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ENVIRONMENTAL AND SUSTAINABLE MANAGEMENT: AN INTEGRATED APPROACH TO THE EDUCATION IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) IN HIGHER EDUCATION

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Abstract: Since the adoption of the Sustainable Development Goals (SDGs) and the 2030 Agenda by the United Nations (UN), Education for Sustainable Development (ESD) has taken on a central role as a pillar for achieving these goals. The idea of sustainable education emerged at the World Conference on Education for All (EFA) in Jomtien, Thailand (1990), and was reinforced at the World Education Forum (2000). These initiatives materialized in the SDGs, which seek to ensure inclusive, equitable and quality education by promoting lifelong learning opportunities. This goal reflects a commitment to educational innovation and university social responsibility, highlighting the role of higher education institutions in the formation of students and the creation of meaningful learning spaces. Higher Education Institutions (HEIs), as complex systems, must offer training aligned with professional and social needs, fostering a culture of knowledge expansion, innovation in science and technology, and serving as models for society. Thus, they actively contribute to the 2030 Agenda, whose final document, "Transforming our World: The 2030 Agenda for Sustainable Development," establishes a global framework to promote sustainability in all areas, including higher education. This article employs scoping review methodology Arksey and O'Malley's (2005) to develop a theoretical and reflective study on the fundamental role of Environmental Education in the implementation of the SDGs. Through this approach, it highlights its contribution to the formation of an aware and committed citizenship to sustainable development, exploring how Environmental Education can be integrated into the educational practices and management of HEIs, strengthening its impact on society and on the fulfillment of the 2030 Agenda.
Keywords: Educational Management, Sustainable Education Challenge, Agenda 2030 for Sustainable Development.

INTRODUCTION

In contemporary society, global problems have reached an unprecedented magnitude, evidencing a state of social and environmental emergency. This situation has prompted the creation of several strategic international conventions aimed at establishing coordinated and effective responses to these barriers. One of the greatest global challenges is climate change, which threatens the shared future of humanity. Faced with this issue, on September 25, 2015, the United Nations (UN) adopted the 2030 Agenda for Sustainable Development, a global action plan endorsed by more than 150 state leaders. This framework established 17 Sustainable Development Goals (SDGs) and 169 targets, designed to address the emerging of the millennium from a holistic perspective. The SDGs encompass three interdependent dimensions: economic, social and environmental, which are articulated in programs aimed at improving the quality of life of the population and ensuring the sustainability of the planet (United Nations [UN], 2015).challenges

However, humanity continues to be immersed in a cycle of crises where environmental problems and social tensions persist, affecting the stability of nations and the well--being of people. Faced with this scenario, it is imperative to implement socio-educational programs that encourage the active participation of the population in the search for solutions. In this context, Environmental Education (EE) emerges as a fundamental tool to promote environmental conservation and protection, as well as to promote significant changes in individual and collective behaviors (Caride & Meira, 2020). EA is defined as an interdisciplinary and comprehensive process that addresses the relationship between people and nature. Its main objective is to form conscious, committed and active individuals, capable of promoting personal

and social transformations that contribute to the improvement of the natural environment. As a continuous process, EE becomes a key strategy to foster ecological awareness and ensure the sustainability of the planet (Jiménez & García, 2017). In a complementary manner, social education plays a leading role in training citizens as agents of change, through socio-educational projects that promote the development of ecological awareness and foster attitudes responsible towards the environment. It is essential for society to adopt more sustainable behaviors, minimizing the impact of human activity on the degradation of ecosystems. This requires a critical and reflective approach, as well as participatory methods that involve citizens in decision-making and in the implementation of concrete actions (Caride, 2017).

In this sense, the education sector has the responsibility to prevent irresponsible behavior towards ecosystems, the consequences of which could seriously affect future generations. It is essential to raise public awareness of the intrinsic connection between individuals, their communities and nature, promoting an approach of interdependence and co-responsibility (Kopnina, 2020).

METHOD

The main objective of this article is to develop a theoretical and reflective study on the fundamental role played by Environmental Education (EE) and social education in the formation of a citizenry committed to sustainable development. This approach is aligned with the Sustainable Development Goals (SDGs), established by the United Nations (UN) in its 2030 Agenda, which seek not only to preserve the planet and its natural resources, but also to ensure social prosperity, equity and well-being for present and future generations (United Nations [UN], 2015). In this context, education stands as an essential pillar

to foster critical awareness, collective responsibility and the active participation of individuals in building fairer and more sustainable societies (Caride & Meira, 2020).

To achieve this objective, the methodology was usedscoping review proposed by Arksey and O'Malley (2005), which allows a systematic and exhaustive review of the existing literature on a specific topic,. This methodology is particularly useful for identifying key concepts, gaps in knowledge and emerging areas of research, which makes it a valuable tool for theoretical and reflexive studies such as the present one. The review process was carried out in several stages. First, the guiding research questions were defined, focused on understanding how AE and social education contribute to the formation of a citizenry committed to sustainability. Second, relevant bibliographic sources were identified and selected, including scientific articles, books, reports and official documents published in the last ten years. The databases consulted included Scopus, Web of Science, Dialnet and Google Scholar, using key terms such as "environmental education", "social education", "sustainable development", "SDGs" and "ecological awareness".

Subsequently, a critical analysis of the selected literature was carried out, identifying the most relevant theoretical and practical contributions in the field of EA and social education. This analysis allowed exploring the socio-educational dynamics that promote the adoption of habits and values oriented towards sustainability, as well as the most effective pedagogical strategies to foster citizen participation in the construction of more just and equitable societies (Jiménez & García, 2017). In addition, case studies and practical experiences were examined that illustrate how AE and social education can be integrated into formal and non-formal educational systems, both locally and globally. This in-
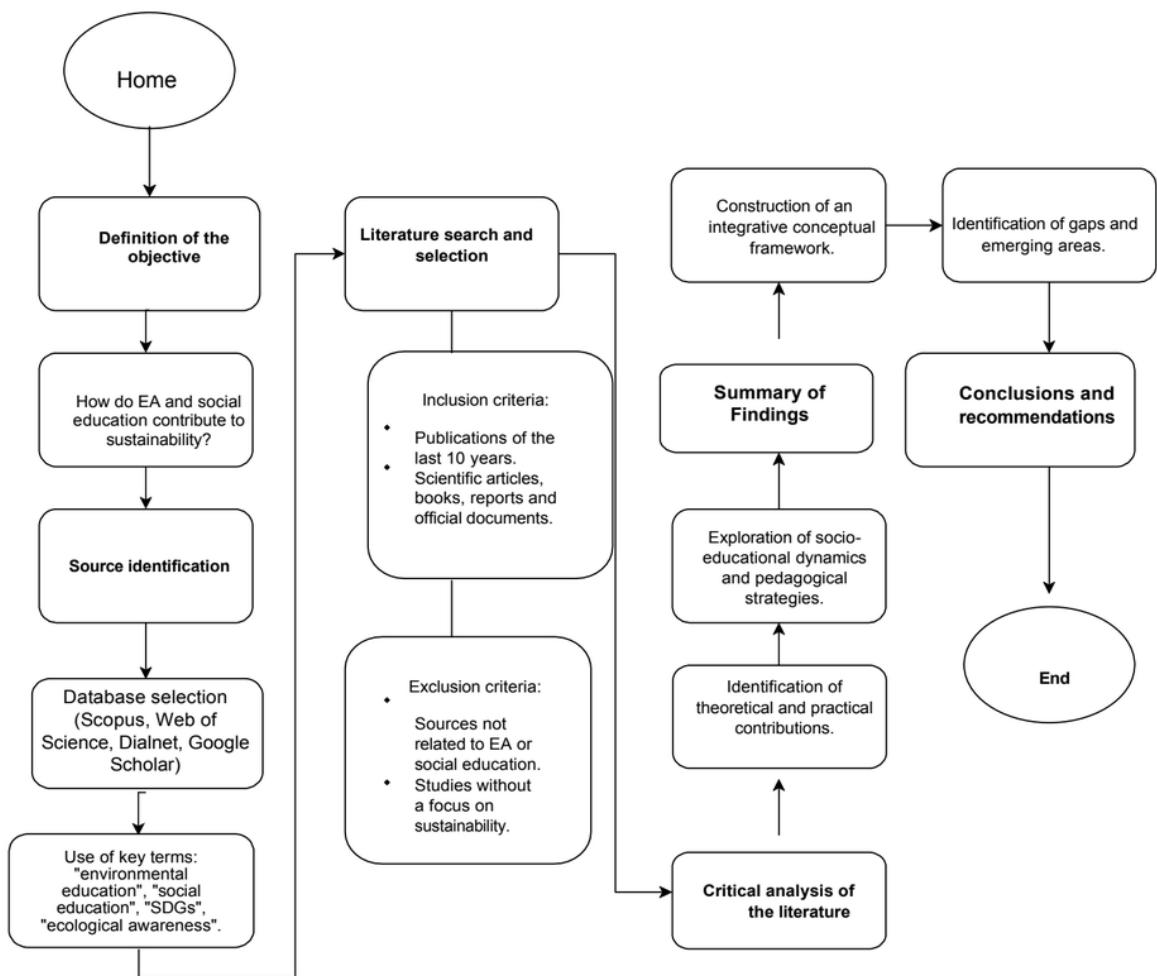
Figure 1. Scoping review process.
Source: Own.elaboration

cluded the analysis of educational programs implemented in higher education institutions, non-governmental organizations and local communities, highlighting their impact on promoting ecological awareness and social responsibility (Cebrián & Junyent, 2014).

Finally, the most relevant findings were synthesized, building a conceptual framework that integrates the theoretical and practical perspectives analyzed. This framework not only enriches the understanding of the role of EA and social education in sustainable development, but also offers valuable perspectives for the design and implementation of innovative and effective educational strategies capable of responding to contemporary global challenges (Kopnina, 2020).

APPROACH TO THE SDGS

The Sustainable Development Goals (SDGs) provide an essential framework for eradicating poverty, protecting the planet and ensuring that all people enjoy peace and prosperity. These goals emerged at the United Nations Conference on Sustainable Development (Rio+20) in 2012, and were formally adopted in 2015 as part of the 2030 Agenda. The SDGs replaced the Millennium Development Goals (MDGs, 2000-2015), broadening their scope to address not only poverty, but also the most pressing environmental, political, and economic of our time (United Nations [UN], 2015). Whereas the MDGs focused primarily on quantifiable targets, such as reducing extreme poverty, combating hunger,

preventing deadly diseases, and expanding access to primary education, the SDGs took a more comprehensive and universal approach. Their transition in January 2016 marked a significant shift in global policy direction and funding for the United Nations Development Programme (UNDP), aligning international efforts with a more holistic view of sustainable development (challenges Biermann, Kanie, & Kim, 2017).

Throughout their first years of implementation, the SDGs have driven significant progress in key areas, such as poverty reduction, access to safe water and sanitation, reduction in child mortality and improvement in maternal health. They have also catalyzed a global movement to foster inclusive economic growth and meet basic social needs, including education, health, social protection and employment opportunities. Likewise, the SDGs have placed special emphasis on combating climate change and environmental conservation, recognizing that these obstacles are intrinsically linked to human well-being and economic development (Kopnina, 2020). In September 2015, world leaders, government representatives and civil society organizations gathered at the UN General Assembly in New York to formally adopt the SDGs. This event marked the launch of the 2030 Agenda for Sustainable Development, a bold and transformative plan that seeks to promote sustainable growth "of the people, by the people and for the people" (UN, 2015, p. 1). The 2030 Agenda represents an unprecedented global commitment that recognizes the interdependence between economic, social and environmental, and proposes integrated solutions to address them.challenges

The SDGs seek not only to complete the work begun by the MDGs, but also to address the most pressing of the 21st century, such as climate change, economic inequality and environmental degradation. The 17 SDGs are interconnected, meaning that progress on one directly influences the others. For example, poverty eradication (SDG 1) is linked to access to quality education (SDG 4) and decent work (SDG 8), while climate action (SDG 13) is critical to the conservation of terrestrial and marine ecosystems (SDGs 14 and 15) (challenges Biermann et al., 2017). Each of the 17 SDGs addresses specific in critical areas for sustainable development. These goals seek not only to improve people's living conditions, but also to promote equitable development that respects planetary boundaries. Among the most prominent SDGs are: 1) End poverty; 2) Zero hunger; 3) Health and well-being; 4) Quality education; 5) Gender equality; 6) Clean water and sanitation; 7) Affordable and clean energy; 8) Decent work and economic growth; 9) Industry, innovation and infrastructure; 10) Reducing inequalities; 11) Sustainable cities and communities; 12) Responsible production and consumption; 13) Climate action; 14) Undersea life; 15) Life of terrestrial ecosystems; 16) Peace, justice and strong institutions; and 17) Partnerships to achieve the goals (UN, 2015).challenges

Although the SDGs are not legally binding, States are expected to incorporate them into their national policies and develop regulatory frameworks for their implementation. This implies the adoption of concrete measures, such as the allocation of financial resources, the promotion of multisectoral partnerships and the active participation of civil society. In addition, the SDGs emphasize the importance of accountability and progress monitoring, through specific indicators that make it possible to measure progress towards each target (Kopnina, 2020).

THE SDGs AND ENVIRONMEN-TAL EDUCATION MANAGEMENT

The environmental deterioration caused by human activity has generated an unprecedented global crisis, jeopardizing the stability of ecosystems and the quality of life of present and future generations. Faced with this reality, it is to important raise society's awareness of how our contemporary lifestyle, marked by unsustainable consumption patterns, could deplete the planet's natural resources. In this context, both governments and citizens must take an active role in the search for genuine solutions to environmental. Various international entities have driven initiatives to promote sustainable actions, highlighting the leadership of the United Nations (UN) and its agencies, which have developed a comprehensive action plan to protect people, planet and prosperity (United Nations [UN], 2015).challenges

The 2030 Agenda, adopted in 2015, represents a global commitment ratified by UN member states, social organizations and businesses, with the aim of driving cross-cutting change on a global scale. This framework, which runs until 2030, integrates the 17 Sustainable Development Goals (SDGs), which address interconnected ranging from poverty eradication to the fight against climate change. Environmental Education (EE) plays a key role in this process, as it promotes understanding of our relationship with the natural environment and encourages reflection on the consequences of our actions. Each of the SDGs aligns with this vision, as they represent the emerging challenges of our interaction with nature, which we must solve to ensure a sustainable future (challenges Kopnina, 2020). Numerous SDGs have been the focus of AE campaigns, such as SDG 14 (Undersea Life), which has driven initiatives to protect the oceans through marine observation programs, tsunami warnings and spatial planning, coordinated by the Intergovernmental

Oceanographic Commission (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023). Similarly, SDG 12 (Responsible production and consumption) has motivated the creation of protected areas and strategies to reduce the environmental impact of human activities. These actions are complemented by measures adopted by member states, such as the implementation of environmental protection programs, the enactment of laws against climate change and the development of strategies to mitigate its adverse effects (Biermann, Kanie, & Kim, 2017).

The objective of the SDGs is to provide a comprehensive framework for overcoming the challenges that impede progress towards a humanity in harmony with nature. In this sense, AE, grounded in critical and reflective teaching, offers the opportunity to achieve the goals proposed by the world leaders who adopted the 2030 Agenda. The transversality of AE allows addressing these challenges from a holistic perspective, encouraging reflection on global inequity, shared responsibility and the need to take effective actions for collective progress (Caride & Meira, 2020).

The main objective of EA is to foster awareness and reflection on our actions, promoting sustainable and equitable development. This implies positive consequences such as poverty reduction, social equity and environmental preservation. Although the SDGs may seem ambitious and complex, they also represent an invaluable guide to act locally without losing sight of a global perspective. Multidisciplinary and interconnected in nature, the SDGs seek to build a sustainable, just and peaceful life in harmony with the environment and today's societies. To achieve this, it is essential to address these needs from an educational perspective, through training and awareness programs that address economic, social and environmental issues. The integration of the SDGs must be an ongoing process that promotes the

active participation and engagement of people with their environment, forming citizens who are aware of and committed to socio-environmental (Jiménez & García, 2017).challenges

Within this framework, education for sustainable development prepares students to make informed decisions and carry out responsible actions that contribute to the preservation of the environment and economic balance. AE, with its multifaceted approach, allows for the integration of ideas and concepts from various disciplines, providing a broad and general overview that avoids reductionism. As points outKopnina (2020), AE should include various types of learning, from "learning to know" and "learning to act" to "learning to transform oneself and society". EA has evolved from its beginnings, when it was limited to identifying environmental problems and proposing isolated solutions, to become a systematic and sequential approach to social transformation. Today, EA is presented as an alternative to implement change measures and has been consolidated as a comprehensive plan that prepares students to face the environmental of the future (challenges Bootrach, Thiengkamol, & Thiengkamol, 2015).

Higher Education Institutions (HEIs) play an role essential in this process. To integrate the SDGs, HEIs must:

a) Incorporate the SDGs into curricula, developing specific courses and programs on sustainable development and training teachers on these issues.

b) Prioritize research in areas that contribute to the achievement of the SDGs, creating specialized institutes and centers.

c) Implement management policies aligned with the SDGs, such as waste reduction and energy efficiency.

d) Promote social programs aimed at vulnerable populations and multidisciplinary community projects.

In the area of educational management, HEIs must ensure quality education (SDG 4), promote gender equality (SDG 5), reduce inequalities (SDG 10), take action for the climate (SDG 13), promote peace and justice (SDG 16), and establish strategic alliances (SDG 17). This involves adapting methodologies, improving infrastructures, promoting values such as tolerance and non-violence, and fostering partnerships with other institutions and sectors (Ramos, 2021).

ENVIRONMENTAL EDUCATION AS A CROSS-CUTTING TOOL FOR THE IMPLEMENTATION OF THE SDGs

Environmental Education (EE) has undergone a significant evolution since its inception, becoming a fundamental tool to address the global posed by the Sustainable Development Goals (SDGs). According to challenges Kopnina (2020), EE should not be limited to the transmission of knowledge about the environment, but should also foster skills and attitudes that enable people to make informed and responsible decisions. This holistic approach is essential to achieve sustainable development, as it combines ecological awareness with practical action, preparing individuals to face the challenges of the 21st century. In this sense, EA has become an ongoing process that seeks not only to educate, but also to transform people into agents of change. As Alcalá del Olmo and Gutiérrez-Sánchez (2020) point out, EA is a key pedagogical instrument for the formation of citizens committed to sustainability. This training should be interdisciplinary, integrating knowledge from various areas such as science, technology, economics and social sciences, to address environmental problems from a holistic perspective.

Higher Education Institutions (HEIs) play a key role in the implementation of the SDGs, as they are responsible for training future le-

aders and professionals who will make decisions in various sectors of society. According to Ramos Torres (2021), HEIs should integrate the SDGs in a cross-cutting manner into their curricula, promoting education that is not only quality, but also inclusive and equitable. This implies developing specific courses on sustainable development, training teachers on the SDGs and promoting research in areas related to sustainability. In addition, HEIs should adopt policies and management systems aligned with the SDGs, both in their internal operations and in their impact on the community. For example, implementing energy efficiency measures, reducing the carbon footprint and promoting sustainable transportation are concrete actions that universities can take to contribute to SDG 13 (Climate Action). These initiatives not only benefit the environment, but also serve as role models for society, demonstrating that it is possible to combine economic growth with the protection of the planet (Kopnina, 2020).

The mainstreaming of the SDGs in higher education is an essential approach to ensure the training of professionals who are aware of and committed to sustainable development. According to Ramos Torres (2021), the integration of the SDGs into university curricula should be a systematic and strategic process, ranging from the revision of curricular content to the implementation of innovative pedagogical practices. This implies that the SDGs should not be treated as isolated topics, but as cross-cutting themes that permeate all areas of knowledge. Thus, HEIs have the responsibility to design curricula that incorporate the SDGs in a comprehensive manner. In undergraduate programs such as economics, law or engineering, it is essential that students understand how their professional decisions can impact environmental, social and economic sustainability. As point outBiermann, Kanie, and Kim (2017), the SDGs represent a global framework that requires collaboration across multiple disciplines for effective implementation. Therefore, universities should foster an interdisciplinary approach that enables students to address complex problems from a holistic perspective.

In addition to curricular revision, HEIs should promote continuous teacher training on SDG-related issues. According to Cebrián and Junyent (2014), teacher training is a key factor to ensure that the SDGs are effectively addressed in the classroom. This includes updating knowledge, developing pedagogical skills that enable teachers to foster critical thinking and reflection among students, and integrating active methodologies that promote participation and engagement. Another relevant aspect is research. HEIs should prioritize lines of research that contribute directly to the SDGs, either through scientific, technological or social projects. According to Alonso-Sainz (2021), university research has enormous potential to generate innovative solutions that address problems such as climate change, social inequality or poverty. In addition, the creation of institutes and think tanks focused on the SDGs can facilitate collaboration between researchers from different disciplines, promoting a multidisciplinary approach that is more effective in addressing global.challenges

HEIs should also encourage the active participation of students in extracurricular programs, volunteering or community projects that allow them to apply their knowledge in real contexts. According to Bootrach, Thiengkamol and Thiengkamol (2015), AE and education for sustainability should include practical experiences that encourage reflection and action. For example, students can participate in reforestation projects, climate change awareness campaigns, or programs to support vulnerable communities. These activities not only contribute to the SDGs, but also strengthen students' commitment to sustainability.

The internal management of HEIs must also be aligned with the SDGs. This implies adopting sustainable policies and practices in areas such as waste management, efficient energy use and the promotion of sustainable transportation. According to Kopnina (2020), HEIs have a responsibility to be models of sustainability for society, demonstrating that it is possible to combine institutional growth with environmental protection. For example, implementing recycling systems, reducing the consumption of single-use plastics and promoting renewable energies are concrete actions that HEIs can take to contribute to SDG 12 (Responsible Production and Consumption) and SDG 13 (Climate Action).

Finally, the mainstreaming of the SDGs in higher education also implies the creation of strategic alliances with other social actors, such as governments, businesses and organizationsnon-governmental. According to Biermann, Kanie and Kim (2017), multisectoral collaboration is essential to achieve the SDGs, as it allows sharing resources, knowledge and experiences. HEIs can play a key role in these partnerships, bringing their academic expertise and capacity to generate innovative solutions. For example, they can collaborate with companies to develop clean technologies or with local governments to implement public policies that promote sustainability.

THE ROLE OF ENVIRONMENTAL EDUCATION IN RAISING PUBLIC AWARENESS

One of the main challenges to achieving the Sustainable Development Goals (SDGs) is the lack of public awareness of the importance of sustainability. Environmental Education (EE) plays a key role in this aspect, as it has the ability to raise people's awareness of environmental issues and encourage behavioral change. According to Bootrach, Thiengkamol and Thiengkamol (2015), EE should include various types of learning, from theoretical knowledge to practical action, so that individuals can understand how their actions impact the environment and how they can contribute to its protection. In this context, AE should promote actions that address the SDGs in a comprehensive manner. For example, SDG 14 (Undersea Life) can be advanced through programs that educate about the importance of the oceans and the need to protect them. Similarly, SDG 12 (Responsible Consumption and Production) can be addressed through initiatives that promote sustainable consumption and waste reduction. These actions should target not only students, but also the community at large, to create a culture of sustainability that transcends the classroom and extends to all walks of life (Kopnina, 2020).

EA not only conveys knowledge about environmental issues, but also fosters a deep understanding of the interconnections between natural and social systems. This holistic approach is essential for citizens to make informed and responsible decisions that contribute to sustainable development. As points outKopnina (2020), AE should empower people to become agents of change, capable of addressing environmental challenges from a critical and reflective perspective. One of the main objectives of EA is to raise public awareness of the urgency to act in the face of problems such as climate change, biodiversity loss and pollution. According to Caride (2017), EA should be understood as a process of social transformation that promotes values such as environmental justice, equity and respect for ecosystems. This implies not only informing about problems, but also empowering people to become active actors in the construction of a more sustainable future.

Furthermore, EA must be inclusive and accessible to all people. According to Cebrián and Junyent (2014), it is essential that EA initiatives reach vulnerable and marginalized communities, which are often the most affected by environmental problems. This implies

adapting messages and methodologies to the specific needs and contexts of each group, promoting active and meaningful participation. For example, in rural areas, EA can focus on sustainable agricultural practices, while in urban settings it can focus on waste management and sustainable mobility. Another key aspect of EA is its ability to foster citizen participation in environmental decision-making. According to Biermann, Kanie, and Kim (2017), effective environmental governance requires the active participation of citizens in the formulation and implementation of public policies. EA can empower people to demand transparency and accountability from governments and businesses, promoting a culture of accountability and environmental justice.

In this sense, EA also has an important role in the formation of community leaders and professionals committed to sustainability. According to Ramos Torres (2021), educational institutions should foster competencies such as critical thinking, problem solving and collaboration, which are essential to address the environmental challenges of the 21st century. This implies not only training students in technical knowledge, but also in values and attitudes that promote environmental responsibility. It is important to emphasize that EE should be a continuous process that extends throughout life. According to Alonso-Sainz (2021), EE should not be limited to the classroom, but should be integrated into all areas of life, from the home to the workplace. This implies promoting sustainable practices in everyday life, thus encouraging reflection on lifestyles and their impact on the planet. Only through a cultural shift towards sustainability can we build a more just and equitable future.

Finally, AE should be seen as a tool for building fairer and more equitable societies. According to Caride and Meira Cartea (2020), EA should address not only environmental problems, but also the social inequalities that aggravate them. This implies promoting a comprehensive, inclusive and participatory environmental justice approach that ensures that all people, regardless of their origin or socioeconomic status, have access to a healthy and sustainable environment.

THE IMPORTANCE OF MULTI-SECTORAL COLLABORATION

The implementation of the Sustainable Development Goals (SDGs) requires the collaboration of various actors, including governments, businesses, non-governmental organizations (NGOs) and civil society. Higher Education Institutions (HEIs) can play a key role in this process by fostering strategic alliances that enable progress towards the goals of the 2030 Agenda. As point outBiermann, Kanie and Kim (2017), goal-based global governance, such as the SDGs, requires a collaborative approach that involves all sectors of society. In this sense, HEIs should promote the creation of collaborative networks that integrate different actors in the search for sustainable solutions. For example, universities can collaborate with companies to develop clean technologies, or with local governments to implement public policies that promote sustainability. These alliances not only allow the sharing of resources and knowledge, but also generate a broader and lasting impact (Ramos Torres, 2021).

HEIs play a fundamental role as bridges between different sectors. According to Ramos Torres (2021), universities have the capacity to generate scientific and technological knowledge that can be applied to solve environmental and social problems. In addition, HEIs can facilitate the creation of collaborative networks that integrate diverse actors in the search for sustainable solutions. For example, universities can collaborate with companies to develop clean technologies, with local governments to implement sustainable public poli-

cies, and with NGOs to carry out community projects that promote environmental justice. One of the main benefits of multi-sector collaboration is the possibility of sharing resources and expertise. According to Kopnina (2020), companies can provide funding and technology, governments can provide regulatory frameworks and public policies, and NGOs can offer expertise in implementing projects at the community level. For their part, HEIs can contribute scientific research, training of professionals and development of innovative solutions. This combination of resources and expertise makes it possible to address sustainability barriers more effectively and efficiently.

In addition, multisectoral collaboration fosters innovation and creativity in the search for sustainable solutions. According to Cebrián and Junyent (2014), interaction between different sectors can generate new ideas and approaches that would not be possible in an isolated context. For example, collaboration between universities and companies can lead to the development of clean technologies and renewable energies, while the involvement of NGOs and local communities can ensure that these solutions are culturally appropriate and socially inclusive. Another important aspect of multi-sector collaboration is its ability to promote equity and social justice. According to Caride and Meira Cartea (2020), environmental problems disproportionately affect the most vulnerable and marginalized communities. Therefore, it is critical that sustainable solutions are designed and implemented with the active participation of these communities. Multisectoral collaboration can ensure that the voices of those most affected are heard and their needs are addressed, thus promoting an environmental justice approach.

Multisectoral collaboration is also essential for the implementation of sustainable public policies. According to Biermann, Kanie and Kim (2017), governments have a vital role in creating regulatory frameworks that promote sustainability. However, the effectiveness of these policies depends largely on collaboration with other sectors. For example, businesses can contribute to the implementation of emission reduction policies by adopting sustainable practices, while NGOs can monitor and evaluate the impact of these policies on local communities. In addition, multisectoral collaboration can strengthen environmental governance at the global level. According to Alonso-Sainz (2021), the SDGs represent a global framework that requires the coordination of efforts at the international level. Collaboration between governments, international organizations, businesses and civil society is essential to ensure that the SDGs are implemented consistently and effectively in all countries. For example, international partnerships can facilitate the transfer of technology and knowledge between countries, thus promoting sustainable development at the global level.

It is worth noting that multi-sector collaboration can foster a culture of shared responsibility. According to Bootrach, Thiengkamol and Thiengkamol (2015), sustainability is a responsibility that must be assumed by all sectors of society. Multisectoral collaboration can promote a sense of co-responsibility, where each actor recognizes its role in building a sustainable future and works in a coordinated manner to achieve the SDGs. This implies not only sharing resources and knowledge, but also committing to common values such as equity, justice and respect for the environment.

ENVIRONMENTAL EDUCATION AS AN ENGINE OF TRANSFORMATIONSOCIAL

Environmental Education (EE) seeks not only to educate, but also to transform. As points outCaride (2017), EE should be understood as a process of social transformation that promotes values such as justice, equity and common welfare. This implies not only addressing environmental problems, but also questioning the social and economic structures that generate them, fostering a cultural change towards sustainability. In this context, EA should be seen as a tool for empowering people, especially those in situations of vulnerability. According to Cebrián and Junyent (2014), EA should foster competencies that enable individuals to participate proactively in the resolution of environmental problems, both locally and globally. This includes skills such as critical thinking, decision making and collaboration, which are essential to face the challenges of the 21st century.

EA is not only a tool for transmitting knowledge about the environment, but also an engine of social transformation that seeks to foster profound changes in the way people interact with their environment. According to Caride and Meira Cartea (2020), EA should be understood as a process that promotes values such as social justice, equity and respect for ecosystems. This approach implies not only addressing environmental problems, but also questioning the social and economic structures that generate them, promoting a cultural change towards sustainability. One of the main objectives of EA as a driver of social transformation is to empower people, especially those in vulnerable situations. According to Cebrián and Junyent (2014), EA should foster competencies that enable individuals to participate proactively in the resolution of environmental problems, both locally and globally. This includes skills such as critical thinking, decision

making and collaboration, which are essential to face the challenges of the 21st century.

Furthermore, AE has the potential to transform the relationships between people and their environment. According to Kopnina (2020), EE should foster a deep understanding of the interconnections between natural and social systems, promoting a holistic approach that recognizes the interdependence between humans and nature. This implies not only educating about environmental issues, but also fostering an ethic of care and responsibility towards the planet. For example, AE programs that include practical activities, such as reforestation or ecosystem restoration, can help people develop an emotional bond with nature, which in turn can motivate more sustainable actions. AD can also be a catalyst for creating more resilient and sustainable communities. According to Bootrach, Thiengkamol, and Thiengkamol (2015), EA should include a community approach that promotes the active participation of citizens in environmental decision-making. This involves not only reporting on problems, but also fostering collaboration and teamwork to find collective solutions. Another key aspect of EA as a driver of social transformation is its ability to promote equity and social justice. According to Caride (2017), environmental problems disproportionately affect the most vulnerable and marginalized communities. Therefore, EA must address not only environmental problems, but also the social inequalities that aggravate them. This involves promoting an environmental justice approach that ensures that all people, regardless of their background or socioeconomic status, have access to a healthy and sustainable environment. For example, EA can empower indigenous communities to participate in the management of their territories, thus promoting a conservation approach based on traditional knowledge.

In addition, EA can be a tool to foster citizen participation in environmental governance. According to Biermann, Kanie, and Kim (2017), effective environmental governance requires the active participation of citizens in the formulation and implementation of public policies. EA can empower people to demand transparency and accountability from governments and businesses, promoting a culture of accountability and environmental justice. For example, EA campaigns that inform about the impacts of development projects can motivate citizens to participate in public consultation processes and to demand that their concerns be taken into account. Thus, it can be observed how EA has a specific role in the formation of leaders and professionals committed to sustainability. According to Ramos Torres (2021), educational institutions should foster competencies that enable students to make informed and responsible decisions for the benefit of the environment and society. This implies not only training students in technical knowledge, but also in values and attitudes that promote environmental responsibility. For example, EA can include modules on environmental ethics, social justice, and developmentsustainable that help students understand the impact of their professional decisions on the environment and society.

CONCLUSIONS

Over the years, the United Nations has maintained a firm commitment to the fight against poverty and the promotion of sustainable development on a global scale, recognizing education as a fundamental pillar for achieving these goals. In this context, the 2030 Agenda stands as a strategic framework that seeks to ensure inclusive, equitable and quality education, promoting lifelong learning opportunities for all. This commitment involves not only governments, but also civil society, institutions, businesses and universities, who must work in a coordinated manner to move towards a more sustainable and equitable world.

The Sustainable Development Goals (SDGs) highlight the importance of Environmental Education (EE) as a key tool to address global challenges such as social exclusion, climate change and inequalities. EE not only facilitates understanding of these issues, but also empowers people to take concrete actions to minimize their impact on the environment. By fostering a critical awareness of the relationship between the environment and human well-being, AE contributes to the formation of active and responsible citizens, capable of participating in solving environmental problems both locally and globally (Kopnina, 2020).

In this regard, Higher Education Institutions (HEIs) play a priority role, as they are responsible for training future leaders and professionals who will make decisions in various sectors of society. To this end, it is essential that universities integrate the SDGs in a cross-cutting manner in their curricula, research and internal management, promoting a collaborative approach that involves the entire university community. Only through an education that combines technical knowledge with ethical and environmental values will it be possible to train professionals committed to building a sustainable future (Ramos Torres, 2021).

In addition, multi-sectoral collaboration is an indispensable element for the effective implementation of the SDGs. The combination of resources, knowledge and experience between governments, businesses, non-governmental organizations and universities makes it possible to address sustainability challenges more efficiently and with a broader impact. HEIs, in particular, have the capacity to act as bridges between these actors, facilitating the creation of collaborative networks and promoting innovative solutions that integrate scientific research with practical action (Biermann, Kanie, & Kim, 2017).

In short, Environmental Education should not only be seen as a training tool, but as an engine of social transformation that promotes values such as justice, equity and respect for the environment. To achieve a real impact, it is necessary that all sectors assume their responsibility and work in a coordinated manner in the construction of more sustainable and resilient societies. The mainstreaming of the SDGs in higher education is therefore a complex but essential process, which requires a collective commitment and a comprehensive vision to achieve the goals proposed in the 2030 Agenda.

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