



## Sustainability Through Higher Education

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### Article Info

**Received:**  
15 March 2021  
**Accepted:**  
25 May 2021  
**Published:**  
1 August 2021

**DOI:**

*Presented in The 6<sup>th</sup>  
International (Virtual)  
Workshop on UI GreenMetric  
World University Rankings  
(IWGM 2020)*

**Abstract** The Universidad Nacional Abierta y a Distancia, UNAD, through instruments, the experiences in environmental management and their participation in the UI GreenMetric World University Rankings were systematized. This article shows the implementation of sustainability within the institution, which was achieved through the Participatory Action methodology, which facilitates the integration of knowledge and actions to promote transformations in the thinking of the institutional community. In this way, they are articulated: objectives, strategy (ecological homes), research, technology and ICT as a method to establish relationships between the university, the State and the community. Additionally, the university defines projects and goals in the 2019-2023 development plan, which are articulated to comply with the Sustainable Development Goals, to train the community in values such as solidarity, assertive and true communication, collaboration effective, the attitudes to dialogue comprehensively, for the benefit of current and future generations. Therefore, only through interdisciplinary work, it is and will be possible to solve the problems that the world must face, seeking to curb hyperconsumption and social irresponsibility, which by seeking economic benefits for certain sectors puts the lives and survival of the species that inhabit the planet, including the human race itself at risk. According to this, the UNAD has the commitment from the environmental management to articulate efforts for the elaboration of proposals that allow the implementation of responsible consumption routes and collective action for the care of the environment.

### 1. Introduction

The relationship of the educational Institution with its Stakeholders is inherent due to the latent need for articulated commitment to achieve the Sustainable Development Goals (SDGs) conceived by the United Nations, which is why it is important to achieve institutional strengthening. The higher education model is not currently being dynamized transversally in the different fields such as economy, society, culture, politics and the environment, which has generated a collective ignorance of the commitment acquired as a country, when it comes to sustainable development.

It is important to recognize that we live in a time of constant change, therefore, complex, adaptable and sensitive thinking is required. From the above, it must be understood that education is a sociocultural process that must be focused on development,

and training, in order to promote knowledge in students, seeing this information reflected in a holistic way, having as a pillar the three axes: Economic, social and ecological and in this way generate an appropriation of the concept of interdisciplinary and multidisciplinary sustainability.

The appropriation of the sustainability concept from the Universities is carried out through the Participatory Action of the actors, in such a way that the implementation of the concept is carried out from the curriculum, implying the design and implementation of skills that allow the creation of spaces for reflection and collective and interdisciplinary collaboration, through teaching and learning strategies that allow knowledge to be transmitted, as well as ways of working and adapting, that can be cross-evaluated. For proper management and articulation from the different fields, it is important to formulate policies for the management of environmental impacts in institutions, in which the focus is not only on legal compliance, but also on the functions, achieving a reduction in environmental impacts and thus influence the teaching, research and daily internal processes, which are related to the projects formulated in the current development plan.

Efforts within the institutions will allow professionals regardless of the line of study, to acquire knowledge and replicate good environmental practices directed by the Institutional Environmental Management System, in the responsible consumption of natural resources, reduction of gaps through social inclusion and promotion of efficient technologies, both in the field of development and in the daily life of each one of them. In this way, a significant impact and transmitted knowledge is generated that in the long run will allow us to obtain strong results and bring us closer to the fulfillment of the much-desired SDGs, which allow us to implement actions in an associative way.

Therefore, the main objective of this article is to document through the experiences of the UNAD, how the environmental management system recognizes the effort for joint and transdisciplinary growth, increasing the commitment of man to conserve natural resources along with economic development.

## **2. Developing**

Universities are centers for the generation of knowledge, where the development of the human being and its environment is constantly being evaluated from the different areas of study. Over the years, the institution has been innovating, creating the need to design new ways to spread culture and knowledge. However, these efforts must be linked to research, creativity and development of technologies to achieve the training of professionals who meet the needs of their environment and thus can contribute to sustainability management, achieving in an articulated way the fulfillment of the objectives of sustainable development; Quality education, Decent work and economic growth, Industry, innovation and infrastructure, Reduction of inequalities, Peace, justice and solid institutions and Alliances to achieve objectives, through the activities related to the macro-projects of the 2019-2023 Development Plan Research, Social projection, Inclusion, retention, permanence and success 4.0 and Innovation.

Promoting the articulation from the different Stakeholders and the feedback of the different processes carried out, is inherent due to global development commitments, the universal call to end poverty, protect the planet and guarantee that all people enjoy peace and prosperity. For this, each of the Universities must independently strengthen their Environmental Management Systems, taking legal regulations as a pillar and promoting awareness of the importance of being responsible with the environment, in the face of the

high demand for consumption of resources. natural resources and waste generation, within educational institutions

According to resolution 013757 of September 25, 2019, the University modifies its Integrated Management policy where it is established that: "The Environmental Management System has the responsibility of contributing to the protection of the environment and the prevention of pollution, controlling risks and environmental aspects related to its activities, products and services, promoting the use of appropriate technologies in order to mitigate the associated environmental impacts "(UNAD, 2020). To comply with the aforementioned, the University carries out Environmental Management Programs, which are implemented annually as a result of the Context Assessment, which evaluates environmental aspects and impacts, and compliance with legal requirements, which are punctuated based on different indicators that allow recognizing the environmental conditions in which the different venues are; Parallel to this, there is the periodic development of audits that consist of the review of the Environmental Management System, with the aim of achieving Environmental excellence in institutional performance, seeking to contribute significantly to the commitment to the Environment.

It is important to note that added to this improvement exercise, the report is made against the UI GreenMetric World University Ranking, which aims to rate universities according to sustainability and green campuses worldwide, thus encouraging them to face the struggle against global climate change, from the conservation of energy, water, waste recycling and ecological transport (GreenMetric, 2019). This in order to promote healthy competition from the comparison between educational entities and generate internal growth within the institutions.

The Universidad Nacional Abierta y a Distancia beyond complying with current environmental regulations, directs its management to achieve the environmental objectives set to achieve sustainable development, thus articulating environmental education and good practices towards commitment and respect for resources, biodiversity and the quality of life of present and future generations that depend on them, objectives for which the institution's education is supported by a pedagogical model, based on autonomous learning, comprehensive training and an investigative spirit (UNAD,2017), presenting the knowledge from the context, in a global and multidimensional way for the treatment of multidisciplinary problems, among which is the strengthening of values, prevention of management of political situations, economic, social, cultural and ecological, as well as training for peace, through an alternative of coverage and educational quality for both young and old.

Based on the Institution's commitment, in the period 2010 - 2011, the initial EMS proposal based on the NTC ISO 14001 model is presented. Subsequently, in 2014 the Environmental Management System is certified under the ISO 14001: 2004 standard in the JCM National Headquarters, which receives in 2015 and 2016 follow-up visits by the certifying entity where it seeks to identify the maintenance of the System, finally in 2017 and complying with the certification times, the Management System Environmental is re-certified by conducting a transition exercise to the ISO14001: 2015 standard. For this year, 2020, the organization has been working on the evolution of the system seeking to meet the second certification in the international standard, incorporating within its scope the CEAD Jose Acevedo y Gomez.

Taking into account the transversality of sustainability management, which is defined as is the intersection of business and sustainability. It is the practice of managing a firm's

impact on the three bottom lines — people, planet, and profit — so that all three can prosper in the future. Sustainable management supports a business's long-term viability, because it's preventative rather than reactive.

Finally, it is stated that the importance of moving from environmental management to sustainability management is mainly due to carrying out a transformation in the perception of environmental responsibility, inside and outside the University, in addition to a strengthening of skills of future professionals through the appropriation of sustainability from the curriculum, which requires different strategies such as the inclusion of academic spaces focused on sustainability in a multidisciplinary way and using projects in which the SDGs are studied, in order to generate knowledge and sensitize students about the current situation of the social, environmental and economic dimensions in Colombia and to which they contribute from their actions.

One of the strategies that the UNAD has, is the REGION CHAIR, in which the student seeks to develop their solidarity action understood as the creation of new opportunities in favor of the well-being and improvement of the different actors; the development of transforming leader skills and in that sense be able to identify themselves as a social actor who manages to recognize the problems or needs of their community (UNAD,2019), the resources they have and make visible the current situation of their local reality, compared to the community or regional ideal. They will seek to plan and execute solidarity actions that allow the improvement of the situations encompassed within the framework of the spheres of sustainability and the construction of a critical, reflective, autonomous, peaceful and equitable society, contributing to regional development in the global framework. of the 17 sustainable development goals proposed by the UN.

### **3. Conclusion**

According to what is stated in this article, the UNAD is characterized by developing alternatives to favor institutional management, taking into account that the way to reach this is comprehensive training, taking as pillars the environmental, social and economic spheres, to promote the principle of sustainability in such a way that it is reflected both in the impact of the institution and in the alliances with the stakeholders related to the institution, contributing to different sectors from a learning process focused on critical and decisive thinking in an interdisciplinary way, based on the common good and the efficiency of natural resources for present and future generations (UNAD, 2019). According to the disciplinary approach of the Basic and Middle Education Program for Youth and Adults, the model is given from a process in which all interested parties are involved, and it is not only a teacher-student learning, in this way the Environmental Management System is articulated with different Schools and Vice-rectories for the fulfillment of its objectives and the promotion of a transdisciplinary education.

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