

Actions for Sustainable Development at University of Moa's Library

Acciones de la biblioteca de la Universidad de Moa para el Desarrollo Sostenible

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Abstract: Actions to be developed by the University of Moa's Library are proposed with the aim of disseminating information, educating the university community, and supporting the activities carried out at the institution regarding the 2030 Agenda. For the development of the research, documentary analysis, the brainstorming technique, and direct participant observation were used. As a result, a description with practical examples of activities carried out that are related to the sustainable development objectives prioritized by the information institution is presented. It is verified that the activities carried out strengthen library management at the University of Moa, essentially in the area of informational services and products, while intentionally contributing to visualizing the 2030 Agenda through different bibliographic collections treasured at the institution.

Keywords: university libraries, Sustainable Development Goals, library services

Resumen: Se proponen acciones a desarrollar por la Biblioteca de la Universidad de Moa con el objetivo de divulgar información, educar a la comunidad universitaria y apoyar las actividades que se realizan en la institución en materia de Agenda 2030. Para el desarrollo de la investigación se utilizó el análisis documental, la técnica de lluvia de ideas y la observación directa participante. Como resultado se muestra una descripción con ejemplos prácticos de actividades realizadas que tienen relación con los objetivos de desarrollo sostenible priorizados por la institución de información. Se comprueba que las actividades que se realizan permiten fortalecer la gestión bibliotecaria en la Universidad de Moa, esencialmente en el área de los servicios y productos informativos, a la vez que de manera

intencionada contribuyen a visualizar la Agenda 2030 a través de las distintas colecciones bibliográficas que atesora la institución.

Palabras clave: bibliotecas universitarias, Objetivos de Desarrollo Sostenible, servicios bibliotecarios

Introduction

The University of Moa is the main academic institution in Cuba in the Geological, Mining, and Metallurgical ground. Since its foundation in 1976, it has been established as an important link in the development of the Cuban Nickel Industry. It guarantees the comprehensive training and continuous professional development of specialists in technical, economic, and social sciences, the development of scientific research and technological innovation actions and knowledge management.

Consequently, this institution's library orients its management in total coherence with the mission of the higher education institution, making it the most important information entity serving not only the university community but also the general community of the territory. It develops its information services and products in a favorable teaching, research, and extension processes context that promote sustainable development and advocate for the fulfillment of the SDGs of the 2030 Agenda. These processes materialize in the development of institutional, national, and international projects, scientific research, scientific publications, and social work towards the community.

In September 2015, during the Sustainable Development Summit, held within the context of the 70th session of the United Nations (UN) General Assembly, the 2030 Agenda was approved, officially entering into force with its 17 Sustainable Development Goals (SDGs) and their 169 targets on January 1, 2016 (Gil, 2018; Lloret *et al.*, 2021; García-Parra *et al.*, 2022). This universal document represents a major plan of action for people, the planet, and prosperity, as it promotes and advocates for strengthening universal peace and access to justice. Thus, it signifies a commitment by all United Nations member countries to pursue a new paradigm of sustainable and prosperous development.

In this context, libraries are essential for cultural and information development, as they promote access to information and provide opportunities for people to exercise their right to information and education. As key institutions for access to information, education, and research, libraries foster social participation and cultural growth in a development

environment (International Federation of Library Associations and Institutions [IFLA], 2014).

The profile of library professionals, specialized in information handling and management, allows the adaptation to a technology-flooded society, nonetheless with clear purposes of fulfilling the 2030 Agenda and the sustainable development goals (Sánchez-García, 2024). They are social transformation agents that go beyond professional profiles, being executors of initiatives with social impact that let building a more sustainable and lasting planet (Alonso *et al.*, 2023).

Ramírez (2022) states that all library institutions actively promote development, so they have a place in the agenda. In this scenario, universities play a fundamental role as drivers of innovation, development, and social, economic, and ecological well-being, aligning with the SDGs established in 2030 Agenda.

According to García-Rodríguez & Gómez-Díaz (2022), the SDGs exert a great influence on libraries, which develop projects aimed at fulfilling the objectives of the 2030 Agenda. These institutions are privileged actors to raise awareness among users about the agenda and foster personal participation and mobilization in support of the SDGs. Their commitment is key for the UN proposal to become a common proclamation for all people, thus contributing to the achievement of the SDGs both locally and globally (García, 2020; Costa & Alvin, 2021; Pereira *et al.*, 2021).

As Marraud (2022) states, university libraries are challenged by the 2030 Agenda, although it is not easy to discover a more or less clear role for university libraries in achieving the SDGs. University libraries naturally offer library services to a community with multiple informational interests; however, any type of library is susceptible to integrating its actions into the approaches of the 2030 Agenda and can collaborate with the plant's sustainable development from different perspectives (IFLA, 2016).

The UN's approval of the 2030 Agenda on Sustainable Development has brought to light the heterogeneity of the contributions that university libraries can develop (Iribarren-Maestro, Benítez-Berrocal & Pérez-Borrego, 2022). Larios, Martín and Balagué (2021) recognize programs in the library sector with actions related to the 2030 Agenda. Authors such as Marraud (2021), Graft & Yaba-Asante (2022), Ullah & Usman (2023), Wan *et al.* (2023) and Carvalho, (2024) emphasize university libraries role into quality education in accordance with sustainable development.

Leveraging the SDGs framework is a feasible opportunity and a current challenge for the University of Moa's Library to advance in achieving its role in line with the 2030 Agenda. Hence, the general objective of this work is: to describe actions and best practices carried out in this information institution to contribute to the dissemination and knowledge of the 2030 Agenda inside and outside the university community.

Materials and Methods

The research has a descriptive nature and follows an essentially action-research approach applied to the University of Moa's Library context. For this purpose, the 2564 potential users of the institution were taken into account.

Documentary analysis was used to conduct the bibliographic study in primary information sources addressing libraries and the 2030 Agenda themes, and to identify activities carried out in other institutions at national level that contribute to the SDGs and could be contextualized to the University of Moa's Library.

Cuban university libraries' portals were explored to learn about the type of activities they carry out and their contribution to the SDGs. It was observed that these institutions carry out various activities that, despite being aligned with the 2030 Agenda SDGs and promoted on social networks, they seem to lack a precise intention from the Agenda's perspective.

Direct and participant observation was used to efficiently coordinate activities planning and development in the institution. It was possible to learn about the usual places used to carry them out, the types with the highest user attendance, the competencies and skills of the people developing them, their execution time, specialists' functions in each one and their willingness to assume them and alliances with teaching departments and other work areas.

Likewise, the brainstorming technique was used to search for possible feasible initiatives to be carried out in the institution that contribute to making the 2030 Agenda visible through the declared information services and products. To develop this technique, the same work setting of the institution was chosen, with the participation of a total of 10 workers.

Following the statement of Alonso-Becerra *et al.* (2021), Cuba faces the challenge of conducting socially relevant research that contributes to the fulfillment of the 2030 Agenda and socio-economic development according to the country's new economic model. Accordingly, without losing sight of the fact that libraries can contribute to all SDGs by

providing access to specialized information on each of them. During the brainstorming session, the 2030 Agenda SDGs were debated, and it was decided to initially focus on those where our library can have a greater action capacity. These SDGs include Health, Education, Sustainable Water Management, Renewable Energy, Climate Change, Technologies, and Sustainable Consumption and Production Modalities.

Results

Throughout its presence at the University, the library has developed information services and products in line with the universal proclamation. However, starting in 2022, it started planning information services and products with an SDG focus, seeking to achieve impact at three levels:

- Institutional: to contribute to strengthening information services and products and improving knowledge of the university's community and Moa's community regarding SDGs.
- Academic: to contribute to the development of the teaching-learning process, as well as projects and research on topics related to the SDGs.
- Extension: to foster students' comprehensive training and greater participation in activities that promote information and bibliographic collections on topics supporting the SDGs.

The proposed activities' goal is visualizing the 2030 Agenda as of the planning and development of information services and products aimed basically at the university community.

Specific Objectives

- To promote a reading, informed, participatory, and information literate university community that contributes to achieving quality education.
- To foster knowledge and use of print and digital collections dealing with the SDGs.
- To promote an infotechnological culture among students, professors, and researchers that guarantees efficient public access to information. This is achieved through training and capacity building in ICTs use, handling, and evaluation; emphasizing the use of databases, institutional repositories, bibliographic managers, and the development of software applications for the university substantive functions.
- Encourage greater and better use of social networks to provide visibility to the 2030 Agenda in the context of library activities.

Activities Developed

Information Literacy Services

1. Course "Understanding and Using Scientific Information Efficiently". Contributes to SDG 4 and SDG 9 Target 9.C

The characteristics of today's society, the information and knowledge society, where information and communication technologies (ICTs) play a fundamental role in the development of knowledge, imply that understanding the way to handle information is a primary necessity. Hence the importance of knowing how to search, select, analyze, evaluate, and use information resources in a reliable, ethical, and responsible manner.

Based on this idea, and at the request of the University of Moa's Electrical Engineering Curriculum, this course was conceived as part of the elective subject "Research Skills and Techniques" students receive within this program. It is aimed at contributing to strengthening students' informational competencies and to support the learning and training process of the electrical engineering professional.

The course was structured into four topics, ranging from the welcoming to the library, information sources, bibliographic search, to metric studies for research purposes. The results obtained were very positive, in addition, improvements were proposed that will be useful to future courses.

The following results were obtained:

- Contribution to enhancing the quality education of 23 students from the Electrical Engineering program, as well as providing them with learning tools that facilitate better conditions for effective access to Information Technologies and appropriate use and handling of information.
- Activity carried out for the first time within a curriculum's subject.
- Strengthening of work alliances between the Electrical Department Staff and the university library.

Professional Teaching Services

2. Course on " Research Activity Visibility". Contributes to SDG 4 and SDG Target 9.B.

To contribute to increasing the visibility of research generated at the University of Moa, a course was organized aimed at professors and researchers from the Metallurgy and Electromechanics Faculty. This activity is promoted by the university library within the framework of the Research Processes Digital Transformation Project and the Information and Digital Literacy program.

The following results were obtained: Training of 23 professors and researchers from the Metallurgy and Electromechanics Faculty in science visibility and academic social networks profiles.

Scientific Information Promotion Services

3. Development of bibliographic exhibitions in line with significant-dates-linked-to-the-SDGs celebrations. It contributes to SDGs 1, 3, 4, 5, 6, 7, 11, 13, 14, 15 and 16.

Based on an international and worldwide celebrations calendar related to aspects shown in the 2030 Agenda, those print or digital bibliographies existing in the library related to the dates were selected and displayed in the library and high-traffic areas within the University. Among the themes identified for the exhibits are: poverty, health and healthy living, education, gender equality, water, renewable energies, decent work, innovation and academic life, equitable access to information, safe and sustainable cities, climate change, seas and their resources, land degradation and rehabilitation, information for peace and development, and citizen participation and empowerment.

The following results were obtained:

- Greater promotion of readings on environmental topics.
- Greater knowledge about the existing collections on SDG topics in the library.

4. Development of Cultural, Literary, and Health Promotion Gatherings.

These activities are carried out to elevate the taste for universal literature, art, sports, world history, foster a scientific culture on topics related to the SDGs, and promote well-being and health in the university community.

An example of this type of activity was the one carried out on the occasion of the World AIDS Day. It is sponsored each year by the university library in partnership with the health sector in Moa territory, with the objective of raising the level of information and awareness in the university student community about AIDS and Sexually Transmitted Diseases.

The following results were obtained:

- Students were inquired on their health status.
- Students got a higher level of information on the topic.

Scientific-Technical Conference Services

5. Organization of Scientific Conferences on topics related to the 2030 Agenda

The University has an Energy and Advanced Technology Studies Center of Moa (CEETAM, its acronym in Spanish), which has facilitated establishing working relationships between the library and this center. Each year, on February 14, both celebrate the World Energy Day, with an initiative developed through a scientific conference that contextualizes the Cuban and global energy situation. This activity is complemented by exhibitions of specialized scientific literature on the topic, book promotions, and displays of achievements reached by the international project "Strengthening Leadership and Participation of Women in the Renewable Energy Sector in Cuba (FORMER, its acronym in Spanish).

The following results were obtained:

- Amplification of the achievements reached by FORMER Project.
- Raising awareness among the university student community about the importance of responsible and efficient use of energy resources in the institution.
- Promotion of books and readings on energy topics.

Accessibility and Document Preservation Services

6. Development of the institutional project "Digitization of the Bibliographic Heritage related to Geology, Mining, and Metallurgy in the University of Moa's Library"

Digitizing heritage materials is an effective way to protect collections as it provides alternative ways for their consultation and expansion of their dissemination. Identifying, digitizing, and publishing heritage materials collections is an increasingly important function for libraries worldwide.

The University of Moa's library has a documentary heritage consisting of diploma works, master's dissertations, doctoral dissertations, and books generated by authors from this institution that focus on unique geological-mining-metallurgical research in Cuba. In this sense, since 2023, it has been executing a digitization project aimed at safeguarding this important bibliographic collection, allowing access to a greater number of people through the inclusion of documents in Nínive Institutional Repository, increasing the visibility of this information, and sharing with the world the knowledge about Cuba and Moa territory in the mining-metallurgical branch.

The following results were obtained:

- Increased public access to digital collections of authors from the center.
- Amplification of the collection and public access to digitized dissertations from the Metallurgy community available in Nínive Repository.
- Creation of better conditions for collections preservation.

Retrospective Search Regime Information Services

7. Development of bibliographies supporting master's degrees programs and professional training

The library has developed several information products that contribute to professional training and master's degrees programs developed at the University. Among these products is the creation and delivery of bibliographies that respond to topics linked to the SDGs. Examples include the Annotated Bibliography for technological risk teaching-learning in Metallurgical and Materials Engineering Program and the Bibliographic Compilation "Sustainable Development in Mining-Metallurgical Activity".

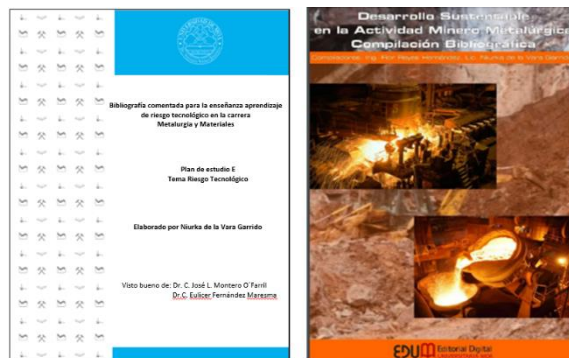


Figure 1. Information products developed by the University of Moa's Library.

The following results were obtained:

- Inclusion within Metallurgy and Materials curriculum of selected bibliographies that contribute to training professionals who can promote safer and more sustainable practices in the metallurgical sector.
- Systematization of bibliographies that contribute to promoting the adoption of sustainable approaches in the mining-metallurgical industry.

Conclusions

The University of Moa's Library has demonstrated an active role and a solid commitment by incorporating the SDGs into the planning of its services, information products, and projects. This reflects its current role in promoting sustainability and disseminating the 2030 Agenda within the university community.

The library gains place and space in contributing to SDG 9 (Industry, innovation, and infrastructure) by preserving bibliographic collections and facilitating public access to academic resources generated by the University, such as scientific literature, research reports, dissertations, and course and institutional projects. This contributes to better information, knowledge, and decision-making.

Cooperation ties with other academic areas of the institution and sectors of the territory have been strengthened to address the SDGs, enriching teamwork and fostering interdisciplinary work. Work with the health sector has been reinforced by annually organizing gatherings and rapid tests to celebrate the World AIDS Day, thus demonstrating the library's commitment to the health and well-being of the university community and contributing to SDG 3 Target 3.3 (Health and Well-being).

The inclusion of the SDGs from the planning of information services and products has allowed contribution to SDG 4 (Quality education) by foreseeing greater interest from professors and students in linking the professional training process to all the Information Literacy Activities carried out in the institution.

Social networks play a crucial role in promoting and giving visibility to the activities carried out by university libraries in relation to the SDGs.

The university library plays a fundamental role in supporting teaching, research, and sustainability within the University. Such is the case of the two information products

developed. The Annotated Bibliography on technological risk supports SDG 9 "Industry, Innovation, and Infrastructure," by providing resources for training engineers capable of identifying and managing technological risks in the metallurgical industry. On the other hand, the bibliographic compilation on Sustainable Development in Mining-Metallurgical Activity offers key bibliography for promoting more sustainable practices in the mining-metallurgical sector.

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