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The Cuban university in social innovation ecosystems for governance in local development

La universidad cubana en ecosistemas
de innovación social para la gobernanza
en el desarrollo local

A universidade cubana em ecossistemas
de inovação social para a governança no
desenvolvimento local

Abstract

Introduction: this article addresses the importance of the university as a driving force for governance in local development, based on its essential role in the knowledge linkages that characterize social innovation. **Objective:** to design a management procedure for the relationship between the university, Municipal University Centers, government, and economic actors, which, as part of social innovation ecosystems and through the systematization of socially innovative practices, contributes to governance in local development. **Method:** through a theoretical-practical action research approach, the study analyzes how higher education institutions can significantly contribute to the socioeconomic progress of their regions, acting as a central axis in social innovation ecosystems that articulate knowledge management with a multilevel and collaborative approach. **Results:** the procedure includes the identification of community-level needs, the identification of territorial resources, the creation of monitoring and evaluation mechanisms, and facilitates the systematization of socially innovative practices, contributing to capacity building with a socioeconomic governance perspective. **Conclusion:** the university, as a catalyst within social innovation ecosystems, has the potential to drive significant changes for governance in local development, promoting an effective integration of knowledge and resources.

Keywords: ecosystems, local development, governance, social innovation

Resumen

Introducción: el presente artículo aborda la importancia de universidad como motor para la gobernanza en el desarrollo local a partir de su papel esencial en los vínculos de conocimiento que tipifican la innovación social.



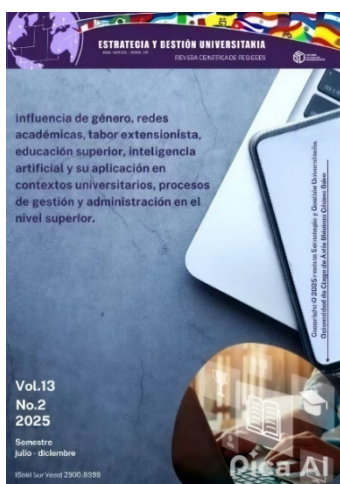
Objetivo: diseñar un procedimiento de gestión de la relación universidad - Centros Universitarios Municipales - gobierno - actores económicos, que como parte de ecosistemas de innovación social y mediante la sistematización de prácticas socialmente innovadoras contribuya a la gobernanza en el desarrollo local. **Método:** a través de un enfoque teórico-práctico de investigación acción, se analiza cómo las instituciones de educación superior pueden contribuir significativamente al progreso socioeconómico de sus regiones, como eje central en ecosistemas de innovación social que articula la gestión de conocimiento con enfoque multinivel y colaborativo. **Resultados:** el mismo incluye la identificación de necesidades a nivel comunitario, la identificación de recursos territoriales, la creación de mecanismos de seguimiento y evaluación y facilita la sistematización de las prácticas socialmente innovadoras al tributar a la creación de capacidades con un enfoque socioeconómico de gobernanza. **Conclusión:** la universidad, como catalizador en ecosistemas de innovación social tiene el potencial de impulsar cambios significativos para la gobernanza en el desarrollo local, promoviendo una integración efectiva de conocimientos y recursos.

Palabras clave: ecosistemas, desarrollo local, gobernanza, innovación social

Resumo

Introdução: o presente artigo aborda a importância da universidade como motor para a governança no desenvolvimento local, a partir de seu papel essencial nos vínculos de conhecimento que caracterizam a inovação social. **Objetivo:** elaborar um procedimento de gestão da relação entre universidade, Centros Universitários Municipais, governo e atores econômicos, que, como parte dos ecossistemas de inovação social e mediante a sistematização de práticas socialmente inovadoras, contribua para a governança no desenvolvimento local. **Método:** por meio de uma abordagem teórico-prática de pesquisa-ação, analisa-se como as instituições de ensino superior podem contribuir de forma significativa para o progresso socioeconômico de suas regiões, atuando como eixo central em ecossistemas de inovação social que articulam a gestão do conhecimento com uma perspectiva multinível e colaborativa. **Resultados:** o procedimento inclui a identificação de necessidades em nível comunitário, a identificação de recursos territoriais, a criação de mecanismos de monitoramento e avaliação, além de facilitar a sistematização das práticas socialmente inovadoras, contribuindo para a criação de capacidades com enfoque socioeconômico de governança. **Conclusão:** a universidade, como catalisadora nos ecossistemas de inovação social, possui o potencial de impulsionar mudanças significativas para a governança no desenvolvimento local, promovendo uma integração efetiva de conhecimentos e recursos.

Palavras-chave: ecossistemas, desenvolvimento local, governança, inovação social



Introduction

In the complexity of interactions that characterize the contemporary world, the various dimensions of development at the local scale have become a strategic axis for introducing dynamics of social change (Rashed et al., 2025). From this epistemic positioning, social innovation emerges as a transformative approach that addresses territorial issues through the creation of collective capacities, intersectoral collaboration, and the reconfiguration of power relationships (Moulaert et al., 2007; Moulaert & Mehmood, 2011; 2020).

Municipalities, situated at the local scale, represent privileged scenarios for implementing social innovation strategies, given their potential to articulate a diversity of actors and generate profound change dynamics. This research is based on the recognition that, in the context of local development, the capacity for social innovation is not merely an operational tool but also a strategic attribute for territorial governance.

Governance, understood as the effective articulation of public, private, and community interests, constitutes a central challenge for territories with high tourist dynamics. In this framework, the present study proposes social innovation capacities as a central axis for strengthening governance processes and responding to the complex demands that arise at the local scale (Giraldo et al., 2020; Galego et al., 2022; Moulaert, 2025).

Social innovation has expanded contemporary development paradigms, characterizing the dynamics of transformation in social relationships. The dynamic circulation of knowledge through social capital networks, with the university as a focal point, has typified this type of innovation (Pérez & Lutsak, 2017; Ndou & Schiuna, 2020; Patiño et al., 2022).

The field of innovation has been approached from the perspectives of Sociology and Economics, overcoming the limitations associated with the relativism of the former and the determinism of the latter. In the works of classical authors, economic analysis predominates with a structural functionalism approach (Hernández et al., 2021; Hernández et al., 2023).

Current institutional networks have been unable to perform effectively in the face of these contradictions, and universities worldwide are not exempt from these challenges. These centers of knowledge manifest as key actors for articulating diverse interests within social systems to enhance governance processes, based on the social appropriation of innovation.

In the case of Latin America, universities have been immersed in very challenging contexts. Social movements have questioned and redefined institutions and the development model of the region (Gatica et al., 2015), showing progress in the development of certain initiatives that do not involve profound changes in power dynamics.

This situation has its roots in social issues, as Latin America and the Caribbean have historically revealed themselves as a region trapped in three development traps: low growth capacity, high inequality and low social mobility, and weak institutional capacities coupled with ineffective governance (Comisión

Económica para América Latina y el Caribe [CEPAL], 2024:5).

The term "ecosystem" has its origins in Biological Sciences, where it has been defined as the basic unit of nature, considering the physical factors that shape a habitat (Tansley, 1935). This approach has been applied in this study to analyze systems of social innovation. This assumes from a dialectical perspective of Economic Sociology that each component of local socioeconomic systems should be analyzed as independent categories.

Gatica et al. (2015), aligning with Horowitz and Hwang (2012), have defined the term "social innovation ecosystems." Considered as social subsystems whose dynamics are imposed by the felt social needs within the community, this definition directly relates to the proposals for multiscale or multilevel governance by Parra and Moulaert (2014).

In the current Cuban context, the recognition of municipal autonomy, as well as decentralization processes and other changes, has reaffirmed municipalities as fundamental entities. This is reflected in the updated regulatory framework in the country aimed at promoting development at the territorial and local scales (Paz & Núñez, 2021).

While, at an international level, social innovation initiatives have made significant contributions by recognizing civil society as a new actor (Von Jacobi & Nichols, 2024), in Cuba, social organization and integration mechanisms reveal themselves as an inherent capacity of the established socioeconomic system. However, they require systematic practice to energize existing capacities and create new ones for designing policies with an innovative social focus.

To achieve this, it is necessary to unravel the role of universities in these social innovation ecosystems, considering that the relationship among universities, Municipal University Centers (CUMs), state enterprises, and Micro, Small, and Medium Enterprises (MSME), as well as local development projects (LDPs), is fundamental for territorial development in the Cuban context.

On the other hand, the lack of appropriate strategies for strategic alliances reveals the need for a theoretical, methodological, and practical approach to define the role of the university in these social innovation ecosystems for generating socially innovative practices. These elements have been corroborated in other research conducted in the country (Santa Cruz et al., 2019; Sosa et al., 2020).

The objective is to design a management procedure for the relationship among universities, Municipal University Centers, government, and economic actors, which, as part of social innovation ecosystems and through the systematization of socially innovative practices, contributes to governance in local development.

Methods and materials

This study was framed within the qualitative paradigm, adopting Participatory Action Research (PAR) as its epistemological premise, considering that

social transformation requires the collective construction of knowledge and the direct involvement of social actors. This methodological approach facilitated the articulation of dialogue, learning, and joint validation processes through focus groups, awareness seminars, and community workshops—tools widely recognized in current governance approaches for development.

The proposal was applied in the municipality of Morón (Ciego de Ávila province), chosen for its potential as an emerging tourist destination. The Municipal Development Strategy recognizes in its Strategic Line No. 2 the management of local tourism based on innovation, aimed at enhancing tourism with new economic actors and a sustainable focus. Recent experiences in capacity-building (González et al., 2024) demonstrate that the municipality has institutional and social conditions to promote ecosystems of social innovation aimed at improving local development indicators across all dimensions.

The main techniques employed were

- Systematic document review, encompassing 125 documents (primary and secondary sources).
- Focus group with 19 local actors, utilizing brainstorming and awareness seminars as participatory tools.

The selection of participants followed a non-probabilistic intentional sampling, prioritizing profiles with experience in collaborative projects and knowledge management applied to territorial development processes. The composition of the focus group is presented in the following table:

Table 1

Composition of the focus group

Actor Category	Number of Participants	Relevant Role or Experience
University professors	3	Knowledge transfer and R&D&I support
Circumscription delegates	5	Community representation and decision-making
Leaders of Local Development Projects (LDP)	3	Social innovation from productive initiatives
Leaders of MSME	2	New economic actors and service innovation
Municipal government representatives	6	Coordination and institutional articulation

Source: Authors' own elaboration.

In the document analysis, the study prioritized the examination of 18 Latin American models of social innovation, of which 56% are oriented towards the local or community context. The study revealed a strong prevalence of empirical approaches led by non-governmental organizations with social aims, alongside a still

limited theorization of the role of universities in these processes.

The diverse composition of the focus group allowed for contrasting and enriching the different analytical dimensions of the study through the situated knowledge and practical experience of key actors. The interconnection between university and territory, innovation applied locally, and participatory governance were the main dimensions, as shown in Table 2.

Table 2

Articulation of actor profiles with the analytical dimensions of the study

Actor Profile	University-Territory Link	Innovation Applied Locally	Participatory Governance
University Professors	Knowledge transfer; integration of substantive functions	Methodological support and systematization of innovative experiences	Articulation with public policies and local capacity building
Circumscription Delegates	Identification of community needs and expectations	Recording of everyday practices with innovative potential	Social representation in local decision-making
LDP Leaders	Generation of proposals from productive practice with territorial vision	Implementation of innovation models in local economic development	Coordination with institutional and community actors
MSME Leaders	Linkage with academic centers for training and innovation	Innovation in management and services with a local focus	Participation in public-private alliances for development
Local Government Representatives	Integration of the university into local planning and management instruments	Promotion of innovation policies from the institutional realm	Facilitation of multiscale governance and participatory processes

Source: Authors' own elaboration.

Results and discussion

From a mixed approach of Economic Sociology and the foundations of complex adaptive systems, this study defines a social innovation ecosystem for governance in local development. It is expressed through the creation of a socio-economic scenario/platform that enhances and fosters interaction among actors at the appropriate level, in either physical or virtual spaces.

It is based on the principle of socially oriented economic actions, horizontal power relationships, community participation, interaction among government, universities, and society, and the social appropriation of knowledge and innovation to boost regional competitiveness. It is designed as a model that combines economic sustainability with social impact objectives (González et al., 2025).

The results presented are a product of collective validation with key actors in the selected municipality. Through the triangulation of theoretical references with contributions generated in the focus group, the dimensions that define the role of the university as a catalyst for territorial development were delineated. Each of these dimensions was enriched by the perspectives of participants, allowing not only for the validation of the methodological proposal but also for the identification of concrete opportunities for institutional strengthening and social transformation.

The proposed procedure is understood as a set of phases, components, and activities, logically related and grounded in the structural functional systemic approach (González et al., 2022). It incorporates the Plan-Do-Check-Act (PDCA) cycle and risk-based thinking (ISO 9001:2015) and facilitates the systematization of socially innovative practices by describing the sequences of activities and tools to be utilized.

It has been conceived at the provincial level, from the University of Ciego de Ávila; however, its validation is conducted in the municipality of Morón. It forms part of the Quality Manual of the University of Ciego de Ávila, effective since 2024, and its implementation supports current strengths in the university-business link within the territory. Its purpose is to systematize socially innovative practices in ecosystems for governance in local development by defining opportunities and obstacles for innovation, mapping competencies and skills, and outlining the capacities to be developed.

Table 3

A Necessary Procedure

Code: FPR_CUM-FUM DL: 07.02.02	Manual of Procedures	Edition: 2.0
Effective date: January 2024	Title: Management of the relationship among University - FUM-CUM - Government - Economic Actors as part of local socioeconomic development ecosystems.	Responsible: First Vice-Rector and Directors of FUM-CUM
Purpose: To manage the relationship among University - FUM-CUM - Government - Economic Actors as part of local socioeconomic development ecosystems.		
Inputs: - Information, knowledge, and innovation needs for managing local socioeconomic development ecosystems.	Responsible: Designated Professors	Design

Outputs: Systematization in generating socially innovative practices within local socioeconomic development ecosystems, with the university and FUM-CUM as key actors.	Responsible: Director, Deputy Directors of FUM-CUM, and heads of involved scientific-academic programs, projects, and tasks
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Source: Authors' own elaboration.

1- Terms and definitions:

Social innovation capacities: A set of competencies and skills to develop new or improved products, processes, services, etc., through the efficient and creative performance of local actors, generating added value and public benefit in management, with an impact on the quality of life of the population through the generation of socially innovative practices (González et al., 2024).

In the Cuban context, this incorporates open knowledge exchange (situated knowledge) (Núñez et al., 2023) and the social appropriation of knowledge and innovation (Franch, 2017), ensuring that social innovation processes do not rely on individual leadership or political processes (Hernández et al., 2020).

Adaptive social innovation ecosystems: Comprised of subsystems or complex units at the micro level that interact with larger units or global processes known as the suprasystem or suprastructure (regional SI ecosystem). An intermediate level or mesosystem corresponds to the territorial SI ecosystem. Interaction among components for social innovation occurs across spatial and temporal scales (González et al., 2024).

2- Procedures and standards:

Key principles, premises, and functions of these ecosystems for governance in local development include:

1. **Collaboration and co-creation:** Foster collaboration among various actors, such as local governments, NGOs, businesses, academia, and citizens, to generate innovative solutions addressing local challenges.

2. **Citizen participation:** In decision-making, identifying needs, and implementing projects.

3. **Focus on equity and inclusion:** Innovative solutions arising from the identified and felt needs of social groups and local communities.

4. **Transparency and accountability.**

5. **Use of data and evidence:** Base decisions on solid data and evidence, using tools to measure the impact of interventions and adjust as necessary.

6. **Promotion of social entrepreneurship:** Generate a positive impact in the community.

7. **Promotion of innovative public policies:** Foster social innovation, local economic development, and environmental sustainability

The structuring and dynamics of ecosystems at different levels may vary depending on the context.

Steps for institutionalizing the relationship among University (Central Headquarter) - Municipal University Centers - Territorial and Local Governments - Economic Actors.

1. Relationship Between University and Municipal University Centers:

The relationship between the University and its Municipal University Centers is fundamental to ensuring cohesion, coordination, and academic quality across all academic units. Some ways to strengthen this relationship include:

1.1 Linkage with the local environment: The Central Headquarter and FUM-CUM can collaborate on outreach projects, applied research, and technology transfer that respond to specific needs and demands.

Activities to be conducted:

AI.7. Creation and operation of the Territorial Development University Council (CUDT).

CUDT vision: The Territorial Development University Council aims to assist the University Management Council in implementing policies to strengthen government-university-business sector relationships, ensuring municipal and territorial economic and social development through the use of science and innovation.

CUDT functions:

- Annually identify the needs of territories to execute actions for territorial and local development.
- Monitor the progress and effectiveness of policies for strengthening government-university-business sector relationships that ensure municipal and territorial economic and social development.
- Annually present a report on the Council's work to the University Management Council.
- Assist the Provincial Government in developing and controlling the Territorial Development Strategy and actions contributing to strengthening government-university-business sector relationships through science and innovation.

CUDT operation:

- A minimum of three meetings will be held each year (preferably in March, June, and November), convened by the president.
- The content will be analyzed beforehand by the president, vice president, and executive secretary.
- Extraordinary meetings may be convened to address prioritized topics.
- The relevance of inviting selected specialists based on the topic will be

considered.

Working committees: The Council's Management may create temporary working committees according to the topic being analyzed, proposing members who may be specialists in the area of evaluation and need not be Council members. Committees will report on their work.

1.2. Academic coordination: The Central Headquarter (SC) and Municipal University Centers (CUM) should work together in planning academic programs corresponding to local and territorial development needs and potentialities, defining professional profiles, updating curricula, and evaluating educational quality.

- Activities to be conducted:

AI.1. Diagnosis of specific capacities for managing territorial resources by local actors.

AI.2. Construction of territorial and local knowledge maps corresponding to the preparation needs for territorial and local development.

AI.3. Design of capacity-building programs and adjustments to curricula corresponding to the preparation needs for territorial and local development.

AI.4. Execution and impact evaluation of capacity-building programs and adjustments to curricula corresponding to the preparation needs for territorial and local development.

1.3. Knowledge transfer: The central headquarters can share resources, experiences, and best practices with municipal university centers.

- Activities to be conducted:

AI.5. Development of knowledge transfer plans based on AI.1.

1.4. Training of teaching staff: The central headquarters can provide training and technical support to the teaching staff of municipal university centers to improve their pedagogical performance, promote research, and foster educational innovation.

- Activities to be conducted:

AI.6. Preparation and update of teaching staff at CUM.

In summary, the relationship between the University and its Municipal University Centers is crucial for ensuring academic quality, social relevance, and a positive impact on local development. Effective communication, coordination, and a shared vision are fundamental elements to strengthen this relationship and enhance collaborative efforts.

2. Relationships Between University and Territorial and Local Governments: The relationship between universities and territorial and local governments is essential for promoting regional development, education, research, and innovation. Some ways these entities can collaborate include:

2.1. Regional development: Universities can collaborate with territorial and

local governments in the planning and execution of regional development projects, contributing their expertise in priority areas.

- Activities to be conducted:

All.1. Creation and operation of the Territorial Development University Council (CUDT), as established in AI.7.

2.2. Knowledge transfer: Universities can transfer knowledge and technologies to territorial and local governments to improve public service delivery, evidence-based decision-making, and effective policy implementation.

- Activities to be conducted:

All.2. Development of knowledge transfer plans based on AI.1, corresponding to territorial needs and potentialities.

2.3. Collaboration in research: Universities can collaborate with territorial and local governments on research addressing specific regional issues, generating innovative and sustainable solutions.

- Activities to be conducted:

All.3. Development of R&D&I projects corresponding to territorial and local needs and potentialities based on project calls.

2.4. Human resource training: Universities can contribute to the training of public officials through continuous training programs, thereby strengthening local government capacities to respond to current challenges.

- Activities to be conducted:

All.4. Diagnosis of preparation needs and capacity building for human resources required for territorial and local development.

All.5. Design of capacity-building programs and adjustments to curricula corresponding to preparation needs for territorial and local development.

All.6. Execution and impact evaluation of capacity-building programs and adjustments to curricula corresponding to preparation needs for territorial and local development.

2.5. Community engagement: Universities can establish close ties with local communities through outreach programs, impact tasks, professional practices, and socio-community responsibility projects, thereby contributing to strengthening social fabric and empowering the population.

- Activities to be conducted:

All.7. Establishing close ties with local communities corresponding to community development needs and potentialities, considering vulnerability levels.

All.8. Creation and operation of the Territorial Development University Council (CUDT) based on community development needs, vulnerability levels, and increasing popular participation and control.

In summary, collaboration between universities and territorial and local

governments is fundamental for promoting sustainable development, social inclusion, and community well-being. Additionally, collaboration between the university and local development is crucial for fostering innovation and economic growth in local communities, generating positive long-term impacts.

3. The Relationship Between the University and State Enterprises, MSME (Micro, Small, and Medium Enterprises), and Local Development Projects

The relationship between the university and state enterprises, MSME, and local development projects is essential for sustainable development. Some forms of collaboration include:

3.1. Professional internships: Companies can offer internship opportunities to university students, allowing them to develop innovative solutions to problems associated with their professions.

- Activities to be conducted:

AI.1.1. Planning and organization of professional internships for university students, enabling them to apply acquired knowledge to solve profession-related problems.

AI.1.2. Execution of professional internships for university students.

AI.1.3. Evaluation and impact assessment of professional internships for university students.

3.2. Research and development: Companies can collaborate with universities on research and development projects, mutually benefiting from technological and scientific advancements arising from this collaboration.

- Activities to be conducted:

AI.2.4. Development of R&D&I projects corresponding to territorial and local needs and potentialities, benefiting mutually from technological and scientific advancements.

3.3. Continuous education: Companies can offer continuous training programs for employees in collaboration with universities to keep their skills and knowledge up to date.

- Activities to be conducted:

AI.3.5. Diagnosis of continuous training needs for business development management.

AI.3.6. Building capacities for human resources necessary to impact organizational capabilities.

AI.3.7. Execution, evaluation, and impact assessment of continuous training programs required for business development

3.4. Technology transfer: Universities can transfer technology and knowledge to companies.

- Activities to be conducted:

AIII.8. Development of technology transfer plans based on AI.1, corresponding to territorial needs and potentialities.

3.5. Consulting and advisory services: The university can provide specialized consulting and advisory services to state enterprises, MSME, and private businesses in areas such as business management, marketing, finance, and technology.

- Activities to be conducted:

AIII.9. Development of specialized consulting and advisory programs for MSME and private businesses.

In summary, the relationship between the university and enterprises is key to fostering innovation, entrepreneurship, and economic growth in society.

4. Systematization of University Action for Governance in Local Development

This involves planning and executing strategies and actions that contribute to the sustainable development of the local community in which the educational institution is embedded. Some actions that can be part of this systematization include:

4.1. Environment diagnosis: Conduct a detailed analysis of the needs, resources, and potential of the territory where the university is located, identifying the main challenges and opportunities for its development.

- Activities to be conducted:

AIV.1. Definition of the product and process life cycle to be managed based on territorial resources and capacities to be developed.

AIV.2. Clarification of why and for what purpose to manage the innovation of identified products and processes and what capacities should be created and developed.

4.2. Creation and systematization of capacities for governance in local development by defining their specifications according to territorial resources.

- Activities to be conducted:

AIV.3. Generation of ideas associated with determining the requirements of specifications based on territorial resources.

AIV.4. Development of actions or dynamizing activities for the innovation of products and processes and the creation of capacities.

4.3. Program and project design:

- Activities to be conducted:

AIV.5. Development of programs and projects that respond to the demands and needs identified in the diagnosis.

4.4. Collaboration among actors:

- Activities to be conducted:

AIV.6. Establishment of alliances and collaborations with relevant actors to enhance the impact of actions undertaken, led by top leaders at each level to create added value and public value in the identified chains.

4.5. Evaluation and monitoring:

- Activities to be conducted:

AIV.7. Ongoing monitoring of implemented actions, evaluating their impact on the territory, and adjusting strategies as necessary to improve results. Evaluation serves as a transversal dimension in innovation management and capacity building, conducted before, during, and after implementation.

4.6. Dissemination and communication:

- Activities to be conducted:

AIV.8. Transparent and effective communication of actions taken with the community during the diagnosis and implementation of initiatives. Socialization aims to enhance the achievement of proposed objectives and goals.

In summary, the systematization of university action for governance in local development involves a planned and coordinated management of actions aimed at contributing to sustainable development and the well-being of the local community in which the educational institution is situated.

5. Evaluation and feedback

The monitoring and evaluation of the procedure are conducted according to the Higher Education Evaluation and Accreditation System in Cuba (SEAES) (Res. 160/2023 del Ministerio de Educación Superior [MES], 2023). This system defines indicators for measuring the university's actions in territorial and local development through CUM - FUM programs (Careers, Master's, Postgraduate Specialties, Doctorates), as well as for institutions.

This analysis is carried out semi-annually as part of the institutional objectives balance process. All processes contribute from their goals to the defined objective for managing university quality.

Implementation

Through the Municipal University Center in Morón, a proposal for indicators was designed to measure tourism management, developed from the perspective of a social innovation ecosystem for governance in local development, which has been included in the Municipal Development Strategy starting in 2025.

Indicators have been refined for the creation of the Territorial Observatory, with a focus on continuous improvement and innovation, defining mechanisms for integration among actors (FORMATUR-MINTUR-UNICA) to ensure the use of prior studies conducted in the territory.

Research results have been extended to enhance the Science, Technology, and Innovation Management System in provincial organizations, emphasizing the

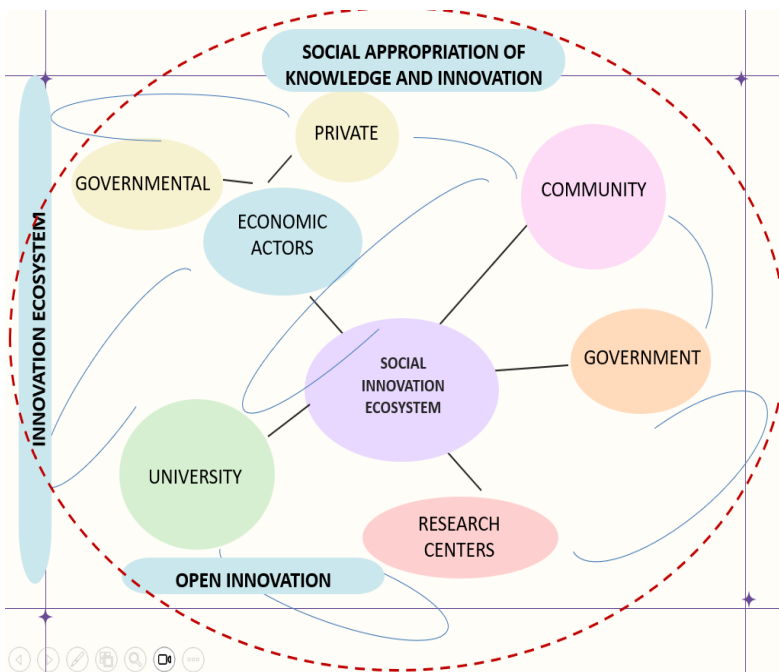
inter-process relationships between University and Enterprise, which are part of the actor network in the territory (Telecommunications Company of Cuba S.A. [ETECSA], Genetic Livestock Company Turiguanó, Credit and Commerce Bank [BANDEC] (Development of Electronic Banking and Green Banking), and Construction Company for Tourism [ECOT] Cayo Coco).

A report has been prepared outlining the principles and premises of innovation in tourism products and their systematization from complex adaptive systems for developing sustainable tourism products. Additionally, the transversal line of social innovation for projects from the Center for Food Engineering and Biotechnology (CIBA) is designed to incorporate its capacities into the ecosystem. Consultations are provided to economic actors and government systems to strengthen the university-enterprise link as fundamental actors in the ecosystem for developing organizational capacities and establishing strategic networks.

The establishment of strategic alliances is strengthened among the university, research centers, government structures, and state economic actors, although ties are weaker between these and non-state economic actors within the ecosystem and the community, as illustrated in Figure 1:

Figure 1

Relationships among ecosystem actors



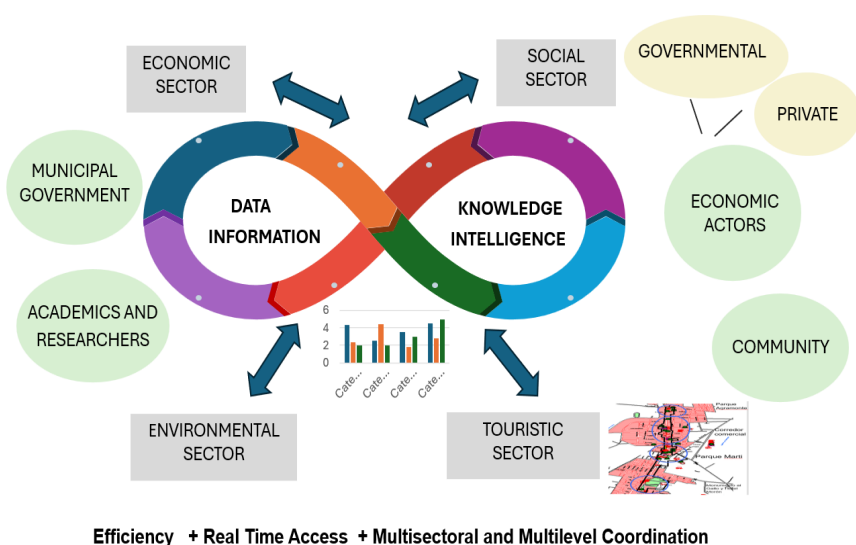
Source: Authors' own elaboration.

Additionally, efforts are underway to design the Territorial Information System of the Government in Morón with a governance and intelligence approach (Operating Manual, Procedure, Organizational Instructions for the Information

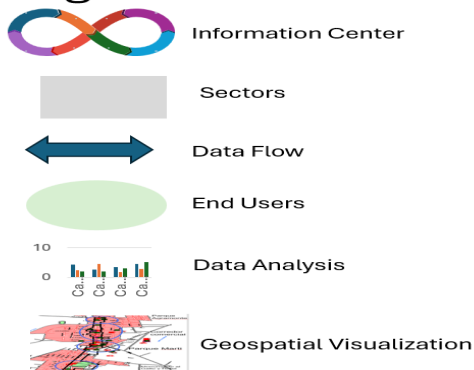
Center).

Figure 2

General outline of the information system



Legend



Source: Authors' own elaboration.

In general, social innovation initiatives in the area have been developed by organizations with social aims. These characteristics limit their scope in terms of deep social transformations, corresponding to the nature of initiatives in Europe and North America.

However, in the last decade, society has emerged as a primary actor in generating ideas and socially innovative practices at the territorial, local, and community levels. It is essential to highlight that beneath a discourse seemingly oriented toward real participation processes, practices aimed at perpetuating

vertical power relations can be identified. These elements limit governance in the context of local socioeconomic development and the necessary interaction between different scales and structures.

This study's proposal for effective implementation in Cuba must address the challenge of developing capacities that facilitate the creative performance of actors in different scenarios, particularly through the lens of social innovation capacities. The aim is to generate and encourage initiatives that transform reality in an innovative manner, as defined in González et al. (2024).

Research conducted in Spain by Hernández (2020) as part of the Systematic Model of Social Innovation Capacities highlights the necessary capacities for an innovation ecosystem to function. However, it does not delve into the essential elements for their creation at the territorial and local levels, nor does it clarify how universities contribute to this process. Consequently, this work reveals new questions and emphasizes the need for application at other territorial scales, as well as the pursuit of comparative studies to contribute to the theoretical modeling of social innovation ecosystems.

Conclusions

The proposal for the social innovation ecosystem brings together key actors, emphasizing the role of the community in jointly identifying social challenges and implementing creative and sustainable solutions. Through a detailed procedure, activities related to training, strategic alliances, and the design of a Territorial Observatory are carried out to promote social innovation.

Thus far, results indicate a strengthening of innovation competencies, increased collaboration among various actors, and a positive impact on local development management. In this context, the primary challenges lie in enhancing alliances and strategic networks among ecosystem actors to achieve the optimal level of necessary capacities for effective functioning. Therefore, this work demonstrates that higher education institutions play a crucial role in the socioeconomic advancement of their regions.

References

- Comisión Económica para América Latina y el Caribe (2024). *Perspectivas del Comercio Internacional de América Latina y el Caribe*. www.cepal.org/es/publicaciones/apps
- Franch León, K. (2017). *El conocimiento como catalizador de la innovación social: Una alternativa de desarrollo local en Cuba*. COFIN Habana, 11(1). <https://revistas.uh.cu/cofinhab/article/view/1032>
- Galego, G., Moulaert, F., Brans, M., Santinha, G. (2022). Social innovation & governance: a scoping review. *The European Journal of Social Sciences*. 35 (2), 265 - 290. <https://doi.org/10.1080/13511610.2021.1879630>



- Gatica, S., Soto, W. & Vela, D. (2015). *Ecosistemas de innovación social: el caso de las universidades de América Latina*. Santiago de Chile. <https://acortar.link/sEnuTy>
- Giraldo-Gutiérrez, F. L., Ortiz-Clavijo, L. F., Zapata Cardona, G. A. (2020). Social Innovation Lab: scenario of social participation, social appropriation and interdisciplinarity. *European Public & Social Innovation Review*, 5 (1). <https://epsir.net/index.php/epsir/article/view/127>
- González Crespo, A., Carballo Cruz, E., & Carballo Ramos, E. (2022). Procedimiento de innovación de productos turísticos para el proceso de coordinación de Bodas y Lunas de Miel. *Cooperativismo y Desarrollo*, 10(3), 536-561. <https://coodes.upr.edu.cu/index.php/coodes/article/view/498>
- González Pardo, A.; Carballo Ramos, E. & Carballo Cruz, E. (2024). Creación de capacidades en un contexto de innovación social para el desarrollo local. *Cooperativismo y Desarrollo*, 12(1), e677. <https://coodes.upr.edu.cu/index.php,./l/coodes/article/view/677>
- González Pardo, A., Carballo Cruz, E. & Carballo Ramos, E. (2024). Innovación social y desarrollo socioeconómico local: un enfoque de sistemas complejos. *Universidad & ciencia*, 13(3), 220-234. <https://revistas.unica.cu/index.php/uciencia/article/view/8702>
- González Pardo, A., Carballo Ramos, E., & González Cruz, E. (2025). Capacidades de innovación social y desarrollo local: Una perspectiva sociológica en ecosistemas de innovación. *Universidad y Sociedad*, 17(1), e4973. <https://rus.ucf.edu.cu/index.php/rus/article/view/4973>
- Hernández Ascanio, J. (2020). ¿La innovación social como método de investigación participativo y sociopráctico? *Tendencias Sociales. Revista de Sociología*, 0(6), 33-63. <https://doi.org/10.5944/ts.6.2020.29157>
- Hernández-Ascanio, J., Aja, J., Rueda, R. y Medina, M. (2021). Medir la capacidad de innovación social en organizaciones complejas del tercer sector. *EMPIRIA. Revista de Metodología de Ciencias Sociales*, 51, 153-182. <https://dialnet.unirioja.es/servlet/articulo?codigo=7915883>
- Hernández Ascanio, J., Aja Valle, J., Medina Viruel, M. J., & Rueda López, R. (2023). Fundamentación teórica de la innovación social: El problema de la modelización en un campo de estudio sin consolidar. *CIRIEC-España, Revista de economía pública, social y cooperativa*, (108), 131. <https://doi.org/10.7203/CIRIEC-E.108.21451>
- Horowitz, G. & Hwang, V. (2012). *The Rainforest: The Secret to Building the Next Silicon Valley*. Regenwald.
- ISO 9001: 2015. Que establece los sistemas de gestión de la calidad – Requisitos. www.iso.org
- Moulaert, F., Martinelli F., González S., Swyngedouw, E. (2007). Introduction: social innovation and governance in european cities urban development between path dependency and radical innovation. *European Urban and Regional*

- Studies* 14(3), 195-209. <https://doi.org/10.1177/0969776407077737>
- Moulaert, F. & Mehmood, A. (2011). Spaces of social innovation. In: Pike, A., Rodríguez Pose, A. and Tomaney, J. eds. *Handbook of Local and Regional Development*. London: Routledge, 212-225. <https://acortar.link/CHHuX5>
- Moulaert, F. & Mehmood, A. (2020). Towards a social innovation (SI) based epistemology in local development analysis: lessons from twenty years of EU research. *European Planning Studies*, 28 (3), <http://dx.doi.org/10.1080/09654313.2019.1639401>
- Moulaert, F. (2025). *From Land Ownership to Landed Commons Social Innovation in the Commoning of Scarce Land Resources*. Edward Elgar Publishing. <https://www.e-elgar.com/shop/usd/from-land-ownership-to-landed-commons-9781035367245.html>
- Ndou, V. & Schiuma, G. (2020). The role of social innovation for a knowledge - based local development: insights from the literature review. *Pati*, 6-25. <https://doi.org/10.1504/IJKBD.2020.106841>
- Núñez Jover, J., Fernández González, A., & Aguilera García, L. O. (2023). Creación de capacidades, conocimiento, innovación y desarrollo territorial. A propósito del municipio que queremos. En L. Pérez Hernández, *El municipio que queremos: Fortalezas y desafíos* (pp. 131-146). Editorial Caminos. <https://doi.org/10.1177/0969776407077737>
- Parra, E. y Moulaert, F. (2014). *Estudios territoriales: el lugar donde la teorización de la innovación social comenzó y continúa floreciendo*. <https://www.scielo.cl/pdf>
- Patiño Valencia, B., Villalba Morales, M. L., Acosta Amaya, M. (2022). Towards the conceptual understanding of social innovation and inclusive innovation: a literature review. *Innovation and development*. 12 (3), 437-458. <https://doi.org/10.1080/2157930X.2020.1859215>
- Paz Enrique, L. E., & Núñez Jover, J. (2021). Agentes productores y socializadores del campo de los estudios sobre desarrollo comunitario en Latinoamérica. *ACADEMO Revista de Investigación en Ciencias Sociales y Humanidades*, 8(1), 42-54. <https://doi.org/10.30545/academo.2021.ene-jun.4>
- Pérez González, M. del C., & Lutsak Yaroslava, N. V. (2017). La producción científica sobre la innovación social para el desarrollo local. Una revisión bibliométrica. *Revista Prisma Social*, (19), 146-182. <https://revistaprismasocial.es/article/view/1750>
- Rashed, A. T. A., Abdullahi, A. Y., & Raziq, M. M. (2025). A Bibliometric Analysis on Social Innovation and Social Entrepreneurship Performance in Emerging Economies from 1986 to 2023. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 0 (0). <https://doi.org/10.1177/23939575251369581>
- Res. 160/2023 del Ministerio de Educación Superior [MES]. (2023). Que establece el Reglamento del Sistema de Evaluación y Acreditación de la Educación Superior (SEAES). www.mes.gob.cu



- Santa Cruz, D., Ojalo, V. y Velasteguí, E. (2019). *Desarrollo local: conceptualizaciones, principales características y dimensiones*. *Revista Ciencia Digital*, 3 (2), 319 - 335. <https://doi.org/10.33262/cienciadigital.v9i2.353>
- Sosa, M.; Riquelme, Y. y Valladares, O.R. (2020). Consideraciones sobre el desarrollo local. *Revista Universidad y Sociedad*, 12 (4), Universidad de Cienfuegos, 309 - 315. <https://rus.ucf.edu.cu/index.php/rus/>
- Tansley, A., (1935). The Use and Abuse of Vegetational Concepts and Terms. *Ecology*, 16(3), 284-330
- Von Jacobi, N. & Nichols, A. (2024). Institutionalizing Inequality: fields conditions, institutional belonging, and the distribution of identities. *Journal of Economic Issues*, 58 (2), 605-618. <https://doi.org/10.1080/00213624.2024.2344444>

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