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Journal-Public Economy

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Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines of Structure and scope of government; Taxation, Subsidies, and Revenue: Efficiency, Optimal taxation, Incidence, Externalities redistributive effects, Environmental taxes and subsidies, Personal income and other Nonbusiness Taxes and subsidies, Business taxes and subsidies, Tax evasion; Fiscal policies and behavior of Economic Agents: Household, Firm; Publicly provided goods: Public goods, Publicly provided private goods, Project evaluation, Social discount rate; National government expenditures and related policies: Government expenditures and health, Government expenditures and education, Government expenditures and welfare programs, Infrastructures, Social security and public pensions, National security and war, Procurement; National budget, Deficit, and Debt: Budget, Budget systems, Deficit, Surplus, Debt, Debt management; State and local government; Intergovernmental relations: State and local taxation, Subsidies, and Revenue, State and Local budget and expenditures, Interjurisdictional Differentials and their effects, State and Local Borrowing, Intergovernmental relations, Federalism; Miscellaneous issues: Governmental loans and credits, Governmental property, International fiscal issues.

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Presentation of the content

In the first article we present, *Sustainable Impact Entrepreneurship Model: ECOCOLOR, a Success Story.*, by Medina-Ocampo Francisco José, Martínez-Mena, Elda Verónica, Bolaños-López Verónica, Rosete-Tenorio, Virginia, with adscription in the Universidad Tecnológica de Cancún, in the next article we present, *Well-Being Economic Development Hub and Social Innovation Ecosystems; Required Synergy for Regional Development Achieve in México*, by Landa-Torres, Iris Adriana, Vega-Zárate, César, Maravert-Alba, Myrna Iselda and Hernández-Quinto, Francisco with adscription in the Universidad Veracruzana, in the next article we present, *The Impact of Insecurity on Entrepreneurial Activities Among University Students in Cancún*, by López-Cetina, Yamit, Preza-Medina, Sergio Roberto, Peña-Santoyo, Kermin Dayan and Cebollón-Meza Ángela, with adscription in the Universidad Tecnológica de Cancún, in the last article we present, *The impact of remittances on families in Tecamachalco Puebla, México*, by Ximitl-Islas, Iván, Rodríguez-De La Vega, Marisol, Cabildo-Orea, Alejandra and Machorro-Díaz, Rafael, with adscription in the Universidad Tecnológica de Tecamachalco.





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
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
Sustainable Impact Entrepreneurship Model: ECOCOLOR, a Success Story





Modelo de emprendimiento con impacto sostenible: ECOCOLOR, una historia de éxito

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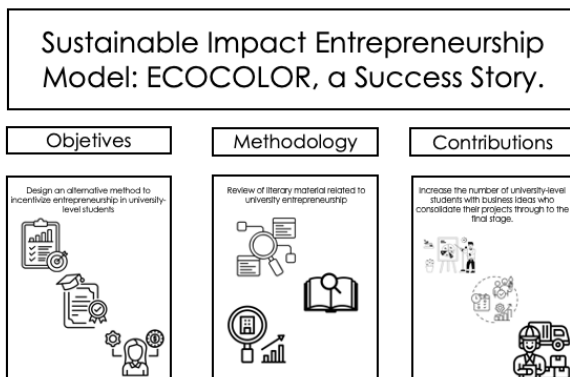


Abstract

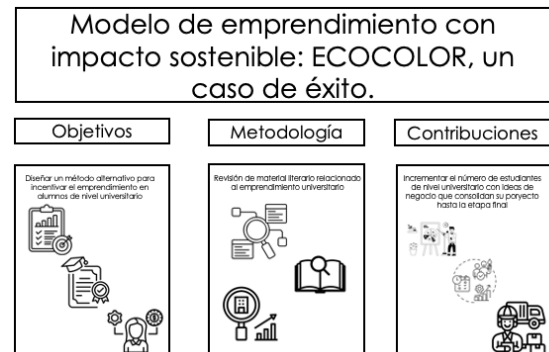
The research addresses aspects related to entrepreneurship and the role of teachers as advisors and coaches for students with business ideas, to generate an alternative for fostering student entrepreneurship at the Technological University of Cancun, a specific case for students of the Bachelor's Degree in Business Innovation, Marketing Area.

Resumen

La investigación aborda aspectos relacionados al emprendimiento y el papel de los docentes como asesores y guías de alumnos con ideas de negocio, a fin de generar una alternativa para el fomento del emprendimiento estudiantil en la Universidad Tecnológica de Cancún; caso específico en los estudiantes de la Licenciatura en Innovación de Negocios Área Mercadotecnia.



Models, entrepreneurship, social impact



Modelos, emprendimiento, impacto social

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Introduction

The concept of sustainability has been incorporated into academic and business discourse since the last decade of the 20th century, following recognition of the need to conserve resources and address various social problems. In 1992, the Earth Summit was held in Rio de Janeiro, Brazil, where a programme was approved to develop an even more sustainable model of growth [Fernández-Vallejo, 2022].

Subsequently, scientific evidence was presented demonstrating how human activity had influenced climate change, as well as the dangers of inaction in this regard. As countries took a stand on this serious problem, the foundations were laid for action plans and projects in line with sustainability [Cabanzo Carreño, 2022].

Based on these studies, nations established public policies to address international red flags, such as Sustainable State Development Plans, Ecological Land Use Plans, National Protected Natural Areas System Policies, among other documents. At the business level, standards have been adopted to ensure more sustainable processes and companies that could be certified, some examples being international standards. However, this variability in how the phenomenon of sustainability should be understood and addressed in environmental, economic, and social terms has allowed companies to enter the standards game not only to generate added value but also to use labels and seals that become valid instruments for increasing sales and competitiveness in all areas of business [Calderón Moscoso, 2024].

Fundamentals of Sustainable Entrepreneurship

Sustainable entrepreneurship is a commitment to taking advantage of business opportunities while seeking to support a sustainable economy, contributing to the creation of sustainable technologies and services that offer solutions to the social problems present in these areas. It involves transforming a product or service by reducing its environmental or social impact compared to less sustainable alternatives [Martinez et al. 2023].

A sustainable enterprise does not break away from the community, from the flat market to the neighbourhood or neighbouring locality; it is found in the people around it and in a person who finds their goal or a social fund. In particular, emerging ventures make it possible to address and close the gap with other types of organisations in terms of the social appropriation of available resources, or to introduce technological improvements that are not necessarily adjustable.

Sustainable entrepreneurship is relevant both in economic and socio-environmental terms, in terms of responsibility for energy consumption and the use of available resources [Arista-Cancino & Colina-Ysea, 2024].

Through sustainable entrepreneurship, tools can be found to improve the local situation, coordinating strategic aspirations, enhancing the local image or social plaques, and carrying out financial monitoring in the form of arbitrage, income in the form of potential income on actual users, and on resources that will not be socially extracted for a period in which they remain available to be used again [Valdiviezo & Pazmiño 2024].

Concept of Sustainable Entrepreneurship

This concept has been gaining increasing prominence in academia and business practice, largely due to the global economic crisis caused in particular by irresponsible management of certain business practices. This situation has resulted in countless highly criticisable ethical behaviours, the loss of a large number of jobs and a profound restructuring of many industries, culminating in the current global economic crisis [Guerrero, 2023].

It is in this context that the need to seek alternatives to existing traditional business models has arisen, and thus most entrepreneurs and researchers have begun to use terms such as solidarity, cooperation, sustainable development, eco-entrepreneurship, fair trade, social and responsible business to express in some way their intention to improve society and/or the environment [Esquinas Rychen, 2023].

Some researchers have concluded that there is a specific relationship between entrepreneurship and sustainability.

To better understand this, it is necessary to comprehend the real evidence that, historically, some societies have based their progress and economic development on the unsustainability of their resources, increasingly aggravating the situation of the population and initiating a cycle of dependency and underdevelopment [Guerrero, 2023].

Relevance of Sustainable Entrepreneurship

Sustainable entrepreneurship is the business approach that is most aligned with the social and environmental demands pursued by the 2030 Agenda. Sustainable entrepreneurship integrates the economic, social and environmental dimensions of business activities [Álvarez et al., 2024].

In this sense, the importance of sustainable entrepreneurship lies in the fact that its success is measured not only in economic, financial or market terms, but also in the social and environmental characteristics of companies. As progress is made towards the Sustainable Development Goals [SDGs], efforts to develop entrepreneurial skills present challenges and opportunities for the region [Solarte et al. 2023].

In 2020, there were 145 million people in the region living in poverty, around 29.5% of the total population. This dense landscape, where multidimensional inequality and extreme vulnerability predominate, indicates that the countries of the region have been investing efforts for some years in promoting entrepreneurship as a source for achieving the goals of the Sustainable Development Agenda, identifying an alignment between the interest in developing entrepreneurship and the need to generate new sources of income for the most vulnerable population.

Sustainable entrepreneurship, at multiple levels, plays an important role in the development of metropolises. Through new products and services, by promoting local economies and creating productive and decent jobs, it can contribute to the country's economic growth. Growing global, social, cultural and economic interdependencies have meant that, at present, all countries are confronted with the same economic, social and environmental reality, in which the principles of sustainability and social and cultural values have been altered, generating crises at the international level [Maguiña Leyva, 2024].

Education and Training

Entrepreneurial education has been the subject of a large number of studies. All have reached the same conclusion: entrepreneurs are, in general, people with little business training and who do not have the training that, depending on the size of the company, might be expected. However, they have also reached different conclusions regarding business training and have drawn up a profile or portrait of the business-trained person.

Although the topic has attracted interest, less research has been done on the origin and type of business education, both formal and informal. As a result, most of the references that form part of business education training programmes remain as hypotheses to be confirmed [Ospina, 2018].

The main objective of this study is to gain a deeper understanding of business education in relation to the creation of companies, and more specifically, micro-enterprises. Based on this diagnosis, it is hoped that business teaching will improve, both in terms of content and form. All of this is being carried out with a view to future definitions of the content of the different compulsory subjects that make up university curricula. The research takes into account the perception of those responsible for entrepreneurship in the productive fabric. Hence, the study aspires to be a reference tool for educators.

Training Programmes

The development of initiatives to promote sustainable entrepreneurship, which seek to strengthen the leadership of enterprises, empowering their leaders and enhancing their capabilities through access to quality education, has been an ongoing objective of many specialised organisations, as well as several governments.

Likewise, minimising differences in access to education and valuing knowledge serves to promote equality by training beneficiaries to better cope with adversity and risk, as well as promoting different strategies associated with the use and protection of natural resources, generating new spaces for different sectors of society to meet and exchange knowledge and experiences, and facilitating new opportunities for future entrepreneurship.

It is important to highlight the use of workshops, conferences, exhibitions and entrepreneurship platforms aimed at promoting learning and reducing the gap between trainers and beneficiaries, allowing for greater interaction and facilitating the exchange of knowledge and experiences [Arias and Echeverry 2023].

Mentoring and Advice

In the 21st century, most countries in Latin America and the Caribbean are promoting initiatives in favour of entrepreneurship as a way of creating employment. In most cases, these public policies establish a framework that includes incentives and programmes to promote private initiatives to generate employment by new entrepreneurs.

One of the barriers limiting the empowerment of society through job creation is the lack of mentoring and counselling to strengthen these initiatives and their continuous monitoring during the first months of the new entrepreneurs' lives [Mesa et al. 2023].

It is essential for public institutions dedicated to promoting entrepreneurship and business creation to integrate plans to promote mentoring and advice for all these initiatives six months after their launch [Aguilar, 2023].

In several developed countries, some of these services are provided by institutions and universities in their role of linking with their environment, but in most countries in Europe and Latin America, these actions tend to come to a standstill after promoting the public initiative to allow the creation of new businesses and generate employment [Ramírez, 2025].

Sharafizad, [2017], as cited in Portuguez [2020], mention that in recent studies related to the application of mentoring in entrepreneurship education, the mentor's intention to share their experiences, as well as the apprentice's ability and intention to learn from them, are considered important for the success of its implementation, where there is interaction between those involved and a relationship is established through effective communication.

Support Networks

Newly created companies need informal, fundamentally human support at the beginning of their journey, which allows them to advance in an often hostile environment. This means that, to a large extent, it is trust and a willingness to support that will result in the company becoming a meeting point for business, contacts, information, training and opportunities to be seized. Throughout this chapter, we have analysed the role played by different types of support networks in the early stages of any economic activity aimed at the production of goods or services.

Firstly, incubators and accelerators are proposed as a model of business support that provides a wide range of benefits to the company and is usually promoted by public institutions, universities or large companies.

Incubators and Accelerators

Currently, business incubators and accelerators have a long history of generating new businesses and have had a significant impact on promoting entrepreneurship in different sectors and geographical areas. The main objective is to provide micro-enterprises in the process of formation with assistance in different areas so that they can develop and remain in the market [García et al., 2025].

The most significant difference between incubators and accelerators is the duration of the process. While incubators provide support for a period of two to three years, based on the philosophy that companies should develop their full potential, the philosophy of accelerators is to extract the maximum potential from companies in a shorter period of time [six to 18 months] in order to assess whether it is viable to bring the company to market.

While some consider accelerators to be focused on technology startups with low costs and high potential, others have shown that they can support startups in any sector.

Unlike incubators, accelerators tend to offer predefined, intensive programmes for learning and implementing a series of stages and objectives [Casali, n.d.].

The following lines present a compilation of the most common model currently used in large accelerators that have set trends in the sector. These are as follows: continuous mentoring, shared workspaces, training, courses and workshops, seed capital, facilitation in subsequent fundraising, alliances with other actors in the ecosystem, commitment to generating networks and contacts, and differentiated relationships with relevant actors in the system.

The growing importance of these methodologies in the entrepreneurial ecosystem justifies the need to delve deeper into how different incubators and accelerators periodically report on how significant they perceive their relationships with other actors to be in their final positioning and what practices they adopt from this perspective with regard to relationship management.

Entrepreneurial Cooperatives

Cooperatives are one of the associative forms of entrepreneurship since, traditionally, they bring together people who are in a vulnerable situation, who have common interests and the intention to accomplish a common task. On this basis, entrepreneurship emerges from the activity that solves their problems and/or needs. In the context of sustainable entrepreneurship, cooperatives can be formed both in the activity of people organised to improve their quality of life and in the generation of autonomous activities that make them more sustainable. If we add to this the training role of the cooperative, generating autonomous human resources and improving the quality of life of its members, the ultimate goal is for this action to have a significant impact on the social and environmental context [Sorroche, 2017].

ECOCOLOR, a sustainable project with teacher guidance

In the case of the Technological University of Cancún, since the start of operations in 2012 of the Higher Technical University Degree in Business Development in the area of Marketing, 13 years ago, entrepreneurship has been continuously promoted, including through the development of business plans. However, the results have been unfavourable, as no companies have been formally registered, even though the projects were viable and appeared to be financially profitable.

Therefore, this article highlights the results of a project by five students from the Higher Technical Degree in Business Innovation and Marketing [LINM] who, in 2024, through the Integrative I course, developed a product aimed at tourism in Quintana Roo: coloured pencils made from 55% sargassum and 45% recycled paper.

At the end of the semester, the students decided to continue with the idea and carry it out in real life, so they approached their teachers to receive advice and mentoring for the project. This allowed several teachers to get involved in the project, each contributing their academic knowledge and work experience as part of the Academic Body's activities.

As a result, from September 2024 to July 2025, significant progress has been made in the development of the project called ECOCOLOR, as mentioned below.

1. Formation of the students as equal collaborators for the development of the project, brand creation, and prototype design.
2. Integration of four professors from the Business Academy to provide support and advice to the students through the Academic Body.
3. Assistance in reviewing calls for proposals to obtain financial and administrative resources for
4. ECOCOLOR.
5. Mentoring to improve the colour manufacturing process.
6. Registration of the ECOCOLOR brand with the Mexican Institute of Intellectual Property [IMPI].
7. Involvement of the authorities of the Technological University of Cancún [which gave the project an even greater boost].
8. Guidance in the preparation of presentations to promote the project to the authorities.
9. Advice on alignment with the State Government's priorities and the Sustainable Development Goals.

10. Financial and material support for the students from the teachers, in order to develop a product to show to the authorities.
11. Accompaniment of students with the authorities of the Federal Maritime Land Zone [ZOFEMAT].
12. Presentation of the product to the Municipal Ecology Department to obtain support for supplies [recycled paper and sargassum].
13. Presentation of the product to the Secretary of Economic Development of the State of Quintana Roo.
14. Presentation of the product at the International Sustainability Congress in Chicago 2025.
15. Presentation of the product to the Municipal President of the Municipality of Benito Juárez in Quintana Roo.
16. Presentation of the product to the Governor of the State of Quintana Roo.
17. Presentation of the product to the Federal Secretary of SEMARNAT.
18. Interviews in the media and social networks.
19. Winners of the state award from the Ministry of Economy.
20. Participation in the Science Clubs promoted by the Quintana Roo Council for Humanities, Sciences and Technologies [COQHICYT].

With all of the above, ECOCOLOR aims to be the first LINM university project to be registered and operating as a company, even before the five students finish their degrees in 2027.

Consequently, there is an urgent need to design a guide in the future, with this alternative working model, so that students from subsequent generations with new business ideas can receive academic advice and support from different professors in the management and administration of their projects.

References

Aguilar, V. J. C. [2023]. *Hacia un futuro de oportunidades igualitarias: mentoría y redes de apoyo para el empoderamiento de las mujeres en el ámbito organizacional*. Newman Business Review.

Álvarez, M. J. N., Bracho, O. A., & Acurero, M. T. [2024]. *Gestión del Talento Humano como factor clave para el emprendimiento sostenible*. Revista Temario Científico.

Arias, C. R., & Echeverry, P. [2023]. *El desarrollo de proyectos sostenibles—emprendimiento, innovación y gestión de proyectos como ejes fundamentales. Caso emprendedor universidad Ean*. La gestión de proyectos sostenibles como herramienta para el fortalecimiento de la competitividad, 239. [\[HTML\]](#)

Arista-Cancino, C. L. & Colina-Ysea, P. F. J. [2024]. *Emprendimiento sostenible y compromiso social*. interciencia.net

Cabanzo Carreño, C. J. [2022]. *Responsabilidad Social Universitaria, Gestión y Políticas Educativas: Un análisis crítico del discurso*.

Casali, H. []. *El funcionamiento de incubadoras universitarias de empresas como parte del ecosistema emprendedor. Estudio de casos múltiples*. Argentina. uap.edu.ar

Calderón Moscoso, E. O. [2024]. *La cooperación al desarrollo de Naciones Unidas y la reforma en la coordinación de las Organizaciones del Sistema de Naciones Unidas para el desarrollo*.

Esquinas Rychen, A. M. [2023]. *¿Una calidad sostenible? Las Denominaciones de Origen en la transición hacia la sostenibilidad*. unisg.ch

Fernández-Vallejo, A. M. [2022]. *La legitimización en el discurso de la Responsabilidad Social Corporativa [RSC]: El sector energético y financiero del Ibex35*. Revista signos.

García, M. K. M. & Anido, L. S. [2025]. *Las incubadoras de empresas como motor de innovación: etapas y procesos fundamentales de la incubación de empresas*. Revista Colegiada de Ciencia. up.ac.pa

Article

Guerrero, A. B. [2023]. *Avances en educación emprendedora: Génesis y desarrollo del potencial emprendedor*.

Maguiña Leyva, Z. L. [2024]. *La gestión empresarial y el emprendimiento sostenible de econegocios en Lima Metropolitana, 2023*.

Martinez, F., Duana, D., & Hernández, T. J. [2023]. *Emprendedor hacia un emprendimiento sostenible*. *Boletín Científico de Las Ciencias Económico Administrativas Del ICEA*, 11[22], 41-47.

Mesa, F. A. H., Morales, A. J. M., & Hurtado, P. D. [2023]. *Emprendimiento femenino en América Latina: una aproximación teórica*. *Económicas Cuc*, 44[2], 191-234.

Ospina C, Carolina D. [2018]. *Modelo programático de formación en emprendimiento para fomentar la inclusión social: Emprendimiento e Inclusión social*.

Ramírez, M. F. [2025]. *El emprendimiento joven avatares de un ecosistema emergente*. *Revista Internacional de Doctrina y Jurisprudencia*.

Portuguez m., Gómez M., [2020]. *Mentoría en curso de emprendimiento en línea. Sistematización de una experiencia en educación superior*. *Revista Formación Universitaria*, 3[6].

Solarte, C. M. S., Vallejo, G. A. R., Almeida, L. H. V., & Yépez, R. F. U. [2023]. *Emprendimiento sostenible: una revisión sistemática de la literatura*. *Gestión y Desarrollo Libre*, 8[15].

Sorroche Gutiérrez, R. [2017]. *Aprende a emprender*.

Valdiviezo, V. A. G., & Pazmiño, A. M. A. [2024]. *Análisis de los factores que influyen en el emprendimiento sostenible: un estudio bibliográfico*. *REINCISOL: Revista de Investigación Científica y Social*, 3[6], 3853-3879.

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Well-Being Economic Development Hub and Social Innovation Ecosystems; Required Synergy for Regional Development Achieve in México.

Polos de Desarrollo Económico para el Bienestar y Ecosistemas de Innovación Social, sinergia requerida para lograr Desarrollo Regional en México.

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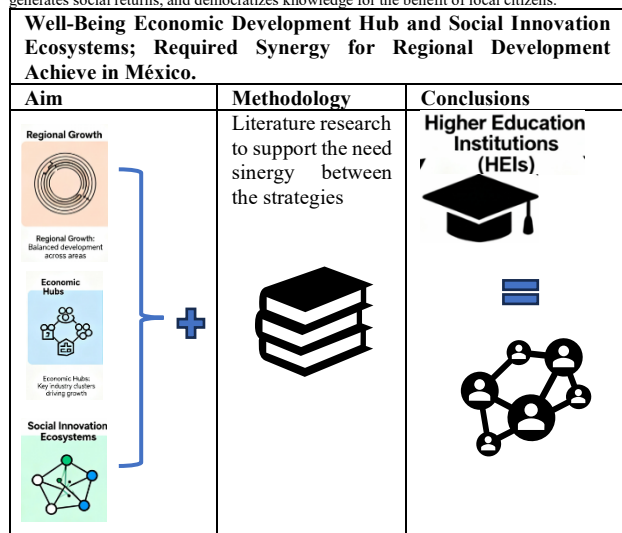
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Abstract

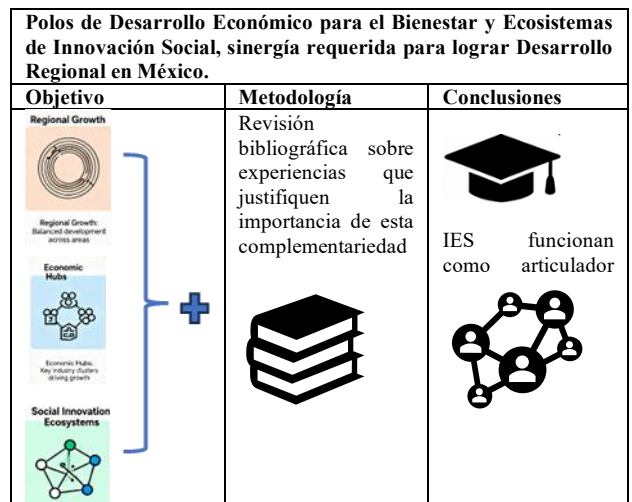
The Economic Development Hubs for Well-being [PODECOBI], announced in the Mexico 2025 Plan, aim to promote regional economic growth by leveraging economic vocations and strategic sectors. However, this does not necessarily guarantee endogenous development or improved well-being within the territories. This article argues that the success of the PODECOBI strategy depends on its complementarity with the creation of Social Innovation Ecosystems, articulated through higher education institutions [HEIs]. The integration of Social Innovation Ecosystems with Economic Development Hubs, positioning HEIs as central actors, offers a framework that ensures territorial ownership and governance, generates social returns, and democratizes knowledge for the benefit of local citizens.



Economic development hubs, social innovation ecosystems, Polos de Desarrollo Económicos del Bienestar, joint mechanism for development, regional development

Resumen

Los Polos de Desarrollo Económico para Bienestar [PODECOBI] anunciados en el Plan México en 2025 buscan impulsar el crecimiento económico regional a través de vocaciones económicas y sectores estratégicos, sin embargo, eso no forzosamente implica Desarrollo y bienestar endógeno en los territorios. Este artículo argumenta que el éxito de la estrategia de los PODECOBI depende de una complementariedad con la creación de Ecosistemas de Innovación Social articulados por las Instituciones de educación superior [IES]. Los Ecosistemas de innovación social, más los Polos de Desarrollo Económico, más las IES como nodo es una propuesta que asegura apropiación y gobernanza territorial, retribución social y la democratización del conocimiento en pro de la ciudadanía local.



Ecosistemas de Innovación social, Polos de desarrollo económico para el bienestar, Mecanismos de articulación, desarrollo regional

Area: Development of strategic leading -edge technologies and open innovation for social transformation

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Peer review under the responsibility of the Scientific Committee MARVID® in the contribution to the scientific, technological and innovation Peer Review Process through the training of Human Resources for the continuity in the Critical Analysis of International Research.



Introduction

In 2025, the ‘Plan Mexico’ initiative was presented as a proposal to boost economic growth in the country. Among its strategies, the idea of Development Poles for Well-being [PODEBIS] launched in the Isthmus of Tehuantepec Corridor [CIIT] was replicated and scaled up. Development Poles will now be installed throughout the national territory.

The pioneering and most advanced PODEBIS in their implementation determined vocations according to the region to be established; consideration was also given to the need to accompany the initiative with social innovation to ensure that the community, local people and the region were part of the development.

This document aims to strengthen this argument based on a review of academic journals and indices that support the importance of articulating both policies. It draws on the experience developed for the Interoceanic Corridor of the Isthmus of Tehuantepec and revisits the articulation mechanism to transfer it to the new initiative, particularly to the Capital Region of the State of Veracruz. Similarly, the proposal set out in this document can be replicated and scaled up for the 41 Development Poles to be implemented.

The first section of the article develops the theoretical arguments on Development Poles and Social Innovation Ecosystems and outlines the main argument of the article: Development Poles and ecosystems are complementary strategies that, when working in synergy, enhance the success of true regional development.

The methodological section explains the process and scientific rigour behind the work and the proposal. Finally, the results show the importance of comprehensive regional development, highlighting the opportunity or benefits of intervention by higher education institutions as a coordinating node that facilitates the contexts and environments for collaboration between the two strategies: Development Poles and Social Innovation Ecosystems, enabling them to find opportunities for synergy.

The conclusion highlights some basic elements that should be considered and proposes the creation of a coordination mechanism that

emulates and scales up the efforts made at the CIIT. Finally, although the capital region of the state of Xalapa does not have a development hub, it is close to the hubs of Tlaxcala, Puebla, Coatzacoalcos and Poza Rica. It is proposed that the University of Veracruz and the Higher Technological Institute of Perote adapt and implement a coordination mechanism that will eventually involve more participation from higher education institutions in the region and promote productive vocations that can generate, on the one hand, a Social Innovation Ecosystem and, on the other, connect with the development hubs close to the region.

Economic Development Hubs for Well-being Initiative [PODECOSI]

In 2025, the Plan Mexico presented a project to create, promote and strengthen the ‘Economic Development Hubs for Well-being [PODECOSI]’, strategic regions that were initially planned and designated to be the backbone of the Tehuantepec Isthmus Development Project and the Interoceanic Corridor. Now, with the new federal administration headed by Dr Claudia Sheinbaum, the PODECOSI project has been extended to other regions of the country.

The Economic Development Poles for Well-being [PODECOSI] are defined as ‘territorially delimited polygons, equipped with specific infrastructure, targeted tax benefits and administrative facilities that seek to promote economic activity’ [Ministry of Economy [SE], 2025, p.2] with the aim of promoting:

- Balanced territorial development,
- Leveraging productive vocations
- Social inclusion
- Job creation and well-being
- Tax incentives
- Production chains
- Development of strategic sectors
- Sustainability

The 2024-2030 federal government considered the Development Poles for Well-being established in the Interoceanic Corridor of the Isthmus of Tehuantepec as the basis and guide for the project. However, it will add 31 additional poles, which will be implemented in stages [see Figure 1].

Box 1

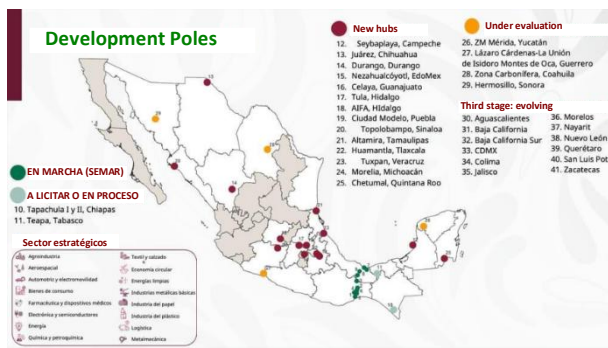


Figure 1

Poles of Economic Development for Wellbeing [PODECOBIS] [SE, 2025, p.3](#)

For these PODECOBIS, the following strategic sectors are recognised: agribusiness, aerospace, automotive and electromobility, consumer goods, pharmaceuticals and medical devices, electronics and semiconductors, energy, chemicals and petrochemicals, textiles and footwear, circular economy, clean energy, basic metal industries, paper industry, basic metal industries, plastics industries, logistics, and metal mechanics.

The strategy of developing Development Hubs is based on international best practices and the theory developed by Francois Perroux, who proposed that development ‘must be global, endogenous, and integrated,’ taking into account the territory and the environment [[in Guillén Romo, 2008, p.18](#)], he highlighted the essential role of the State as an articulator and connector between different economic elements to trigger growth and face competition; this is because economic development in a developing country is not uniform, but asymmetrical, so agglomerations or poles with the potential to lead growth must be identified.

Boudeville contributed to the theory through ‘economic spaces,’ which recognise the territorial influence generated by the industrialisation of an area. This concentration of efforts results in accelerated growth and economic development. Beyond economic sustenance, international experiences have shown that every hub must identify its location and territory and build useful instruments and mechanisms capable of developing and implementing policies that counteract the imbalances that occur between regions [[Hermansen, T, 1974](#)].

The implementation of Development Hubs around the world are good practices and successful cases that demonstrate the capacity to develop productive, interconnected, and coordinated areas that also generate development and well-being. According to the World Bank [2011], there are success stories in China, Korea, India, and Brazil that have promoted areas of industrial and manufacturing development.

Social Innovation Ecosystems

Social innovation is understood as a transformative agent in the community, and in the last twenty years, it has been the focus of study as a strategy to promote regional and local development. Social innovation is capable of building territorial capital [[Domanski, et al., 2020](#)] and is an engine of change that democratizes opportunities to overcome obstacles and achieve true development among societies [[Pel, et al., 2020](#)].

Social innovation is the transition to a new paradigm that understands that innovation goes beyond technological development, is open to society, and is oriented towards combating social challenges:

We describe social innovation as a new combination and/or new configuration of social practices in certain areas of action or social contexts prompted by certain actors or constellations of actors in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices [[Domanski, et al., 2020, p. 459](#)].

Social innovation is approached from a perspective that transcends economic value and emphasises the generation of social value; it is created and implemented among different actors and in different contexts, incorporating knowledge and technology transfer to increase the productivity and well-being of the community, organisation and company.

Table 1 presents some definitions of social innovation, as well as the evolution of the concept.

Box 2

Table 1

Definitions of Social Innovation	
Author	Definition
F. Moulert [2020] Catholic University of Leuven Heverlee, Belgium	Social innovation is made up of two pillars: one stems from the institutional and includes innovations in social relations, empowerment of people and governance; the other pillar relates to the social economy, and the quest to meet the needs of local communities.
A. Hubert [2011] Bureau of European Policy Advisers [BEPA]	Social innovations must be social both in their purpose and in the means employed. They are new ideas [products, services and models] that simultaneously meet the needs of the community and create new relationships or partnerships. These practices are good for society and contribute to the improvement of its capacity for action [p. 7].
G. Mulgan [en Vega Jurado, 2017]	Social innovation comprises innovative activities and services that arise with the aim of meeting some social need and that are predominantly developed and disseminated by organisations whose primary purpose is social [p. 15].
CEPAL [en Vega Jurado, 2017]	New ways of doing tasks, new tasks, new forms of management or administration, with a better cost-efficiency ratio than traditional models, which have the potential to be replicated, both in the country where they originate and in others in the region that have proven to be economically and politically sustainable, that can be converted into public policy, that have an impact on the determinants of poverty, that have the potential to reduce discrimination and exclusion, and, very importantly for ECLAC, that promote and strengthen community participation as a contribution to citizenship and, therefore, to the strengthening of democracy [p. 15].

Elaborated with information from different authors cited in the table.

The processes of interconnection, collaboration, and participation generated by social innovation can become mechanisms that lead to ecosystems from the complex paradigm.

For Pel, et al. [2020], social innovation ecosystems are a mode of governance through which the challenges of communities can be addressed. It can even reach a level of meta-governance through strategic and collaborative efforts between governments and benefactors [non-governmental organisations, private initiative, higher education institutions, among others].

The conceptualisation of social innovation ecosystems is still in the construction stage, but it is nevertheless an observable phenomenon that demonstrates its virtues and qualities for enhancing regional well-being and development. The idea of social innovation ecosystems goes beyond the individualistic vision of entrepreneurship and focuses on the environment, its dimensions, actors, and drivers [government, private initiative, industry, academia, environment].

The more infrastructure, scaffolding and articulation mechanisms are promoted among the actors in a region, the better the conditions for empowering an ecosystem and the greater the degree of consolidation and strengthening of the ecosystem [Pel, et.al., 2020].

Following this theoretical review of Economic Development Hubs and Social Innovation Ecosystems, this article considers that both strategies complement each other and ensure that the territory and its inhabitants enjoy well-being and economic development; it also considers that the community embraces the projects and takes ownership of them in order to self-manage them in the most efficient and useful way for the community itself. Thus, Development Poles that promote economic growth through investment and the establishment of businesses become part of an ecosystem that integrates and includes territories, the environment, and people.

Methodology

The methodology of this work is qualitative and consisted of searching for literature no more than fifteen years old that deals with the subject. The information collected will be analysed and categorised according to the type of product and publication in order to highlight the most important findings using an information matrix.

The search, categorisation and bibliographic review made it possible to identify the challenges and opportunities that HEIs face in fulfilling their role as coordinating nodes and in seeking the development and consolidation of innovation ecosystems. In addition, opportunities for building an innovation ecosystem in the Veracruz capital region were reviewed through collaboration between different HEIs, initially with UV-TEC in Perote through its quality postgraduate education programmes registered with SECIHTI.

Results

In the previous sections, hubs and ecosystems were developed conceptually, whose theoretical interpretations agree that each region has different initiatives, strategic actors, and different driving forces; that is, they are different journeys shaped by experience and a differentiated constellation of networks that make each ecosystem different.

However, they all require certain criteria and elements to trigger: empowerment, the capacity for self-management, the construction of tools that lead to good governance, and the building of systemic capacities.

This also implies understanding social innovation as a cross-cutting element that must prioritise the community and its connection with the territory, nature, needs and reality, as well as recognising the value of collaboration and dynamism open to receiving contributions from other actors [Gatica, et al., 2015].

Synergy between Development Hubs and Innovation Ecosystems

The development of megaprojects generates both positive and negative impacts. Castillo, et.al. [2025] mention that in many cases, the negative impacts are mainly felt by local communities and ecosystems, which sometimes leads to widespread resistance and rejection of infrastructure development. Bettina Cruz, founder of the Assembly of Indigenous Peoples of the Isthmus of Tehuantepec, stated that ‘the benefits of the megaproject seem to be oriented more toward the outside world than toward the comprehensive development of local communities’ [in Castillo, et al., 2025, p.155].

The above shows the importance of incorporating comprehensive strategies into megaprojects such as PODECOBIS that consider and address the needs of the local population, as well as mechanisms for participation, collaboration and integration. Development hubs are a reductionist vision that generates inequality between regions; therefore, only if they are designed with a complex, local and community-based vision can they incorporate actions that ensure the promotion of true well-being in the region where they are established.

This is where Social Innovation Ecosystems find the opportunity to articulate this comprehensive intervention involving the community, the environment and society, ensuring at all times the reduction of gaps and possible inequalities.

According to Domanski, et.al. [2020], there is a growing consensus among academics, government officials and public policy specialists that technological innovation is not enough to solve the challenges facing the economic and social development of communities.

It is important to clarify that in order to achieve true local development, community residents must be considered active and participatory agents, not passive beneficiaries [Castillo, et al., 2025]. In other words, the design and implementation of these policy interventions must be determined by the community, for the community, in order to achieve participatory governance.

To achieve this combination and complementarity between projects, one of the fundamental mechanisms for building the foundations of effective and efficient communication is to establish a coordination mechanism.

In this regard, the documented experience of the work carried out in the Isthmus of Tehuantepec shows that it is possible to establish a critical path and develop the stages of the process that facilitate coordination.

In this regard, Landa-Torres [2024] presented a proposal for a coordination mechanism in which higher education institutions served as coordinating nodes in a model of loosely coupled organisations, ‘understanding coordination as the synergy that results from the joint action of two or more actors, and whose value exceeds their simple sum’ [Leyton in Landa-Torres, 2024, p.4] [See Figure 2].

Box 3

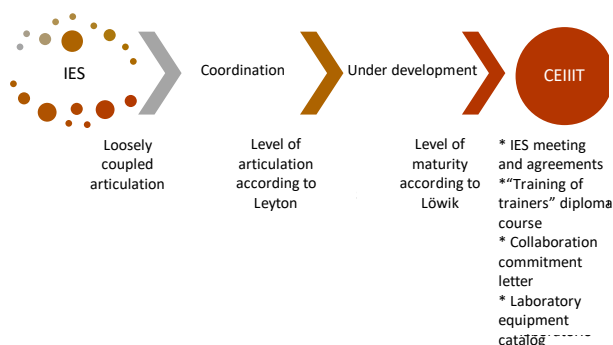


Figure 2

Proposed articulation mechanism
Landa-Torres [2024, p.7]

HEIs as an articulation node

Achieving participatory governance and self-management for local development, among other key elements required by social innovation ecosystems and PODECOBIS, involves the intervention of different actors in a pentahélice process that promotes the exchange of knowledge, methodologies, and actions to advance development and well-being objectives.

This is where higher education institutions [HEIs] come in as a coordinating agent, facilitating the implementation of a coordination mechanism, as the virtues and qualities of HEIs allow for the necessary loose and flexible coupling between the community, government, private initiative, nature and any other local actor. HEIs can therefore act as a synaptic agent [translator, articulator, facilitator, incubator] that fosters the environments, tools and knowledge necessary to generate connections between actors, creating unique spaces, territories where the economy [development hubs], the community and the environment coexist in a holistic and comprehensive manner for the sake of local development and well-being.

In a way, the first Development Hubs implemented in the Interoceanic Corridor of the Isthmus of Tehuantepec promoted the participation of Higher Education Institutions through the Inter-institutional Groups for the Strengthening of Human Capital in the Isthmus of Tehuantepec, with the aim of meeting the needs of industries in relation to the workforce. Now, the PODECOBIS seem set to replicate this collaboration, as the first hub announced to be set up in Tlaxcala will be surrounded by several HEIs [Mexico Business News, 2025]. Following the same argument as that promoted in the Isthmus of Tehuantepec:

With centres such as the Technological University of Tlaxcala [UTT] and the Autonomous University of Tlaxcala [UATx], together with CBTIS, CBTA and six CECYTE campuses, a robust educational ecosystem is being created that can be directly aligned with the productive vocations of the hub... This proximity will allow young people from Tlaxcala to access technical and professional training linked to emerging industries, facilitating their entry into the labour market and strengthening the social fabric of the region... retaining local talent, reducing migration and creating new life prospects for future generations [Avendaño, 2025, p.1].

HEIs have shown that they have functioned as articulating nodes for the training and strengthening of human capital, coordinating agents of change and promoting the formation, consolidation and strengthening of social innovation ecosystems. Furthermore, in a globalised world based on a knowledge management economy, the role of HEIs goes further and becomes a hub for socialisation, knowledge transfer [Yuzhuo, C. Jinyuan, M. & Qiongqiong, 2020] and knowledge recovery.

To achieve the design, planning and execution of this grand strategy, HEIs are central actors that function as anchors and hubs, changing their role from knowledge generators to transmitters and disseminators of knowledge, but also creating spaces for co-creation where information and knowledge are transformed and communicated in a bidirectional manner. On the other hand, the literature agrees that HEIs also acquire a leadership role that allows them to guide spaces of trust and security for the construction of their own ecosystems [Yuzhuo, Jinyuan & Qiongqiong, 2020] [See Figure 3].

ox 4

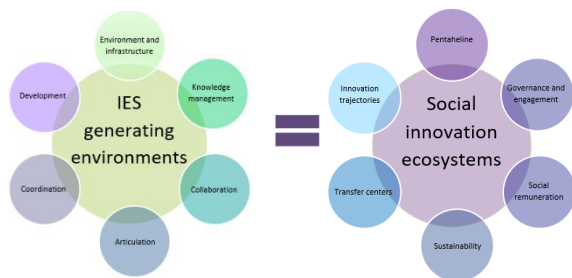


Figure 3

Impact of HEIs as a hub for coordination

Own elaboration

Conclusions

This discussion becomes a proposal for academia and researchers to move from theoretical research to the territorialisation of strategies and to develop the instruments and tools to identify the vocations, actors, elements and territorial conditions that facilitate the consolidation of social innovation ecosystems in any region of the country as part of a development-oriented need.

In this way, Innovation Ecosystems become a valuable heuristic/empirical model that generates unique and distinctive opportunities according to the territory, the actors and their dynamics, providing an opportunity to shape characteristics appropriate to each region and maximise opportunities for growth and impact.

Elements necessary for the creation of ecosystems: 1] a model of governance between different actors, 2] social innovation hubs, laboratories and transfer centres as innovators that trigger and accelerate social innovation, and 3] innovation trajectories [Terstriep, et al., 2020]. You can also consider the existence of translocal networks [funded by international and transnational organisations] for the transfer of knowledge and skills that empower communities [Avelino, et al., 2020].

The importance of creating a social innovation ecosystem lies in its ability to generate strong interconnections that result in new hybrid and flexible organisational models that facilitate communication, work and the achievement of established objectives and goals. Above all, it promotes the incorporation and inclusion of different actors in a community, benefiting everyone equally.

An innovation ecosystem empowered by network constellations can build strong foundations for the appropriation and propulsion of Economic Development Poles for Well-being, facilitating the achievement of the objective of true endogenous development and the improvement of the quality of life of local residents.

In the case of development hubs, they are a well-studied strategy and international best practices are the guiding force for achieving their territorialisation. However, their implementation in isolation disconnects them from the opportunity to generate real change and achieve local and regional development. Furthermore, there is widespread rejection of the imposition of economic activities that are alien to the traditions, customs and practices of the defined regions.

The capital region of the state of Veracruz does not currently have a territorial delimitation that will officially be a PODECOBI, but it does have all the elements to promote ecosystems and local development zones, enhancing vocations, and subsequently establishing mechanisms for coordination with the hubs that surround the area and are located less than two hours away [Puebla and Tlaxcala].

The four authors participating in this article represent a collaborative effort between various faculties, study programmes and human capital training. However, we all share the commitment of the Secretariat of Science, Humanities, Technology and Innovation [SECIHTI] to link the academic sectors with local needs and problems in order to influence their solution and democratise access to science, thus actively contributing to the social welfare and economic development of society.

The aim is therefore to establish the first steps for a coordination mechanism between the three study programmes, drawing on the experience and knowledge generated in the Isthmus of Tehuantepec Interoceanic Programme and Corridor, to identify and map the vocations, projects, products and economic activities that could result in a productive chain and enrich the value chain. In subsequent stages, the aim is to incorporate more HEIs and actors into a constellation of welfare networks.

In conclusion, the challenge for Higher Education Institutions [HEIs] is not only to formalise and professionalise young people in Mexico, but also to be understood as agents of change that contribute to the development of their communities. Through their experience in knowledge generation and management, the implementation of collaboration and cooperation mechanisms, among other tools, HEIs can facilitate environments for the formation and consolidation of Social Innovation Ecosystems.

The creation of these constellations of networks for well-being that articulate the Poles and ecosystems must also be understood as part of our commitment to social retribution, complying with the provisions of the General Law on Humanities, Sciences, Technologies and Innovation [LGHCTI]. Democratizing knowledge to generate benefits in the territory and marginalised and vulnerable communities of the country, breaking the vicious cycles of poverty, marginalisation and precarious employment. Ensuring a better distribution of wealth and the effective management of common goods that protect diversity and the environment.

Declarations

Conflict of interest

The authors declare no interest conflict. They have no known competing financial interests or personal relationships that could have appeared to influence the article reported in this article.

Author contribution

Landa Torres, Iris Adriana: Contributed to the project idea, research method and technique, the elaboration and written of the article.

Vega Zárate, César: Contribute to the idea, research method and article review.

Myrna Iselda Maravert Alba: Contribute to the idea, research method and article review.

Francisco Hernández Cano: Contribute to the idea, research method and article review.

Availability of data and materials

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Abbreviations

CBTA	Centre of Technological and Agricultural High School
CBTIS	Centre for Technological, Industrial and Service High School
CECYTE	Centre for Scientific and Technological Studies
CEPAL	Economic Commission for Latin America and the Caribbean
CIIT	Isthmus of Tehuantepec Interoceanic Corridor
IES	Higher Education Institutions
PODECABI	Economic Development Poles for Well-being
PODEBIS	Development Poles for Well-being
TEC de Perote	Higher Technological Institute of Perote
SE	Ministry of Economy
UATx	Autonomous University of Tlaxcala
UTT	Technological University of Tlaxcala
UV	Veracruz University

References

Antecedents

Avendaño, J.C. [2025] “[Polo de desarrollo en Huamantla pone a Tlaxcala a la vanguardia](#)” *La Jornada de Oriente*, Periódico Digital publicación 18 de agosto 2025 [La jornada de Oriente]

Guillen Romo, H. [2008] “[Francois Perroux: pionero olvidado de la economía del desarrollo](#)” *en Mundo Siglo XXI*. Revista del Centro de Investigaciones Económicas, Administrativas y Sociales del IPN, num 11, pp. 11-22 [Teoría del desarrollo]

Article

Hermansen, T. [1974] “Polos y centros de desarrollo en el desarrollo nacional y regional: Elementos para un marco teórico para un enfoque sintético” *Revista EURE- Revista de Estudios Urbano Regionales*

Hubert, A. [2011]. *Empowering people, driving change: Social innovation in the European Union*. Ginebra: Bureau of European Policy Advisers.

Mexico Business News [2025] “Mexico Lauches First Well-Being Economic Development Hub” Periódico Digital publicación 20 de agosto 2025 [Economic Development Hub]

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, 434-453.

Pel, B., Wittmayer, J., Dorland, J. & Sogaard Jorgensen, M. [2020] “Unpacking the social innovation ecosystem: an empirically grounded typology of empoweing network constellations” *Innovation: The European Journal of Social Science Research*, Vol. 33 No. 3, pp 311-336. Routledge Taylor & Francis Group. [Empowering network constellations]

Vega Jurado, J. [2017]. *Innovación Social. Asunción: Consejo Nacional de Ciencia y Tecnología- Paraguay*, ISBN 978-99967-829-92. Obtenido de

Basics.

Secretaría de Economía [2025] “Polos de Desarrollo Económico para el Bienestar” Presentación oficial obtenida en [Polos de Desarrollo]

Supports.

Banco Mundial [2011] “Los polos de crecimiento en los mercados emergentes redefinen la estructura económica internacional” Comunicado de Prensa.

Castillo Leal, M., Martínez Castro, C.J. & García Martínez, K. [2025] “Análisis socioeconómico de los Polos de Desarrollo para el Bienestar en el Proyecto del Corredor Interoceánico del Istmo de Tehuantepec” en De la Vega Estrada, S. y Sáenz Vela, H.M. [Coords] *Desigualdad regional y empobrecimiento.*

Gestión de los territorios con inclusión social. UNAM-AMECIDER, México, pp. 153-168. ISBN UNAM 978-607-30-8309-6. [Polos de desarrollo del Istmo de Tehuantepec]

Domanski, D., Howaldt, J. & Christoph K., [2020] “A comprehensive concept of social innovation and its implications for the local context- on the growing importance of social innovation ecosystems and infrastructures” *European Planning Studies*, Vol 28, no.3, pp 454-474. Routledge Taylor & Francis Group. [Social innovation ecosystems and infrastructures]

Gatica, S., Soto, W y Vela, Diego [2015] “Ecosistemas de Innovación Social: El caso de las Universidades de Amércia Latina” Ed. Ashoka, Santiago de Chile [Ecosistemas de innovación social]

Landa-Torres, I.A. [2024] “Joint Mechanism of isntitutions of Higher education for the creation a Social Innovation Ecosystem in Istmo de Tehuantepec, México, *Journal-Law and Economy*

Terstriep, J., Rehfeld, D., & Kleverbeck, M. [2020]. Favourable social innovation ecosystem[s]? An explorative approach. *European Planning Studies*, 28[5: Social Innovation: The Economics of Social Innovation], 881-905.

Discussions.





Avelino, F., Dumitru, A., Cipolla, C., Kunze, I., & Wittmayer, J. [2020]. Translocal empowerment in transformative social innovation networks. *European Planning Studies*, 28[5], 955-977.

Yunzhuo, C., Jinyuan, M. & Qiongqiong, C. [2020] “Higher Education in Innovation Ecosystems” *Sustainability journal*,





The Impact of Insecurity on Entrepreneurial Activities Among University Students in Cancún




El Impacto de la Inseguridad en el Emprendimiento de Jóvenes Universitarios de Cancún.

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Abstract

Entrepreneurship is a fundamental pillar within the comprehensive education of university students. This research aims to evaluate the impact that the perception of insecurity has on the decision to undertake entrepreneurial activities among young people about to complete their Bachelor's degree in Business Innovation at a university in Cancún. To achieve this objective, a questionnaire with a transversal and descriptive approach was designed and applied to a voluntary sample of 113 students. The data obtained allow for the analysis of how insecurity conditions influence students' entrepreneurial choices. The results will facilitate the identification of strengths and areas for improvement in their preferences and attitudes towards entrepreneurship, providing a foundation for the development of institutional strategies that consider security programs and financial support. In this way, the goal is to promote financial autonomy and strengthen the entrepreneurial ecosystem within this segment

Resumen




El emprendimiento constituye un pilar esencial dentro de la formación integral de los estudiantes universitarios. La presente investigación tiene como propósito evaluar el impacto que la percepción de inseguridad ejerce sobre la decisión de emprender en jóvenes próximos a concluir la Licenciatura en Innovación de Negocios en una universidad de Cancún. Para alcanzar este objetivo, se diseñó y aplicó un cuestionario con enfoque transversal y descriptivo, dirigido a una muestra voluntaria de 113 estudiantes. Los datos obtenidos permiten analizar cómo las condiciones de inseguridad influyen en las elecciones emprendedoras de los estudiantes. Los resultados facilitarán la identificación de fortalezas y áreas de mejora en sus preferencias y actitudes hacia el emprendimiento, constituyendo una base para el desarrollo de estrategias institucionales que consideren programas de seguridad y apoyo financiero. De este modo, se busca promover la autonomía financiera y fortalecer el ecosistema emprendedor en este segmento.

The Impact of Insecurity on the Entrepreneurship of University Students in Cancún

Objective	Methodology	Contributions
Evaluate the level of impact that insecurity has on the decision pursue entrepreneurship.	Non-experimental, cross-sectional, and descriptive design.	Understanding the reasons why students choose not to pursue entrepreneurship.
		

Financial education, Financial culture, Personal finance.

El impacto de la inseguridad en el emprendimiento de jóvenes universitarios de Cancún

Objetivo	Metodología	Contribuciones
Evaluar el nivel de impacto que la inseguridad ejerce en la decisión de emprender.	Diseño no experimental, transversal y descriptivo.	Conocer los motivos por los que los estudiantes no deciden emprender.
		

Emprendimiento, Inseguridad, Financiamiento.

Area: Advocacy and attention to national problem

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Introduction

In the current context, entrepreneurship and insecurity are closely linked, especially in the business world. Constant exposure to unfavourable news makes it difficult for students to access financial loans to start businesses. When they do manage to obtain them, they often face this process with uncertainty due to the high level of insecurity affecting the country and, in particular, our city, which is recognised as a leading tourist destination.

Young people, in particular, are often unaware of both the advantages and obligations involved in participating in the national financial system. For this reason, entrepreneurship is a key element in the comprehensive training of university students, particularly those who are about to enter the labour market and face complex economic decisions.

In the case of students pursuing a Bachelor's Degree in Business Innovation at a university in Cancún, it is essential to analyse their entrepreneurial motivation and how factors such as insecurity and limited understanding of financial credit influence their investment decisions.

Problem statement

In analysing entrepreneurship in Mexico, a complex scenario is identified, marked by a low level of knowledge and access to financial credit for new businesses, especially in institutions dedicated to this purpose. This gap, even among people with higher academic qualifications, highlights the urgent need to strengthen entrepreneurial education in the country.

Insecurity represents one of the greatest obstacles to business activity. According to the World Economic Forum and economic experts, although Mexico ranks among the most competitive economies globally, it shows deterioration in key factors such as infrastructure, health, and education, with insecurity being the main factor negatively impacting its competitiveness.

Regional economic disparities also affect entrepreneurship. Over the last decade, policies have been implemented to favour micro, small and medium-sized enterprises [MSMEs] in order to boost their growth. However, insecurity remains a critical challenge at the national level.

INEGI data reveal that approximately 75% of adults perceive insecurity in their environment, which limits not only formalisation but also confidence to invest. In addition to direct damage, insecurity has psychological and economic effects, evidenced by a decline in the purchase of insurance for homes, cars and businesses, as occurred in Cancún in 2019 with a 4.7% reduction in these contracts.

Therefore, insecurity in Mexico not only affects the viability of new businesses, but also has an impact on the economic and social structure, highlighting the need for comprehensive policies that strengthen both security and financial and educational support for entrepreneurs.

Justification

Currently, one of the main concerns in university education is to offer a comprehensive education that includes financial education, entrepreneurship and access to financing, given its relevance for personal and professional development throughout life. However, young people often lack the knowledge and tools necessary to spark interest and develop the ability to effectively launch entrepreneurial projects.

In the municipality of Benito Juárez, Cancún, although there are no official public data on the exact number of new businesses registered in the last three years, the local government has implemented various programmes and support measures aimed at promoting entrepreneurship and formal employment. For example, in 2023, initiatives such as 'Ven y Empléate' [Come and Get a Job] succeeded in connecting more than 9,500 people with employment opportunities, advised nearly 2,000 citizens on the development of micro, small and medium-sized enterprises, and trained more than 10,000 job seekers. Likewise, projects such as 'Ellas Facturan' [Women Bill] focus on strengthening and empowering women entrepreneurs in the region.

This research seeks to provide valuable information on the financial perceptions and behaviours of students in the Bachelor's Degree in Business Innovation at a university in Cancún.

The aim is for teachers to use these findings to promote conscious financial education among young people, emphasising that they are at a crucial stage in learning to make informed financial decisions that can positively influence their family unit and, consequently, their future economic freedom and the economic development of the state.

General Objective

To assess the level of impact that insecurity has on the decision to become an entrepreneur among young students in the Bachelor's Degree in Business Innovation programme at a university in Cancún.

Specific Objectives

To determine the influence of insecurity as a main factor in the entrepreneurial decision of students in the Bachelor's Degree in Business Innovation programme at a university in Cancún.

To identify the effect of other factors, such as lack of knowledge about financing and excessive bureaucratic procedures, on the entrepreneurial decisions of these young people.

Research Questions

What is the level of influence of insecurity on the entrepreneurial decisions of students in the Bachelor's Degree in Business Innovation programme at a university in Cancún?

How much weight do other factors, such as lack of knowledge about sources of financing and bureaucratic procedures, have on the decision to become an entrepreneur among students in this degree programme?

Theoretical framework

In the case of a person who is not well informed or who has little knowledge in the economic and financial field, they will not be able to make the best decisions, nor will they be able to reflect on the options that are most profitable in economic terms. With regard to expenses, issues related to investments were not analysed, because any individual needs the basic information and knowledge that will allow them to compare the benefits or profits of each of the options offered by financial systems, so that with this knowledge they can choose the best alternative [Céspedes, 2017].

Insecurity

Insecurity, a term I want to address in general terms, can refer to a lack of security as a lack of some kind of protection, which may be due to a latent risk, an unexpected factor, the presence of a negative context, among other aspects.

However, this can also change based on the concept that insecurity can now be considered not as the lack of security that a generation had, those values of individual and social protection that were the norm, but rather as the problem derived from an excess of it. This change is largely based on the security situation of the subjects of the generation, with specific exceptions, which compared to other historical periods is much higher, and this may lead to certain individuals 'rejecting' the level of security offered to them.

The perception of insecurity is related to psychological aspects of insecurity, as it is the way we perceive and interpret these events that determines our emotions. It is true that, in principle, exposure to actual criminal acts can increase the perception of insecurity, but the magnitude of the feeling of vulnerability on the part of the population does not depend primarily on the existence of a real danger, but rather on the risk of exposure to certain situations that are specifically socially condemned. However, the real factors that cause insecurity, whether at the state or municipal level.

Entrepreneurship

Entrepreneurship is the action of creating and launching new projects or businesses that involve uncertainty and risk, where innovation and value creation are central elements of the process [Hisrich, Peters & Shepherd, 2005].

Entrepreneurship refers to the search for something new that one does not possess, simply as a synonym for innovation. Many authors agree that entrepreneurship means creating and implementing something with uncertainty. Thus, the first attempt to make sense of the act of entrepreneurship is to recognise its creative function. A second meaning of entrepreneurship focuses on that special type of activity that involves high personal risk, but also another type of risk: the possible negative consequences of the very process of creating and implementing new resources, values or solutions.

Entrepreneurship in Mexico is defined as a dynamic process through which individuals identify opportunities to create new businesses or projects, generating economic and social value in a complex context influenced by cultural, economic and regulatory factors [GEM, 2016].

This process involves the interaction of various dimensions, such as individual entrepreneurial attitudes and the national environment, which includes public policies, institutional support, education and access to financing [Kantis, 2004; Sepúlveda et al., 2016].

The Mexican entrepreneurial ecosystem presents challenges such as limited technological base and internationalisation, but it also reflects the incipient creation of companies with moderate employment and growth expectations, aspects that shape its development and sustainability [GEM, 2015].

Therefore, the theoretical framework considers the importance of understanding both the personal factors of the entrepreneur and the formal and informal institutions that influence entrepreneurship [North, 1990; Guerrero & Urbano, 2017].

In the field of training, entrepreneurial education emerges as a key strategy for strengthening skills and fostering an entrepreneurial culture adapted to the country's conditions [Rodríguez, 2014].

Financing.

Financing is a key element for the development and sustainability of micro, small and medium-sized enterprises [MSMEs] in Mexico, as it allows for the acquisition of the resources necessary for growth, innovation and operation [Peña, Rojas & Guijarro, 2017]. MSMEs face challenges in accessing formal financing due to limitations in guarantees, credit history and financial structuring, which forces them to seek different sources, from bank loans to public support and venture capital [Vinculatégica, 2021].

In this context, public financing plays a fundamental role through programmes and support that seek to reduce financial barriers and promote business competitiveness and productivity [APCAM, 2019].

Furthermore, financing for innovation is essential to drive technological development and efficiency in new technology-based companies in Mexico, although it faces challenges due to the lack of efficient venture capital markets and the need for policies that strengthen governance and the entrepreneurial ecosystem [Zaloamati, 2020].

Method

This study is based on a non-experimental, cross-sectional and descriptive design, seeking to quantitatively analyse the impact of insecurity on the decision to become an entrepreneur among university students.

The choice of a cross-sectional design allows for a clear and accurate 'snapshot' of reality at a specific moment in time, without manipulation of variables, in order to understand the relationship between insecurity, entrepreneurship and financing.

The study population consisted of 113 students in the tenth semester of the Bachelor's Degree in Business Innovation at a university in Cancún, who participated voluntarily. Data collection was carried out using a structured questionnaire, inspired by INEGI's National Urban Public Safety Survey [ENSU] [July 2024], adapted to explore perceptions and factors related to insecurity, access to financing, and entrepreneurship.

The instrument consisted of twenty questions designed to measure the key variables of the study. The data obtained will be analysed using descriptive statistics to identify the relative influence of each dimension and determine the level of impact of insecurity on young people's entrepreneurial intentions.

This quantitative methodology allows for the collection of accurate and representative data to support solid conclusions that contribute to guiding educational and entrepreneurship support policies in insecure contexts.

Interpretation

Box 1

Table 1

General data of the tenth semester students of the Bachelor's Degree in Business Innovation at a University in Cancun.

		Frequency	Porcentaje
Gender	Female	72	63,7%
	Male	41	36,3%
Marital Status	Single	113	100,0%
	Married	0	0,0%
N° of family members	from 1 a 3	42	37,2%
	from 4 a 5	59	52,2%
	6 o more	12	10,6%
Employment Status	Active	84	74,3%
	Inactive	29	25,7%

Source: Own Elaboration

The table provides an overview of the 113 young students who participated in the entrepreneurship survey. Most of the students are female [72, i.e. 63.7%], while all of them are single. In terms of the number of family members, the majority have between four and five members [59 students, i.e. 52.2%], followed by those between one and three members [42 students, i.e. 37.2%].

In terms of employment status, the majority of students are in employment [84 students, i.e. 74.3%], while 29 students [i.e. 25.7%] are inactive. These data may be useful to better understand the demographic and employment characteristics of students and how these may influence their perception and knowledge of financial literacy.

Box 2

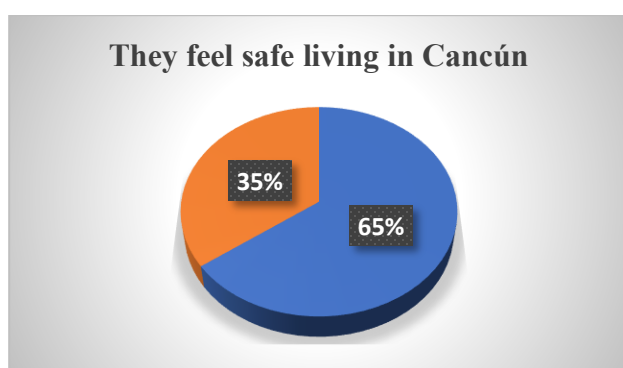


Figure 1

Percentage of people who say they feel unsafe living in Cancún.

The perception of insecurity in Cancún showed a slight reduction during this period, falling from 83.3 per cent in June 2023 to 77.8 per cent in June 2024.

This decline reflects certain advances in the public security strategies adopted in the city.

However, a high proportion—more than three-quarters of the population—still feels unsafe, evidencing a context of uncertainty and persistent social concern.

This negative perception is influenced by recurring news reports in the media, along with personal or close experiences related to crimes in places such as ATMs, public transport, and areas considered to be at risk, which fuels fear and mistrust in local security.

Sixty-five per cent of the population say they feel unsafe in their place of residence, while 35 per cent do not share this perception.

This difference may be related to socio-economic factors, direct experiences with crime, or the influence of media coverage of criminal acts in specific areas such as neighbourhoods or deserted streets.

The impact of these factors contributes to a high perception of daily vulnerability.

Box 3

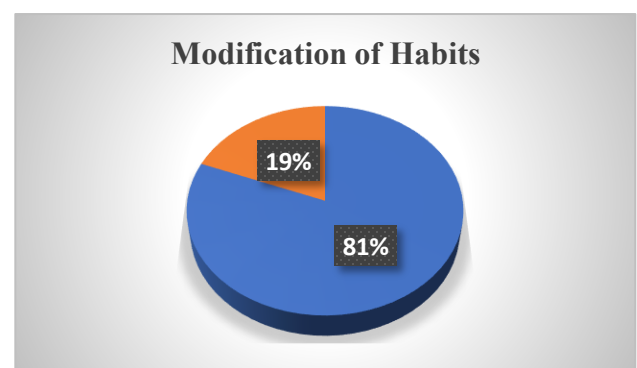
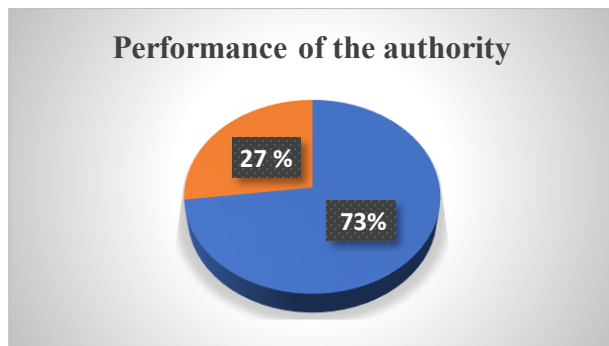


Figure 2

Changes in daily habits due to the perception of insecurity in Cancun

A significant 81% of residents have adapted or modified their habits to mitigate risks associated with insecurity. These modifications include changing habitual routes, avoiding carrying valuables such as jewellery and credit cards, and limiting going out at night, especially after 10 pm.

These precautionary behaviours highlight the weight of insecurity in people's daily lives, affecting their freedom of movement and quality of life.

Box 4**Figure 3**

Evaluating the performance of public security authorities in Cancún

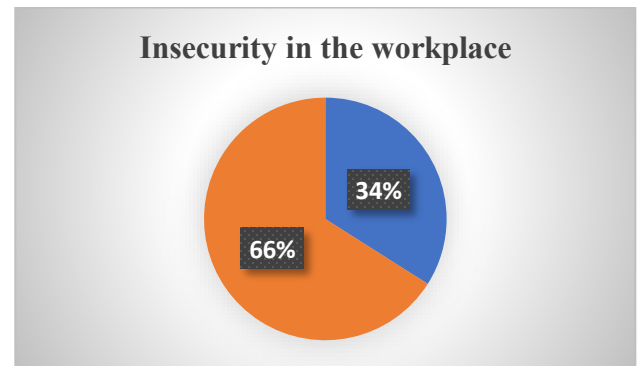
Source: Own elaboration

73% rate the performance of public security authorities [Navy, Army, National Guard, state and municipal police] as satisfactory, while 27% rate it as unsatisfactory. This assessment reflects a majority perception that the security forces are doing their job adequately, although there is a significant segment that maintains doubts or distrust regarding the effectiveness or commitment of these institutions.

Box 5**Figure 4**

Perception of corruption in contact with public security authorities

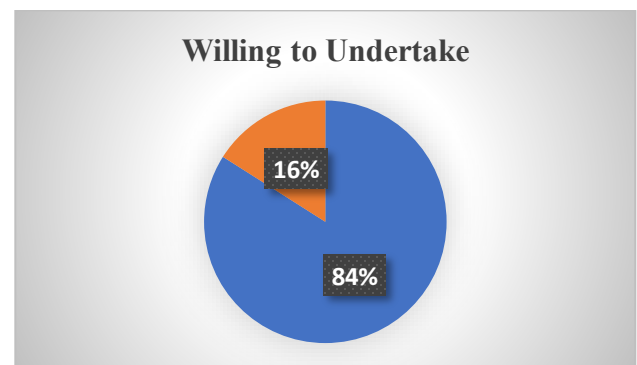
Among the population that has had contact with public security elements, 54% report having had experiences related to corruption, while 46% have had no such experience. This high percentage of perceived or experienced corruption contributes to the erosion of trust in security institutions and could hinder the citizen collaboration needed to improve security and the entrepreneurial environment.

Box 6**Figure 5**

Incidence of workplace insecurity among the working population in Cancún

Source: Own elaboration

Of the 74.3% of the working population, only 34% report having been directly affected by crimes such as robbery, extortion, extortion or kidnapping in their workplace. 66% say they have not been affected in these terms. Although the direct incidence seems moderate, the general environment of insecurity can generate uncertainty and affect the perception of stability for entrepreneurship or investment.

Box 7**Figure 6**

Willingness of young university students to become entrepreneurs and their preferred sectors [Digital Marketing, Digital Marketing, etc.]

Source: Own elaboration

84% of the young university students surveyed expressed a willingness to become entrepreneurs, with a marked preference for venturing into companies in the digital marketing sector.

This strong entrepreneurial commitment shows that, despite adverse conditions in terms of insecurity and financing, the majority maintain a positive attitude towards creating innovative projects, which represents an opportunity to design targeted support programmes.

Conclusions

The research shows that insecurity is one of the main factors limiting entrepreneurial development among young university students in Cancún, as it generates uncertainty and mistrust both in the environment and in the financial instruments available. However, the results also highlight the existence of other significant barriers, such as lack of self-confidence, fear of stress and responsibility, insufficient access to capital, and lack of solid knowledge to start and manage a business.

These conditions are exacerbated by the challenges posed by the local economic and social climate, which, marked by unfavourable news and insecurity, has a negative impact on young people's motivation and attitude towards entrepreneurship. The perception of the business environment, as well as the limited availability of resources and lack of knowledge about financing options, further complicate decision-making and increase risk aversion.

Despite this outlook, there is a notable entrepreneurial spirit among students, especially in areas of innovation such as digital marketing, which represents a strategic opportunity to design support and capacity-building programmes. In this regard, it is important to promote comprehensive financial education and public policies that mitigate adverse conditions and encourage business creation in safer and more supportive environments. Only through coordinated and multidimensional intervention will it be possible to harness the innovative potential of young people, facilitating their integration into the labour market, the generation of well-being and the sustainable economic development of the region.

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Declarations

Conflict of interest

The authors declare that they have no conflict of interest. They have no known competing financial interests or personal relationships that could have appeared to influence the article reported in this article.

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López-Cetina, Yamit: research leader

Preza-Medina, Sergio Roberto: quantitative methodologies and data analysis specialist

Peña-Santoyo, Kermin Dayan: quantitative methodologies and data collection specialist

Cebollón-Meza, Ángela: data collection and interpretation

Availability of data and materials

Data openly available in a public repository that issues datasets with DOIs

Data openly available in a public repository that does not issue DOIs

Data derived from public domain resources.

Data available upon request from the authors.

Data openly available in a public repository that issues datasets with DOIs

Data openly available in a public repository that does not issue DOIs

Data derived from public domain resources

Data available on request from the authors

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Abbreviations

SECIHTI: National Council for Science and Technology

INEGI: National Institute of Statistics and Geography

GEM: Global Entrepreneurship Monitor

MIPyMES: Micro, small and medium-sized enterprises.

References

Background

Céspedes, J. B. [2017]. [Análisis de la necesidad de la educación financiera en la formación colegial](#). *Pensamiento Crítico*, 22[2], 97–126.

Global Entrepreneurship Monitor [GEM]. [2015]. [Reporte nacional México 2015](#). Recuperado de

Kantis, H. [2004]. [Sistema de desarrollo emprendedor: Una propuesta para América Latina](#).

Basics

Hisrich, R. D., Peters, M. P., & Shepherd, D. A. [2005]. [Entrepreneurship](#) [6th ed.]. McGraw-Hill/Irwin.

Instituto Nacional de Estadística y Geografía [INEGI]. [2024]. [Encuesta Nacional de Seguridad Pública Urbana \[ENSU\], julio 2024](#).

North, D. C. [1990]. [Institutions, institutional change and economic performance](#). Cambridge University Press.

Peña, R., Rojas, C., & Guijarro, P. [2017]. [Financiamiento y desarrollo de las micro, pequeñas y medianas empresas en México](#). *Revista de Economía*, 35[1], 45-60.

Diferences

Rodríguez, M. [2014]. [Educación emprendedora](#).

Vinculatégica. [2021]. [Retos y oportunidades en el financiamiento para MIPyMES en México](#). [Documento institucional].

Zaloamati, J. [2020]. [Financiamiento a la innovación en México: Desafíos y perspectivas](#). *Revista Mexicana de Innovación Tecnológica*, 12[3], 123-140.

Discussions

APCAM. [2019]. [El financiamiento público para empresas familiares en México](#).

Publicaciones oficiales del Municipio de Benito Juárez [2023-2025]. [Iniciativas como “Ven y Empléate” y “Ellas Facturan”](#).

Fuentes adicionales sobre inseguridad en Cancún [2024-2025]

Encuesta Nacional de Seguridad Pública Urbana [INEGI, 2025]. [La percepción de inseguridad en Cancún alcanzó el 79.5% en el primer trimestre de 2025](#).

Guerrero, M., & Urbano, D. [2017]. [The impact of Triple Helix agents on entrepreneurial innovations' performance: An inside look at enterprises located in an emerging economy](#).

Sepúlveda, M. U., et al. [2016]. [Eco-sistemas emprendedores: análisis en México](#).

The impact of remittances on families in Tecamachalco Puebla, México

El impacto de las remesas en las familias de Tecamachalco Puebla, México

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Abstract

The objective of this paper is to analyze the behavior of families receiving remittances in Tecamachalco, Puebla, Mexico, and their association with financial services. The research hypothesis is that the remittance flows received by the municipality of Tecamachalco, Puebla, have contributed to income redistribution, which has been facilitated by a complex network of financial services. What is observed from this link between remittances and financial services are patterns of concentration and dispersion in Puebla. This relationship is characterized, in addition to the financial system, by the phases of remittance transfers and the use of remittances as a wage fund.

Resumen

El objetivo de este trabajo es analizar el comportamiento de las familias receptoras de remesas en Tecamachalco, Puebla, México, y su relación con los servicios financieros. La hipótesis de investigación es que los flujos de remesas recibidos por el municipio de Tecamachalco, Puebla, han contribuido a la redistribución del ingreso, por medio de una compleja red de servicios financieros. De esta relación entre remesas y servicios financieros se observan patrones de concentración y dispersión en Puebla. Esta relación se caracteriza, además del sistema financiero, por las fases de las transferencias de remesas y su uso como fondo salarial.

Objective	Hypothesis	Contribution
Analyze the behavior of families receiving remittances in Tecamachalco, Puebla, Mexico, and their association with financial services. 	The research hypothesis is that the remittance flows received by the municipality of Tecamachalco, Puebla, have contributed to income redistribution, which has been facilitated by a complex network of financial services 	What is observed from this link between remittances and financial services are patterns of concentration and dispersion in Puebla

Objetivo	Hipótesis	Contribución
El objetivo de este trabajo es analizar el comportamiento de las familias receptoras de remesas en Tecamachalco, Puebla, México, y su relación con los servicios financieros 	La hipótesis de investigación es que los flujos de remesas recibidos por el municipio de Tecamachalco, Puebla, han contribuido a la redistribución del ingreso, por medio de una compleja red de servicios financieros 	De esta relación entre remesas y servicios financieros se observan patrones de concentración y dispersión en Puebla

Remesas, servicios financieros, transferencias

Remittances, financial services, transfers

Area: Advocacy and attention to national problems

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Introduction

This research was conducted in the first half of 2025 and analysed the causes of international migration to the United States in the municipality of Tecamachalco Puebla, Mexico, a region with a high Migration Integration Index, with families receiving remittances. A total of 256 surveys were conducted using a sample design for complex studies [Soriano 2013].

A socioeconomic study was conducted with various variables that showed us the phenomenon of migration and remittances. This factor indicates a multiplier effect on investment, which generates benefits from having migrant relatives in the United States. Working conditions and imbalances in the labour market have led to a situation of international interrelation between families in the municipality of Tecamachalco, Puebla.

The central hypothesis is that remittances represent a wage fund that is not possible to obtain in Mexico. The relationship through remittance flows for financial services and social network connectivity are factors that are currently decisive in the migration process.

According to the World Bank [2016], in 2010 there were at least one billion poor people in the world, with around 10 per cent of the population subsisting on less than \$1.9 per day, while 2.8 billion subsist on less than \$2 per day. In Mexico, 43.6 per cent of the population lives in poverty, that is, 53.4 million people, of whom 9.3 million are extremely poor [Coneval, 2016].

The former do not have enough total income to purchase the goods included in the welfare basket [food, health, education, recreation, savings] and suffer from at least one of six social deficiencies [health, education, social security, housing, food, basic services]. The extremely poor, on the other hand, cannot cover their food expenses even with their entire income and suffer from at least three social deficiencies. [Salas, 20218: 144].

Remittances are a determining factor in Mexico. Mexico's dependence on the United States is not only economic due to the USMCA, but also due to the relationship between the labour market and families receiving remittances.

Currently, the decline in remittances at the macroeconomic level and the reduction in migrants represent the beginning of a migration crisis, coupled with US security policies.

Literature review

Remittances are sent after migrants pay federal, state, and local taxes, including social security contributions [although very few actually benefit from or make use of such contributions].

Furthermore, since family members receive higher incomes than in their place of origin [remuneration in the United States can be up to 10 times higher than in Mexico], remittances also skew poverty estimates. It is unclear whether remittances encourage individuals to remain in a monetary economy and in the informal sector.

[Batiz and González, 2024: 939]. Migrants are rarely at the bottom of the social pyramid, as they tend to be skilled or semi-skilled [unskilled workers tend not to migrate], and recipient families rarely benefit from government subsidies. Migrants also need [informal] credit to pay for the journey north, which can cost between \$3,000 and \$7,000. [Batiz and González, 2024: 938].

Among other aspects, it is worth considering barriers to access—determined by distance, travel times, accessibility to goods and services, and the availability of transport systems—; social and cultural barriers—created by the isolation, segregation and stigmatisation of certain groups and individuals in the territory—; risks to physical and mental health—derived from exposure to sources of pollution, water scarcity, insufficient green areas and forestation, as well as the effect of other environmental externalities—; limitations on the development of activities relevant to recreation, leisure, and the social and cultural life of local communities—associated with the lack, poor condition, or inadequacy of public spaces—; among others.[Moreno, 2025:143-144]

Under the right circumstances, a significant percentage of migrants' remittances and savings can be allocated to productive enterprises. Rather than asserting that migration inevitably leads to dependency and underdevelopment, it is more appropriate to ask why productive investments take place in some communities and not in others.

Ximitl-Islas, Iván, Rodríguez-De La Vega, Marisol, Cabildo-Orea, Alejandra and Machorro-Díaz, Rafael. [2025]. The impact of remittances on families in Tecamachalco Puebla, México. *Journal-Public Economy*. 9[15]1-13: e4915113
<https://doi.org/10.35429/JPE.2025.9.15.4.1.13>

Cases in which remittances have been found to have a negative impact on productivity can be attributed in part to deficiencies in research designs that do not take into account the direct and indirect ways in which remittances can influence rural household spending. [Mora and Arellano, 2016:5].

The empirical discussion on long-term economic analysis, both by country and for Mexico, offers some key elements for analysing the hypothesis on the positive impact of remittances on regional economic growth, but complemented by a different methodology that can capture both heterogeneity and spatial dependence. It is important to consider that the panel models used in country studies capture heterogeneity but not spatial dependence, while cross-sectional models that traditionally incorporate spatial dependence do not capture heterogeneity. [Mendoza and Valdivia, 2016:133]

Remittances modify the Keynesian multiplier of autonomous demand, increasing or decreasing it according to the Central Bank's intervention in the foreign exchange market. Unlike previous studies, we do not analyse the multiplier of these remittances, but rather their dampening or expansive impact on fiscal policy. We conclude that the effectiveness of fiscal policy varies in the presence of remittances.

Central Bank intervention to eliminate the contraction in demand resulting from remittances is the crucial factor that can transform the automatic stabilising effect of remittances into an amplifier of the impact on demand of an increase in public spending, which we call the *super multiplier effect of remittances*. [Sovilla, 2021:110].

The general model allows us to predict the contractionary impact of remittances on aggregate demand in a recipient economy, but it does not determine the equilibrium values of the exchange rate and national income, because the functions of exports and imports were not specified. In this section, we consider a simplified case and assign unit elasticities to these functions. This allows us to determine graphically and algebraically the solutions for the equilibrium exchange rate and income. Then, based on a dynamic model with time lags between variables, we perform a simulation considering different values of elasticities. [Sovilla, 2022: 79].

Aggregate demand is presented in the IS-LM model, at the macroeconomic level $Y = C + S + G + XN$, where remittances are recorded in the balance of payments in the capital account. International trade factors are reflected in macroeconomic indicators such as unemployment, economic growth, interest rates, inflation and exchange rates.

Remittances may be the subject of World Bank plans, but the introduction of remittances into development financing plans requires a thorough understanding of the volume and nature of these cash flows because, without going any further, it is essential for making forecasts.

This is an opportunity to appreciate once again the cognitive and empirical work carried out by international organisations, and in particular by the World Bank: remittances are nothing new, but by putting them in the spotlight, giving them a role in development policies and gathering data to justify their importance, international organisations are completely transforming their nature.

Remittances have gone from being an old phenomenon that was largely ignored and perceived as marginal to being the subject of public policy and a factor in development. [Pécoud, 2015:55] International organisations are essential in the analysis of remittance flows, although in recent years there have been cases of money laundering, making it important for countries to review their fiscal policy.

Much of the literature that focuses on examining the impacts of remittances on communities of origin has concentrated exclusively on studying the relationship between migration and development, leaving out of the analysis the likely implications that this resource may have on the environment.

Due to this situation, recent research has emerged that broadens the discussion to include the use of natural resources in communities of origin, hence the importance of studying the role they play in the context of sustainable development. [Aragónés, 2016:133]. Regional studies must be multidisciplinary, given the complexity of the migration phenomenon.

Methodology

From January 1981 to January 2021, there have been four Republican presidents in the United States, occupying the presidency for 24 years. Of these, 12 years were consecutive [January 1981 to January 1993]: eight by Ronald Reagan and four by George W. Bush. The Republicans returned to the presidency at the beginning of the 21st century with George W. Bush Jr., who remained in office from 2001 to 2009 due to his re-election, and during the second decade of this new century, Donald Trump arrived [2017-2021] [CONAPO 2020].

Biden subsequently took office, and Trump has been re-elected, beginning his term with anti-immigrant policies, which has led to a decline in the number of deportations in 2025. The indicator used to conduct migration studies in Mexico is the Migration Intensity Index. See Figures 1 and 2.

Box 1

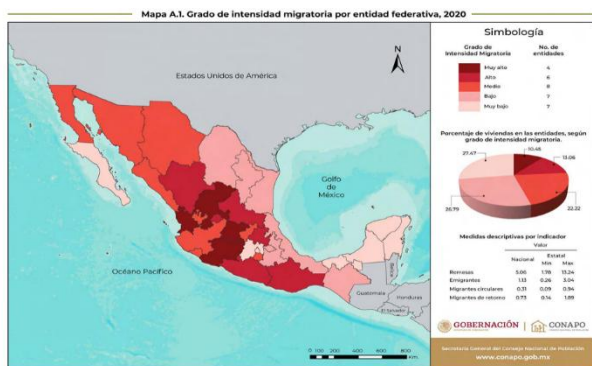
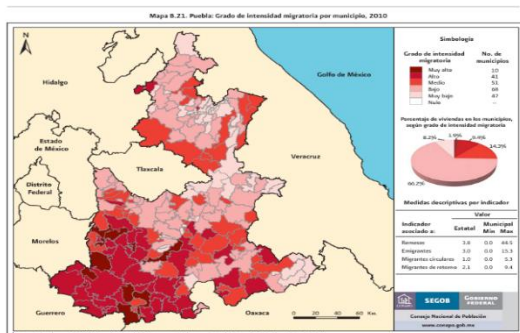


Figure 1 Migration Intensity Index Mexico 2020
 Source: [chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.omi.gob.mx/work/models/OMI/Resource/2802/IIMMexEEUU2020.pdf](http://www.omi.gob.mx/work/models/OMI/Resource/2802/IIMMexEEUU2020.pdf)

Box 2

Figure 2. Migration Intensity Index for the State of Puebla



Source: [chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/http://conapo.gob.mx/work/models/CONAPO/intensidad_migratoria/anexos/Anexo_B2.pdf](http://conapo.gob.mx/work/models/CONAPO/intensidad_migratoria/anexos/Anexo_B2.pdf)

The INEGI National Directory of Economic Units, Municipality of Tecamachalco, Puebla, was used to perform the regional diagnosis. 65 financial and insurance institutions in 2024.

Box 3



Figure 3. DENUE

The calculation of the sample was determined with the methodology of Raúl Rojas Soriano "Guía para realizar investigaciones sociales" [2013] sampling for complex studies, the universe was calculated based on the Migratory Intensity Index, so it was estimated that in Tecamachalco Puebla there are approximately 1875 families receiving remittances, the sample design for complex studies is presented below:

$$n = \frac{\left[\frac{Z^2 q}{E^2 P} \right]}{1 + \frac{1}{N} \left[\frac{Z^2 q}{E^2 P} - 1 \right]} \tag{1}$$

- n = Sample size
- Z = Confidence level 1.96
- P = Positive variability 0.6
- q = Negative variability 0.4
- N = Population size 1875 remittance recipient households.
- E = Precision or error 10 %.

$$n = \frac{\left[\frac{(1.96)^2 [0.4]}{(0.10)^2 [0.6]} \right]}{1 + \frac{1}{1,875} \left[\frac{(1.96)^2 [0.4]}{(0.10)^2 [0.6]} - 1 \right]} \tag{2}$$

$$n = \frac{\left[\frac{[3.8416][0.4]}{[0.01][0.6]} \right]}{1 + \frac{1}{1,875} \left[\frac{[3.8416][0.4]}{[0.01][0.6]} - 1 \right]} \tag{3}$$

$$n = \frac{\left[\frac{1.53664}{0.006} \right]}{1 + \frac{1}{1,875} \left[\frac{1.53664}{0.006} - 1 \right]} \tag{4}$$

$$n = \frac{[256.1066667]}{1 + \frac{1}{1.875} [256.1066667 - 1]} \quad [5]$$

$$n = \frac{[256.1066667]}{1 + \frac{1}{1.875} [255.1066667]} \quad [6]$$

$$n = \frac{256.1066667}{1.136056889} \quad [7]$$

$$n = 227 \quad [8]$$

In the field study, 256 surveys were carried out.

Calculation of remittances, linear regression

Historically remittances have evolved with a positive trend and slope from 1994 to 2024, in 2025 a fall of -5.59% has been detected, this deceleration of remittances is very noticeable, due to the slowdown of economic growth in Mexico and the USA, A linear regression analysis was performed on the monthly period from January 1995 to December 2024, where $y = 12.537x - 156.16$ and the value of $R^2 = 0.8298$, which indicates a high correlation and a trend with a positive slope.

Box 4

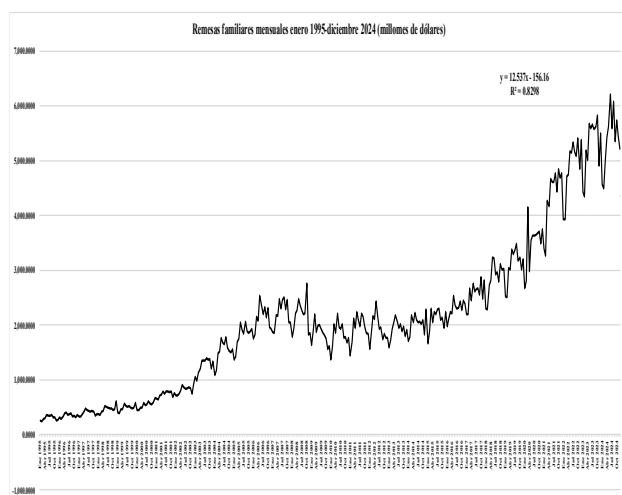


Figure 4
Monthly Household Remittances January 1995. December 2024

Box 5

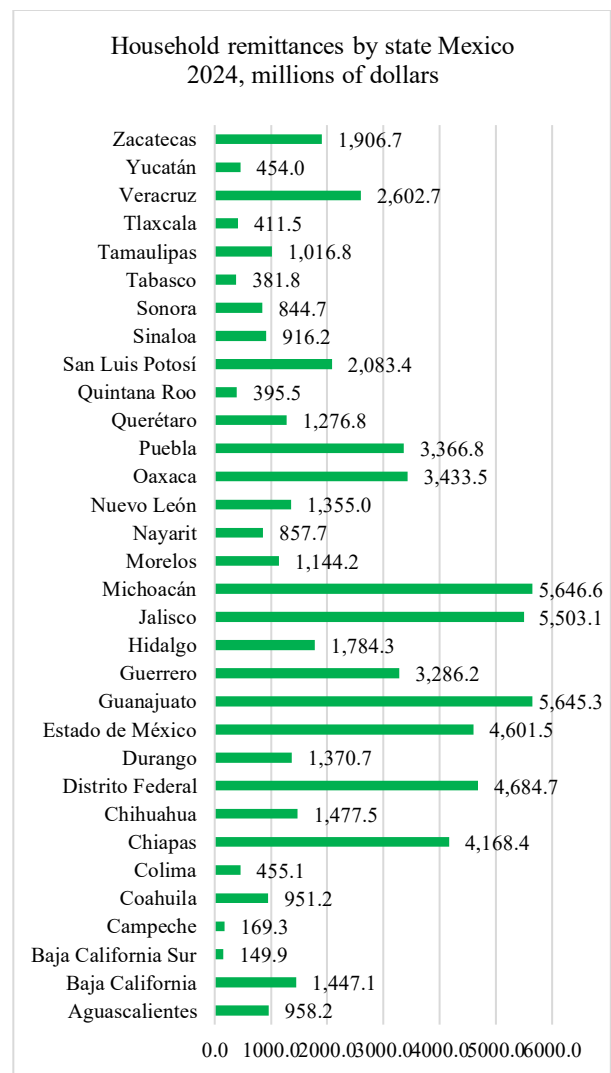


Figure 5

Source:
<https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadroAnalitico&idCuadro=CA79&locale=es>

In 2024, the 11 states that received the highest amount of remittances are as follows: 1]. Michoacán 5,646.4 million dollars, 2]. Guanajuato 645.3 million dollars, 3]. Jalisco 5,503.1 million dollars, 4]. Mexico City 4,684.7 million dollars, 5]. State of Mexico 4,601.5 million dollars, 6]. Chiapas 4,168.4 million dollars, 7]. Puebla 3, 366.8 million dollars, 8]. Oaxaca 3,433.5 million dollars. 9]. Guerrero 3.2862 billion dollars 10]. Veracruz 2.6027 billion dollars and 11].

San Luis Potosí 2.0834 billion dollars, the other federal entities received less than 2 billion dollars in 2024.

Family remittances fell by 5.59% in the first half of 2024 compared to the previous year, according to the Bank of Mexico.

This is a situation that has not occurred in the last 25 years. Family remittances have slowed down in relation to the US economy and ICE deportations in the US. See Table 1.

Box 6

Table 1.

Family remittances January - March 2024 and 2025

Concept	Anual		Ene-Jun		Variation	Variation
	2024	2025	2024	2025	Relative	Relative
			[A]	[B]	2024	[B/A]
Total Remittances 1/	64,746.38	31,326.49	29,576.06		2.25	-5.59
Electronic Transfers	64,136.23	31,029.32	29,291.39		2.37	-5.60
Money Orders	128.19	60.13	67.76		-7.08	12.68
Personal Cheques	0.00	0.00	0.00		N/E	N/E
Cash and In-kind	481.97	237.04	216.91		-9.43	-8.49
Total Remittances 2/	164.77	79.65	76.19		2.31	-4.35
Electronic Transfers	163.53	79.06	75.65		2.38	-4.31
Money Orders	0.13	0.06	0.06		-9.25	2.83
Personal Cheques	0.00	0.00	0.00		N/E	N/E
Cash and In-kind	1.12	0.53	0.48		-5.95	-10.72
Total Remittances 3/	393	393	388		-0.06	-1.29
Electronic Transfers	392	392	387		-0.01	-1.35
Money Orders	1,021	995	1,090		2.39	9.58
Personal Cheques	0	0	0		N/E	N/E
Cash and In-kind	432	444	455		-3.69	2.50

Source:

<https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadroAnalitico&idCuadro=CA11&locale=es>

Note:

1/ The concepts referring to total remittances are expressed in millions of dollars.

2/ The concepts referring to the number of remittances are expressed in millions of transactions.

3/ The concepts referring to average remittances are expressed in dollars..

Box 7

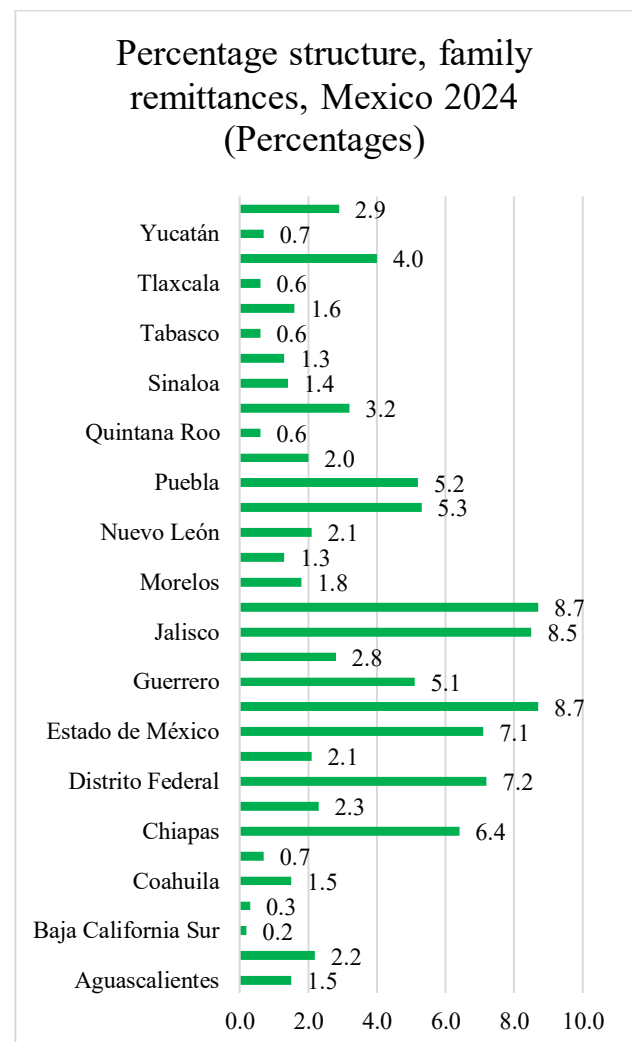


Figure 6

Source:

<https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadroAnalitico&idCuadro=CA79&locale=es>

In terms of percentage, Michoacán received 8.7%, Guanajuato 8.7%, Jalisco 8.5%, Mexico City 7.2%, State of Mexico 7.1%, Chiapas 6.4%, Oaxaca 5.3%, Puebla 5.2%, Veracruz 4.0%, San Luis Potosí 3.2%, Zacatecas 2.9%, Hidalgo 2.8%, Chihuahua 2.3%, Baja California 2.2%, Morelos 1.8%, Tamaulipas 1.6%, Coahuila 1.5%, Aguascalientes 1.5%, Sinaloa 4%, Sonora 1.3%, Nayarit 1.3%, Yucatán 0.7%, Colima 0.7%, Tlaxcala 0.6%, Tabasco 0.6%, Quintana Roo 0.6%, Campeche 0.3% and Baja California Sur 0.2%.

This assessment indicates that the state of Puebla ranks seventh with 3.366 billion dollars, which means that the Mixteca Poblana, Valle de Atlixco, and Tehuacán regions in southern Puebla have a high rate of migration intensity.

Results

The sample size was 256 surveys conducted on 197 men and 59 women, with the following age groups: Under 18 years of age, 33 cases [12.89%]; 19 to 20 years of age, 22 cases [9.87%]; 21 to 25 years of age, 29 cases [13.00%]; 26 to 30 years of age, 34 cases [15.25%]; 31 to 35 years old, 25 cases [11.21%], 36 to 40 years old, 40 cases [17.94%], 41 to 45 years old, 34 cases [15.25%], 46 to 50 years old, 17 cases [6.64%], from 51 to 55 years old, 14 cases [5.47%], from 56 to 60 years old, 5 cases [1.95%], over 60 years old, only 3 cases [1.17%] were recorded, indicating that the main age range is from 20 to 40 years old. [See Figure 7]

Box 8

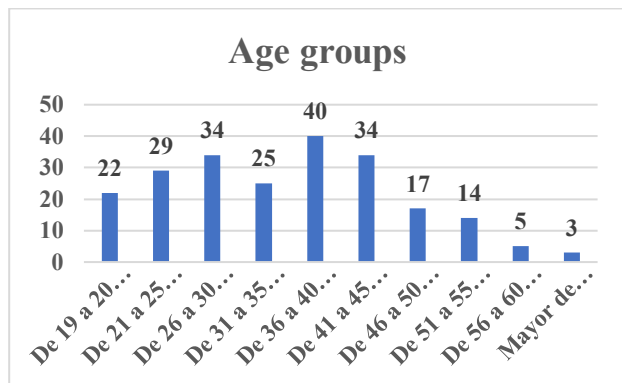


Figure 7

Source: Own elaboration, with information obtained in the first half of 2025..

Box 9

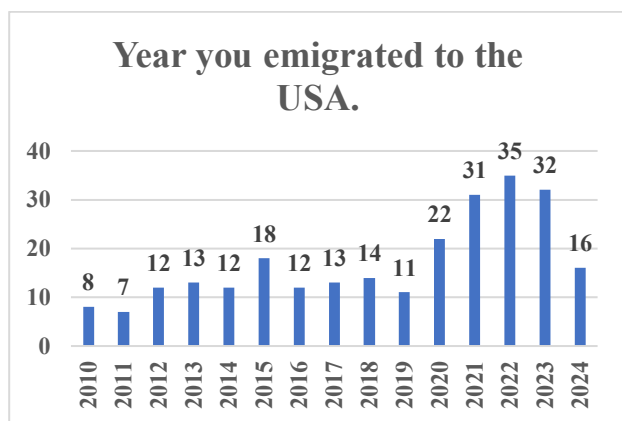


Figure 8

Source: Own elaboration, with information obtained in the first half of 2025.

The study period is from 20210 to 2025, so it is clear that the post-pandemic period saw a higher frequency of migration to the US, with the highest frequency in 2020, 2021, 2022 and 2023, decreasing in 2024 [see Figure 8].

In terms of education level, 5 cases had no education, 65 cases had primary education, 39 cases had secondary education, 26 cases had high school education, 4 cases had technical degrees, 12 cases had bachelor's degrees, 2 had master's degrees, and 1 case had a doctorate, indicating that migrants already have a certain level of education, ranging from basic to upper secondary [see Figure 9].

Box 10

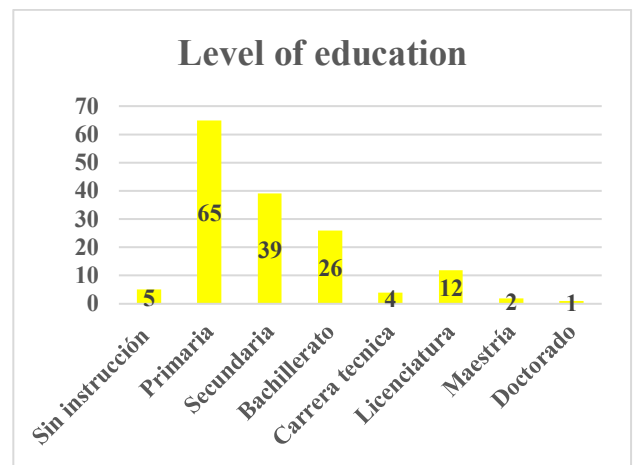


Figure 9

Source: Own elaboration, with information obtained in the first half of 2025.

The main means of transport to reach the United States are as follows: bus 46.88%, private car 30.86%, aeroplane 13.28%, and railway 8.98% [see Figure 10].

Box 11

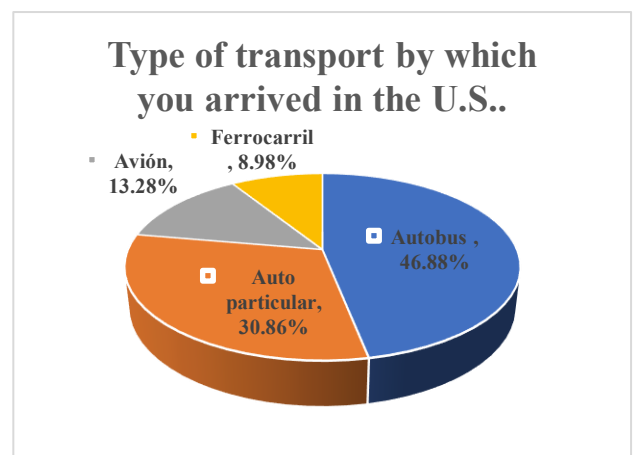


Figure 10.

Source: Prepared internally, with information obtained in the first half of 2025.

According to the information obtained, the main border cities are as follows: Tijuana, Baja California 46.09%, Ciudad Juárez, Chihuahua, 15.63%, Nogales Sonora 9.38%, Matamoros Tamaulipas 6.64%, Piedras Negras, Coahuila, 6.25%, Nuevo Laredo, Tamaulipas, 5.86%, Mexicali, Baja California, 4.69%, Reynosa, Tamaulipas, 3.91%, Altar, Sonora, 1.17%, and Agua Prieta, Sonora, 0.39% [see Figure 11].

Box 12

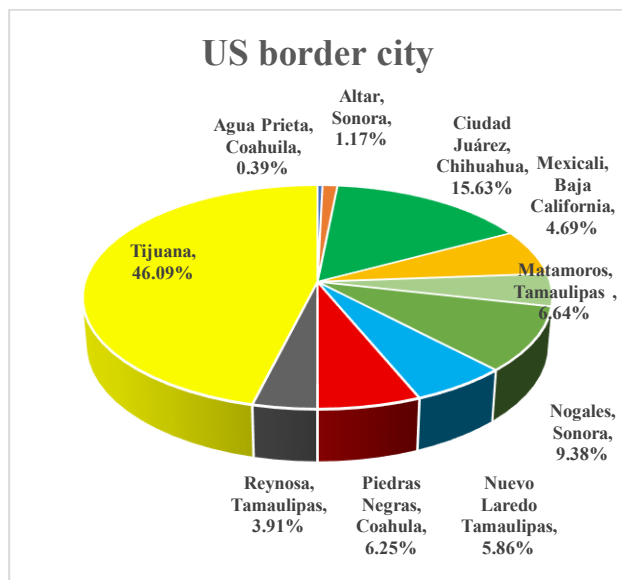


Figure 11.
Source: Own elaboration, with information obtained in the first half of 2025.

Box 13

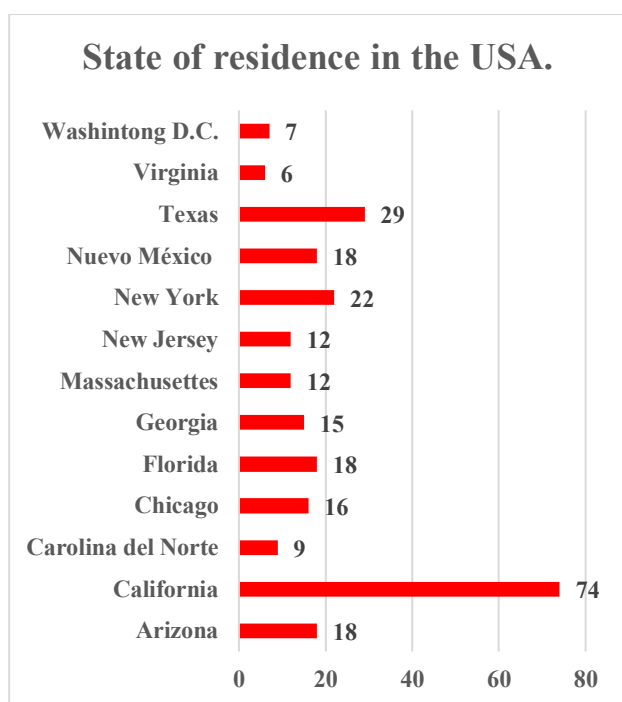


Figure 12
Source: Own elaboration, with information obtained in the first half of 2025.

In terms of state of residence in the United States, the main ones are as follows: California with 74 cases, Texas with 29 cases, New York with 22 cases, Florida with 18 cases, New Mexico with 18 cases, Arizona with 18 cases, Chicago with 16 cases, Georgia with 16 cases, New Jersey with 12 cases, Massachusetts with 12 cases, North Carolina with 9 cases, Washington D.C. with 7 cases. 7 cases, indicating that most migrants resided in states bordering Mexico [see Figure 14].

Regarding payment for coyote services, of the 256 surveys, 28 migrants did not pay a coyote [10.94%], and of those who did pay, the data is as follows: Less than 1,000 USD, 40 cases [7.81%]; 1,001 to 2,000 USD, 36 cases [14.06%]; 2,001 to 3,000 USD, 29 cases [11.33%]; 3,001 to 4,000 USD, 15 cases [5.86%], 5,001 to 6,000 USD, 14 cases [5.47%], 6,001 to 7,000 USD, 17 cases [6.64%], 7,001 to 8,000 USD, 16 cases [6.24%], From 8,001 to 9,000 USD, 11 cases, [4.30%], From 9,001 to 10,000 USD, 35 cases [13.67%], more than 10,000 USD, 9 cases [3.52%], [See Figure 12].

Box 14

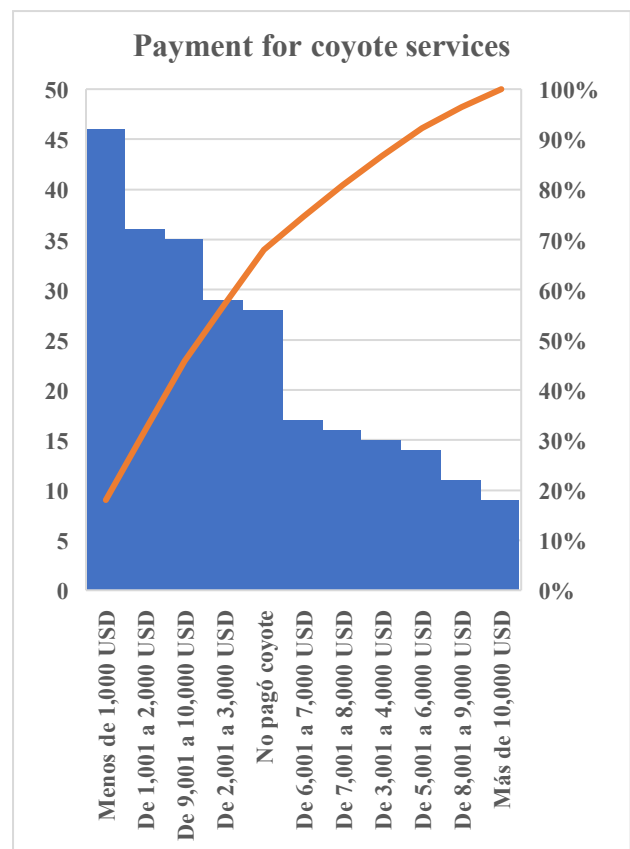


Figure 13

Regarding residence, 232 [90.63%] stated that they are undocumented, 10 have work visas, and 9 are residents.

The financial services available to migrants were as follows: Bank account, 112 cases [43.75%], none 43 cases [16.80%], Credit card 38 cases [14.84%], Mobile banking 29 cases [11.33%], Mortgage loan 17 cases [6.64%], Life insurance 7 cases [2.73%], Savings account loan 5 cases [1.95%], See Figure 13.

Box 15

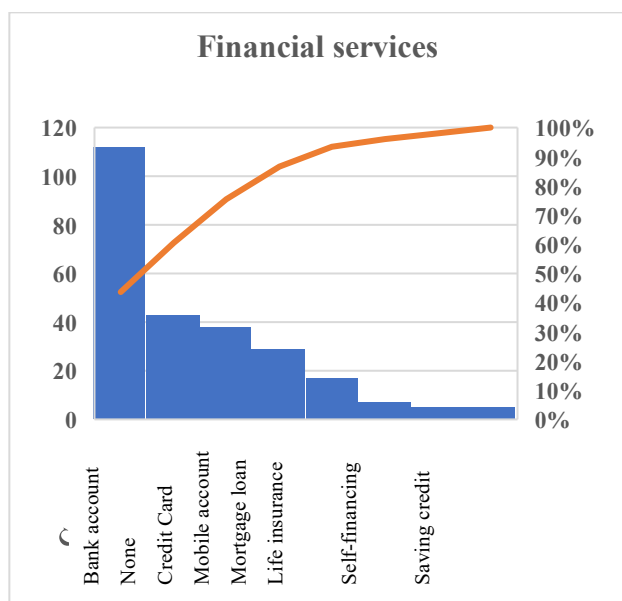


Figure 14
Source: Prepared internally, with information obtained in the first half of 2025.

Box 16

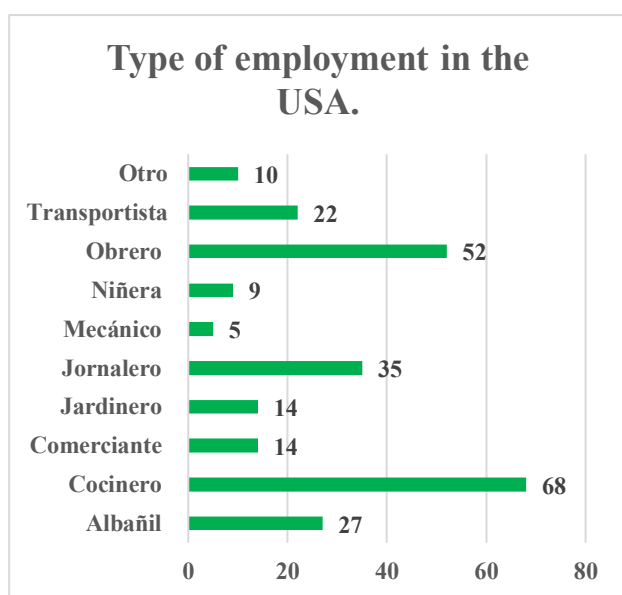


Figure 15
Source: Own elaboration, with information obtained in the first half of 2025.

The main economic activities identified in the different sectors of the economy are as follows: cook 68 cases [26.56%], labourer 52 cases [20.31%], day labourer 13 cases [13.67%], bricklayer 27 cases [10.55%], transport worker 22 cases [8.59%], merchant 14 cases [5.47%], day labourer 14 cases [5.47%], nanny 9 cases [3.52%], mechanic 5 cases [1.95%], and other activities 10 cases [3.91%]. See Figure 15. The monthly income levels of migrants are as follows: less than \$5,000 MXN [23.05%], \$5,001 to \$10,000 MXN [32.03%], \$10,001 to \$15,000 MXN [22.66%], \$15,001 to \$20,000 MXN [9.77%], \$20,001 to \$25,000 MXN [7.03%], \$25,001 to \$30,000 MXN [3.52%], and more than \$30,001 MXN [1.95%]. See Figure 16.

See Figure 16.

Box 17

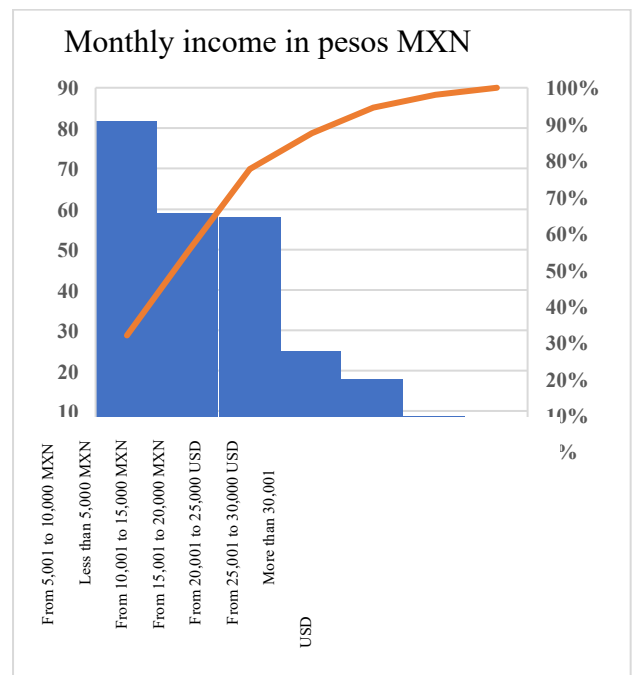


Figure 16.

Information was requested on the amount sent or received monthly per family, which is very important in this research. The results show the following: 18 cases do not send remittances [7.03%], 45 cases send between 51 and 100 USD [17.58%], 23 cases [8.98%] sent between 101 and 200 USD, 34 cases [13.28%] sent between 201 and 300 USD, 18 cases [7.03%] sent between 301 and 400 USD, 21 cases [8.20%] sent between 401 and 500 USD, from 501 to 600 USD 27 cases [10.55%], from 601 to 700 USD 13 cases [5.08%], from 701 to 800 USD 9 cases [3.52%], from 801 to 900 USD 8 cases [3.13%], from 901 to 1,000 USD, 28 cases [10.94%], More than 1,001 USD 12 cases [4.69%].

There is great diversity in remittance sending, depending on income level and economic activities.

Box 18

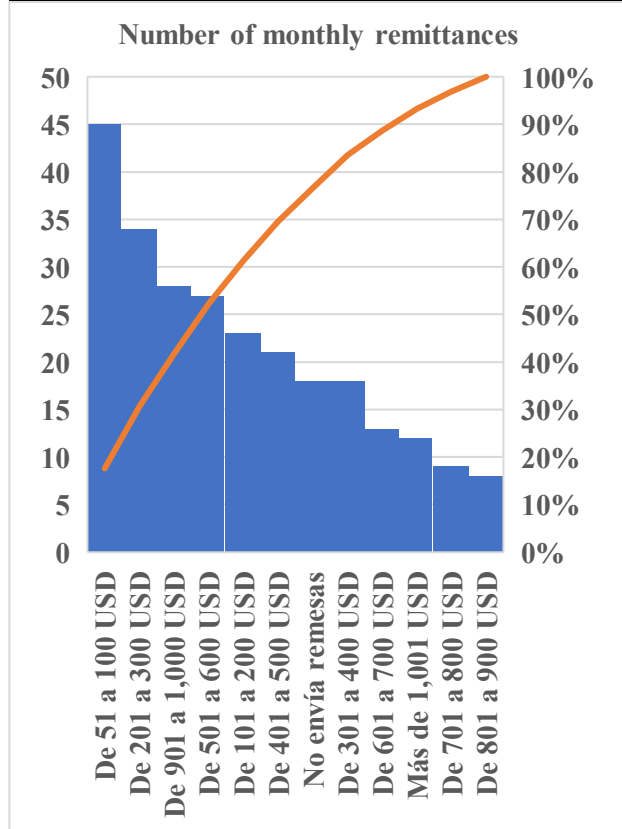


Figure 17.

The institutions through which remittances are sent and received are as follows: BANAMEX® 17.58%, BANCO AZTECA® 14.45%, BBVA® 13.28%, BANCOPPEL® 12.50%, WESTERN UNION® 10.55%, MONEY GRAM® 8.59%, Other 7.42%, OXXO® 5.08%, SCOTIA BANK® 3.13%, INBURSA® 2.73%. See Figure 18.

Social programmes are a fundamental factor for social development. Ninety-three cases reported receiving Welfare Scholarships [36.33%], 25 cases received Pensions for the Welfare of Older Adults [9.77%], 5 cases received Rita Cetina Scholarships [4.69%], 8 cases received Sembrando Vida [4.69%], 6 cases of Youth Building the Future [2.34%], while 112 cases do not receive support from social programmes [43.75%]. Although social programmes are a palliative measure, they are of great importance to migrant families. See Figure 19.

Box 19

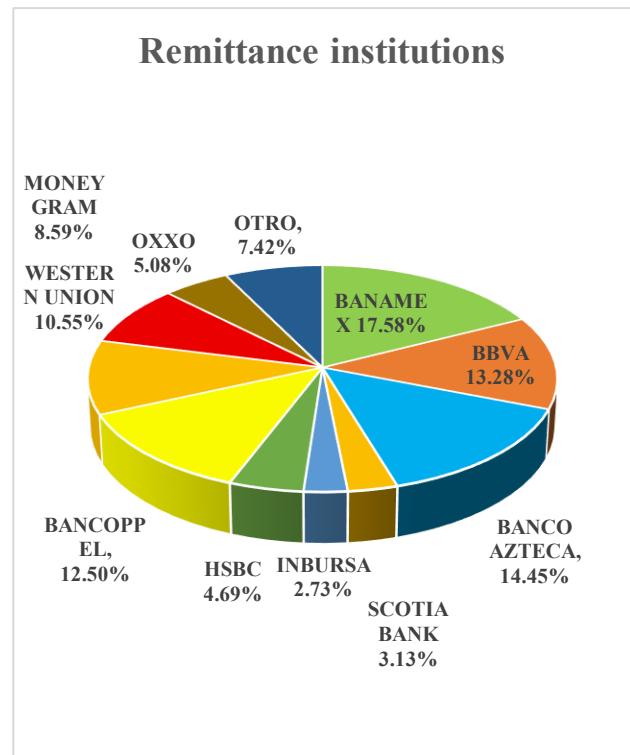


Figure 18.

Box 20

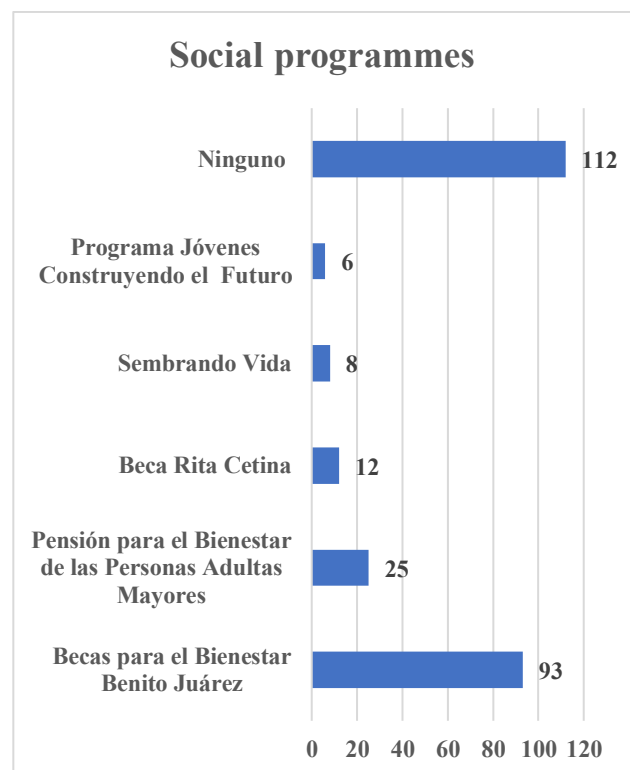


Figure 19.

Conclusions

Remittances in the macroeconomic model in the IS-LM model, which deals with the analysis of aggregate demand, indicate that remittances are recorded in the balance of payments in the Capital Account. Remittance flows are a significant source of income. In the macroeconomic model, aggregate demand is represented as: $Y = C+I+G+XN$, where C=consumption, I = investment, G = government expenditure, XN = net exports. In this variable, the balance of payments is divided into the current account and the capital account. According to the Bank of Mexico, remittances fell by 5.59% in the first half of 2025, indicating a slowdown after sustained growth over the last 25 years.

The results obtained indicate that the main age groups are 20 to 30 and 31 to 40 years old, with men migrating more frequently. The main years in which they emigrated were after the pandemic, in 2021, 2022, 2023 and between 2024 and 2025. There was less frequency, and the main levels of education are basic, intermediate, and upper secondary, meaning that migrants have a higher level of education to adapt to the work environment in the United States. The main means of transport are bus, private car, plane, and train.

The main border cities through which migrants crossed were Tijuana, Baja California Norte, followed by Ciudad Juárez Chihuahua, Matamoros Tamaulipas, Nuevo Laredo, Nogales Sonora, and Piedras Negras, Coahuila. The main US states where they reside are California, Texas, and New York. The main jobs they do are: cook, labourer, day labourer, bricklayer, and transporter.

The main reasons for emigrating are lack of employment and living conditions. Remittances serve as a wage fund that migrants' families can use to cover current expenses such as food, education, health, and housing through the use of financial services and social networks to stay in constant communication. and multiple banking services, SOCAPS, and convenience stores are factors in the diversification of financial services.

Declarations

Conflict of interest

The authors declare no interest conflict. They have no known competing financial interests or personal relationships that could have appeared to influence the article reported in this article.

Author contribution

Specify the contribution of each researcher in each of the points developed in this research.

Availability of data and materials

Indicate the availability of the data obtained in this research.

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References

- Aragónés, Ana María; Ávila, Sophie; Salgado Uberto, *Migración rural, remesas y su relación con la diversificación sustentable y los patrones de consumo*. Un estudio de caso en la zona costera de Oaxaca, *Migración y Desarrollo*, vol. 14, núm. 27, julio-diciembre, 2016, pp. 109-138, Red Internacional de Migración y Desarrollo, Zacatecas, México.
- Banco Mundial [2016]. *Para poner fin a la pobreza extrema hacia 2030 es fundamental abordar el problema de la desigualdad*.
- Cárdenas Alaminos, Nuty, “*Make America White Again*”. Los cambios en la política migratoria de Estados Unidos bajo el gobierno de Donald Trump, *Norteamérica*, vol. 17, núm. 2, 2022, julio-diciembre, pp. 191-212, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.
- Casillas R., Rodolfo, *¿Cómo negociar la política migratoria de México? Prácticas, logros, errores y opciones*, *Migración y Desarrollo*, vol. 19, núm. 36, 2021, junio, pp. 7-36, Red Internacional de Migración y Desarrollo, Zacatecas, México.

Castillo Ramírez, Guillermo, *Migración y cambios socioeconómicos en contextos rurales, Norteamérica*, vol. 15, núm. 1, 2020, enero-junio, pp. 57-84, UNAM, Centro de Investigaciones sobre América del Norte.

Coneval [2016], *Medición de la pobreza en México y en las entidades federativas 2016*.

Corona Jiménez, Miguel Ángel; Estrada Jiménez, Mar; Chavarría Hernández, Jerónimo, *Crecimiento y distribución de la migración y remesas, en México 2010-2021, desde un enfoque regional, Paradigma económico. Revista de economía regional y sectorial*, vol. 16, núm. 1, 2024, enero-junio, pp. 167-198, Universidad Autónoma del Estado de México, Toluca, México.

De Oliveira, Márcio; López Valle, Aldo; Lara Reyes, Karla Paulina, *Refugio y remesas: un análisis basado en «El perfil socioeconómico de refugiados en Brasil. Subsidios para el desarrollo de políticas, Migración y Desarrollo*, vol. 19, núm. 36, 2021, -junio, pp. 115-142, Red Internacional de Migración y Desarrollo, Zacatecas, México.

Garabarrot, Mariana, *Familias transnacionales y política social en las comunidades de origen: una visión, cualitativa de la relación entre migración y desarrollo, Migración y Desarrollo*, vol. 14, núm. 27, julio-diciembre, 2016, pp. 139-165 Red Internacional de Migración y Desarrollo Zacatecas, México.

Jacobo Suárez, Mónica Liliana *La niñez y juventud migrante de retorno en México: hallazgos, avances y pendientes [2015-2022]* Norteamérica, vol. 17, núm. 2, 2022, Julio-diciembre, pp. 241-265, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.

Luciel Méndez Romero, Brenda; Mendoza Cota, Jorge Eduardo, *Integración económica y convergencia en la frontera México-Estados Unidos 2010-2019, Paradigma económico. Revista de economía regional y sectorial*, vol. 17, núm. 1, 2025, enero-junio, pp. 5-34, Universidad Autónoma del Estado de México Toluca, México.

Martínez Cuero, Julieta; López Arévalo, Jorge Alberto; Gómez Santiago, Sergio Martín, *Instituciones, migración, remesas y pobreza. Los casos de Rancho Narvéez y Yalvanté, Chiapas, México, Revista pueblos y fronteras digital*, vol. 17, e590, 2022, Universidad Nacional Autónoma de México, Centro de Investigaciones Multidisciplinarias sobre Chiapas y la Frontera Sur.

Mendoza González, Miguel Ángel; Valdivia López, Marcos, *Remesas, crecimiento y convergencia regional en México: aproximación con un modelo Panel- Espacial, Estudios Económicos*, vol. 31, núm. 1, enero-junio, 2016, pp. 125-167 El Colegio de México, A.C., Distrito Federal, México

Mora Rivera, José Jorge; Arellano González, Jesús, *Las remesas como determinantes del gasto en las zonas rurales de México, Estudios Fronterizos*, vol. 17, núm. 33, enero-junio, 2016, pp. 1-27, Universidad Autónoma de Baja California, Mexicali, México.

Mora-Rivera, Jorge; Llamas Huitrón, Ignacio; García Amador, Martha Cecilia, *Pobreza y hogares receptores de remesas a veinte años del TLCAN: México 2010, 2012 y 2014, Economía: teoría y práctica*, vol. 4, Esp, 2018, pp. 215-244, Universidad Autónoma Metropolitana, a través de la Unidad Iztapalapa, la Unidad Azcapotzalco y la Unidad Xochimilco, División de Ciencias Sociales.

Moreno Crossley, Juan Cristóbal, *Irse y no partir. Contacto, movilidad y viajes en jóvenes migrantes interescales chilenos [2018-2022]*, Quivera. *Revista de Estudios Territoriales*, vol. 27, núm. 1, 2025, enero-junio, pp. 136-156, Universidad Autónoma del Estado de México, Toluca, México.

Núñez Medina, Gerardo; López Arévalo, Jorge Alberto, *Análisis espaciotemporal bayesiano de las remesas y la inclusión financiera en municipios de México, Norteamérica*, vol. 16, núm. 2, 2021, Julio-diciembre, pp. 99-120, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.

Ibarra González, José Israel; Vargas-Valle, Eunice D. La reconfiguración familiar de los migrantes deportados en la frontera norte de México, *Norteamérica*, vol. 16, núm. 1, 2021, enero-junio, pp. 121-145, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.

Pécoud, Antoine, Remesas desde la perspectiva de los organismos internacionales: construcción de un desafío y elaboración de una agenda política internacional, *Migración y Desarrollo*, vol. 13, núm. 25, julio-diciembre, 2015, pp. 33-59, Red Internacional de Migración y Desarrollo, Zacatecas, México.

Salas Alfaro, Renato; González Becerril, Juan Gabino; Soberón Mora, José Antonio, Remesas internacionales y pobreza: estudios de caso en Michoacán y Oaxaca, *Análisis económico*, vol. XXXIV, núm. 85, 2019, enero-abril, pp. 143-168, Universidad Autónoma Metropolitana, Unidad Azcapotzalco, División de Ciencias Sociales y Humanidades.

Salas Alfaro, Renato; Ramírez García, Sergio Alberto, Las remesas y conocimientos laborales e intangibles, de los migrantes retornados en la costa de Oaxaca, *Paradigma económico. Revista de economía regional y sectorial*, vol. 16, núm. 1, 2024, enero-junio, pp. 91-116, Universidad Autónoma del Estado de México, Toluca, México.

Schiavon, Jorge A. ¿Cómo estudiar la migración en el sistema mesonorteamericano? *Norteamérica*, vol. 17, núm. 2, 2022, Julio-diciembre, pp. 171-190, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.

Sovilla, Bruno, Las remesas internacionales: ¿estabilizador automático o súpermultiplicador de la política fiscal?, *Investigación económica*, vol. LXXX, núm. 315, 2021, enero-marzo, pp. 107-124, Universidad Nacional Autónoma de México, Facultad de Economía.

Vera Sánchez, Fernando; Cruz Vasquez, Miguel, Factores económicos y financieros del envío de Remesas Internacionales, de Estados Unidos a México en épocas de pandemia COVID-19, *Paradigma económico. Revista de economía regional y sectorial*, vol. 16, núm. 1, 2024, enero-junio, pp. 117-145, Universidad Autónoma del Estado de México Toluca, México.

Verea, Mónica, La política migratoria de Biden a un año de su administración, *Norteamérica*, vol. 17, núm. 1, 2022, enero-junio, pp. 265-291, Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.

Villafuerte Solís, Daniel; García Aguilar, María del Carmen, Fin de la era Trump y las promesas de Biden: ¿nuevos aires en la política migratoria de la Cuarta Transformación?, *Migración y Desarrollo*, vol. 18, núm. 35, 2020, Julio-, pp. 103-127, Red Internacional de Migración y Desarrollo, Zacatecas, México.

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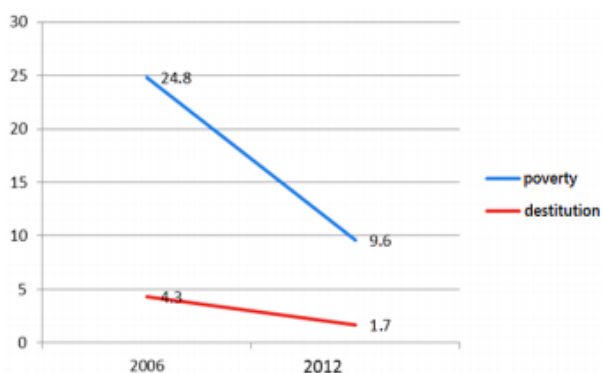
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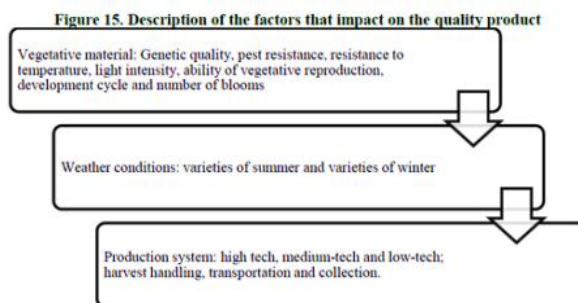


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