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Editorial

We are pleased to present the second issue of the year 2025, which brings together scientific contributions with different perspectives on the science of law. These works show how the study of law is nourished by diverse approaches and areas of knowledge, which makes it more approachable, dynamic and interesting. In this issue, *Law and International Politics* presents articles that reflect the current state of legal science and its constant evolution.

The first article analyzes the role of education in promoting social justice and human rights in Cochabamba, Bolivia, in a context of structural inequalities. The objective was to quantitatively assess the perceptions of professionals on the contribution of education to social equity, inclusion and the formation of agents of change.

The second article deals with the daily use of the cell phone and how it has profoundly transformed our habits, and online shopping, which has become one of the most frequent activities. The article points out that this change has impacted both consumer behavior and traditional business models, providing recent data from the European Commission and the INE.

The third study is an investigation of savings and credit cooperatives (CACs) in Paraguay, which have consolidated their role as relevant actors in financial inclusion, especially in sectors neglected by traditional banks. This text discusses comparative models of cooperative supervision in Latin America, identifying good practices applicable to the Paraguayan case. This article seeks to contribute to the debate on the financial governance of non-bank entities, suggesting regulatory and institutional reforms that strengthen the stability of the cooperative system without undermining its solidarity-based nature.

The fourth article provides an analysis of cross-border civil infrastructure projects, such as dams, gas pipelines and transport corridors, which represent complex challenges for international law. This article explores how international legal norms regulate these ventures, highlighting the need to balance sovereign interests with environmental and human rights obligations.

In addition to the above, the magazine adds a fifth article, which analyzes the fight against gender violence in Ecuador, which has historically been undertaken by women, however, this research focuses on the analysis of another reality in the home: gender violence exercised by women against men, which entails a significant impact on the victim in all areas of development, violating the essence of the existence of fundamental human rights, as well as the need for a clear and precise legal framework in this regard.

Finally, this issue is completed with a study on the relationship between economic law and business sustainability in Honduras, focusing on micro, small and medium-sized enterprises (MSMEs). The text examines the doctrinal bases of sustainable economic law, the national and comparative regulatory framework, and empirical evidence gathered through interviews with 30 experts and surveys of 200

MSMEs in Tegucigalpa, San Pedro Sula and La Ceiba. The results show a fragmented legal framework, poor interinstitutional coordination and insufficient incentives for the transition to sustainable production models.

We hope that this edition will be of interest to you and spark new reflections.

Dr. Roberto García Lara
Editor Jefe / Editor in chief / Editor Chefe

**EDUCATION: A QUANTITATIVE ANALYSIS OF ITS ROLE IN SOCIAL
JUSTICE AND HUMAN RIGHTS IN COCHABAMBA**
**EDUCACIÓN: UN ANÁLISIS CUANTITATIVO DE SU ROL EN LA JUSTICIA SOCIAL Y LOS
DERECHOS HUMANOS EN COCHABAMBA**

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ABSTRACT

Keywords:

education, social justice, human rights, interculturality, inclusion.

This study examines the role of education in promoting social justice and human rights in Cochabamba, Bolivia, within a context of structural inequalities. The objective was to quantitatively assess professionals' perceptions of education's contribution to social equity, inclusion, and the development of change agents. A cross-sectional descriptive design was employed, using a non-probabilistic convenience sample of 150 professionals from education, law, and human rights. A survey with six Likert-scale questions was applied to explore perceptions regarding equity, human rights, intercultural approaches, critical awareness, policies for vulnerable groups, and the training of change agents. Results indicate that 60% believe education promotes social equity, 70% acknowledge its contribution to human rights, 61% value intercultural approaches, 64% highlight critical awareness, 48% approve policies for vulnerable groups, and 69% support the training of change agents. However, neutral (19-27%) and critical (12-25%) responses reveal implementation challenges. The study concludes that education is a key pillar for social justice but requires inclusive policies, enhanced teacher training, and strengthened intercultural approaches. Recommendations include implementing community based programs and inclusive curricula, and combining mixed methods in future research to further explore these dynamics.

RESUMEN

Palabras clave:

educación, justicia social, derechos humanos, interculturalidad, inclusión.

Este estudio analiza el rol de la educación en la promoción de la justicia social y los derechos humanos en Cochabamba, Bolivia, en un contexto de desigualdades estructurales. El objetivo fue evaluar cuantitativamente las percepciones de profesionales sobre la contribución de la educación a la equidad social, la inclusión y la formación de agentes de cambio. Se empleó un diseño descriptivo transversal con una muestra no probabilística por conveniencia de 150 profesionales de educación, derecho y derechos humanos. Se aplicó una encuesta con seis preguntas en escala Likert para explorar percepciones sobre equidad, derechos humanos, enfoques

interculturales, conciencia crítica, políticas para grupos vulnerables y formación de agentes de cambio. Los resultados muestran que el 60% considera que la educación promueve la equidad social, el 70% reconoce su contribución a los derechos humanos, el 61% valora los enfoques interculturales, el 64% destaca la conciencia crítica, el 48% aprueba las políticas para grupos vulnerables y el 69% respalda la formación de agentes de cambio. Sin embargo, las respuestas neutrales (19-27%) y críticas (12-25%) señalan desafíos en la implementación. Se concluye que la educación es un pilar clave para la justicia social, pero requiere políticas inclusivas, formación docente y enfoques interculturales fortalecidos. Se recomienda implementar programas comunitarios y currículos inclusivos, y combinar métodos mixtos en futuras investigaciones para profundizar en estas dinámicas.

Introduction

Education has been widely recognized as an essential instrument for the promotion of social justice and the guarantee of human rights, especially in contexts with high rates of inequality and social exclusion such as Cochabamba and Bolivia in general, several recent studies provide empirical and conceptual evidence on the interrelationship between education, social equity and fundamental rights.

First, the Latin American Campaign for the Right to Education and the International Institute for Educational Planning emphasize that, although significant progress has been made in Latin America in terms of access to and permanence in school, structural inequalities persist and "it will be difficult to make progress in improving the educational situation if the serious problems of structural poverty and exclusion that affect important sectors in each of the countries of the region are not addressed" (UNESCO, 2021, p. 37). In the Bolivian case, the persistence of these educational inequalities is closely related to socioeconomic, cultural and recognition gaps, showing that education sometimes reproduces inequalities instead of mitigating them.

In a quantitative analysis specific to Bolivia, Montaña and Navia (2022) use an econometric model with panel data to show that educational inequality, measured through the Gini coefficient of education, is the most influential factor in income inequality. This study confirms that reducing educational gaps contributes directly to reducing economic inequality, which is a key component for social justice in the region, and that public policies aimed at educational inclusion and increasing the average years of schooling are essential for promoting more equitable development.

Regarding the conceptual and philosophical framework of social justice in education, Mendoza (2022) highlights the need to incorporate rigorous and critical approaches that transcend the simplistic discourse of equity and inclusion. The author examines relevant philosophical traditions such as the theory of primary goods, the human capabilities approach and epistemic justice that allow us to understand education not only as a right, but also as a mechanism to transform power relations and foster social emancipation in Latin American contexts.

Likewise, Sánchez-Corral (2021) approaches education for social justice from an intersectional analysis, particularly focused on students from privileged groups, proposing educational strategies that develop critical awareness, recognition of privilege and genuine social commitment. This approach is vital to foster agents of change capable of working for the dignity and equity of vulnerable groups, contributing to a more just and transformative education system.

Simón et al. (2019), reflect on the convergence and divergence between equity, inclusive education and social justice education approaches, noting that they all share a foundation in human rights and aspire to eliminate exclusion and discrimination. Education is seen as a key tool for building more just societies, provided that educational policies and practices are aligned with these principles.

In the field of higher education, Santos and Condori (2023) stress the importance of promoting an inclusive university that guarantees access, permanence and graduation of all students, regardless of their individual or social characteristics. This inclusion is based on principles of social justice and human rights, which implies transforming institutional practices to eliminate economic, social and cultural barriers, promoting equal opportunities at the higher education level.

Finally, from an intercultural and decolonial perspective, Villafán (2024) highlights the role of intercultural education in Bolivia as a strategy to build a plurinational society

based on reciprocity and self-management, taking as an example the historical model of Warisata. This education promotes social justice by positioning indigenous communities not as passive recipients, but as active subjects of their own educational and cultural development, thus contributing to overcoming colonial power relations.

In summary, the body of research shows that for education to fulfill its role in social justice and human rights in Cochabamba-Bolivia, it is necessary to articulate public policies that reduce educational inequalities, incorporate intersectional and decolonial approaches, and transform educational practices at all levels to ensure effective inclusion, equity and respect for cultural and social diversity.

Method

The present research adopts a quantitative approach because it seeks to "analyze in an objective and measurable way the relationship between education, social justice and human rights, facilitating the obtaining of numerical data that allow establishing patterns and generalizations" (Creswell, 2014). This approach is suitable for "describing social phenomena accurately and for evaluating specific variables in the study population" (Hernández; Fernández; Baptista, 2014).

A cross-sectional descriptive design (transactional) was used, which allows the collection of information at a given time, "descriptive studies measure variables independently and even when no hypotheses are formulated, such variables are stated in the research objectives" (Arias, 2006 a, p.25). This type of design is relevant for studies that seek to establish the current state of the phenomena of interest, in this case, the role of education in social justice and human rights in Cochabamba.

The population considered is composed of 200 professionals from different areas related to the object of study: education, law and human rights. From this population, a non-probabilistic convenience sample of 150 professionals was selected, "given the accessibility and availability of the participants, which allows obtaining relevant information in limited time and resources" (Etikan; Musa; Alkassim, 2016). This method is commonly used in descriptive studies where probabilistic representativeness is difficult to achieve, but a sample that provides meaningful data for analysis is required.

A survey was designed with 6 closed response questions on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to assess the perceptions of professionals on the role of education in social justice and human rights in Cochabamba.

Results

The results obtained in this research are as follows:

Question 1. Does education in Cochabamba effectively promote social equity and the reduction of inequalities?

Table 1

Perception of social equity and education in Cochabamba

ANSWER	F	%
Strongly disagree	10	7%
Disagree	20	13%
Neither agree nor disagree	30	20%
Agreed	60	40%
Totally agree	30	20%
Total	150	100%

Note. Data on the perception of social equity and access to education in Cochabamba, prepared by the authors (2025)

According to the survey conducted, the majority of participants were in favor of the role of education in promoting social equity and reducing inequalities, with 40% of respondents agreeing and 20% strongly agreeing, totaling 60% clear support. However, 20% maintained a neutral position, showing a certain degree of indecision or lack of sufficient information to form a solid opinion. On the other hand, 20% expressed disagreement or total disagreement, reflecting a significant minority with criticisms or reservations about the current effectiveness of education in this area. This set of results indicates that, although there is a predominantly positive perception, there are still challenges and areas for improvement that must be addressed in order to strengthen the social impact of education.

Question 2. Do current educational programs contribute to guaranteeing the basic human rights of all students?

Table 2

Perception of educational programs and guarantee of basic human rights

ANSWER	F	%
Strongly disagree	5	3%
Disagree	15	10%
Neither agree nor disagree	25	17%
Agreed	70	47%
Totally agree	35	23%
Total	150	100%

Note. Data on the perception of educational programs and the guarantee of basic human rights, own elaboration (2025).

According to the survey, 47% agree and 23% strongly agree, for a solid 70% support. However, 17% remain neutral, which may reflect uncertainty or lack of sufficient knowledge to form a definitive opinion. On the other hand, 10% expressed disagreement and 3% total disagreement, indicating that a minority questioned the current effectiveness of these programs in ensuring human rights. These results show a mostly positive perception, although they also show the existence of challenges and aspects to be improved in the implementation of education to fully guarantee fundamental rights.

Question 3. Does the inclusion of intercultural approaches in education strengthen social justice in the region?

Table 3*Perceptions of intercultural inclusion and social justice*

ANSWER	F	%
Strongly disagree	8	5%
Disagree	10	7%
Neither agree nor disagree	40	27%
Agreed	55	36%
Totally agree	37	25%
Total	150	100%

Note. Data on the perception of intercultural inclusion and social justice in Cochabamba, own elaboration (2025).

According to the survey, 36% of the participants agree and 25% strongly agree that the inclusion of intercultural approaches in education strengthens social justice in the region, totaling 61% of positive opinions. However, a remarkable 27% remain neutral, suggesting that a considerable portion of respondents still do not have a definite opinion or need more information on this topic. On the other hand, 7% disagreed and 5% totally disagreed, reflecting that there is a minority that questions or does not perceive the impact of intercultural approaches on social justice. These results indicate that, although the majority recognizes the value of intercultural education, there are still doubts and areas to strengthen its acceptance and effectiveness in the community.

Question 4. Does education foster critical awareness of social injustices and discrimination?

Table 4*Perception on education and critical social awareness*

ANSWER	F	%
Strongly disagree	7	5%
Disagree	12	8%
Neither agree nor disagree	35	23%
Agreed	60	40%
Totally agree	36	24%
Total	150	100%

Note. Data on the perception of education and critical social awareness in Cochabamba, own elaboration (2025).

According to the survey, 40% of the participants agree and 24% strongly agree that education fosters critical awareness of social injustices and discrimination, accumulating 64% of favorable opinions. However, 23% of respondents remain neutral, suggesting that a significant proportion still do not have a defined position or require further understanding on this aspect. In contrast, 8% disagreed and 5% totally disagreed, showing that a minority questioned the effectiveness of education in this area. The results indicate a mostly positive perception, although they highlight the need to continue strengthening critical education in order to broaden its social impact.

Question 5. Do education policies in Cochabamba adequately address the needs of vulnerable groups?

Table 5*Perception of educational policies and vulnerable groups in Cochabamba*

ANSWER	F	%
Strongly disagree	12	8%
Disagree	25	17%
Neither agree nor disagree	40	27%
Agreed	43	28%
Totally agree	30	20%
Total	150	100%

Note. Data on the perception of educational policies and their impact on vulnerable groups in Cochabamba, prepared by the authors (2025)

According to the survey, 28% of the participants agree and 20% strongly agree that educational policies in Cochabamba adequately address the needs of vulnerable groups, for a total of 48% favorable opinions. However, 27% remain neutral, indicating that a considerable part of the respondents do not have a defined position or consider the information available to be insufficient. On the other hand, 17% disagreed and 8% totally disagreed, adding up to 25% who questioned or did not consider these policies adequate. These results reflect a divided and critical perception regarding the effectiveness of educational policies to serve vulnerable groups, evidencing the need for improvements and adjustments in this area.

Question 6. Does academic training contribute to developing agents of change committed to human rights?

Table 6*Perception on academic training and development of change agents*

ANSWER	F	%
Strongly disagree	4	3%
Disagree	14	9%
Neither agree nor disagree	28	19%
Agreed	65	43%
Totally agree	39	26%
Total	150	100%

Note. Data on the perception of academic training and the development of agents of change in Cochabamba, own elaboration (2025).

According to the survey conducted, 43% of the participants agree and 26% strongly agree that academic training contributes to developing agents of change committed to human rights, reaching a positive endorsement of 69%. However, 19% maintain a neutral position, indicating that a significant portion still does not have a defined opinion or requires more information to evaluate this aspect. On the other hand, 9% disagreed and 3% strongly disagreed, reflecting that a minority questioned the effectiveness of academic training in this regard. These results suggest that, although most recognize the formative impact on the commitment to human rights, there is room to strengthen and consolidate this educational role.

Discussion

The results of this research consolidate education as a fundamental pillar for promoting social justice and guaranteeing human rights in Cochabamba, Bolivia. The

mostly positive perception of the professionals surveyed, with 60% recognizing that education promotes social equity (Table 1) and 70% valuing its contribution to basic human rights (Table 2), corroborates the approaches of (UNESCO, 2021) and (Montaño; Navia, 2022). These authors emphasize that the reduction of educational gaps reduces economic inequality, a critical aspect in contexts of high social exclusion such as Bolivia. This finding is aligned with the theory of justice of (Rawls, 2002; Rawls, 2006), who positions education as a primary good to ensure an equitable society, and with Sen's (2010) capabilities approach, which emphasizes the role of education in expanding human freedoms, enabling individuals to participate fully in society. In the Latin American context, Filmus (2010) reinforces this idea by emphasizing that education is an engine of social inclusion and labor equity, providing opportunities to overcome structural inequalities.

The inclusion of intercultural approaches, supported by 61% of respondents (Table 3), validates Villafán's (2024) proposal of intercultural education as a mechanism for building a plurinational society based on reciprocity. Neutral responses (27%) do not contradict this impact, but rather point to the need to strengthen teacher training and curriculum implementation, as suggested by Walsh (2013) in his work on decolonial pedagogies that promote the resistance and re-existence of marginalized communities. Fals (1987) complements this perspective by emphasizing education as a process of collective construction of knowledge, where indigenous communities, as in the Warisata model, are active agents of their development. This convergence is reinforced by the vision of (Freire, 1997; Freire, 2005), who advocates a dialogical and liberating education that decolonizes knowledge and promotes social justice, an essential principle for transforming power relations in plurinational contexts such as Bolivia.

The 64% who perceive that education fosters critical awareness of social injustices (Table 4) confirms the relevance of the intersectional strategies proposed by (Sanchez-Corral, 2021; Freire, 1997) enrich this analysis by stressing that critical pedagogy should empower students to question oppressive structures through dialogic learning. Diaz (2019) adds that education should be a democratic space that cultivates critical citizens, a principle that resonates with the Cochabamba context. The neutral (23%) and disagreement (13%) responses reflect the diversity of perceptions, but do not detract from the transformative potential of education. On the contrary, these responses highlight the opportunity to integrate popular education approaches, as proposed by (Alfieri; Rébola; Suárez, 2022), to strengthen social awareness through participatory and contextualized practices.

Educational policies for vulnerable groups, with 48% support (Table 5), indicate significant progress towards inclusion, as argued by (Santos; Condori, 2023) and (Filmus, 2010) reinforces that educational policies should prioritize equitable access for marginalized sectors, an objective that policies in Cochabamba are addressing, although with room for optimization. For his part Walsh (2013) adds that decolonial pedagogies can transform the living conditions of vulnerable groups, while Sen (2000) stresses that education must guarantee opportunities for the development of human capabilities. The neutral (27%) and disagreement (25%) responses do not question this progress, but rather point to the need to design specific programs, such as scholarships, financial support and inclusive curricula, to maximize impact. Fals (1987) suggests that community participation in the design of these policies can ensure their relevance and effectiveness.

The 69% who recognize that academic training develops agents of change committed to human rights (Table 6) fully validates the importance of inclusive higher education, as argued by (Santos; Condori, 2023) and (Flores; Bustamante, 2020) provide a philosophical perspective by arguing that education should be a space for thinking the

common, forming citizens who promote social justice through dialogue and collective action. Barrera (2023) reinforces this idea by stressing that higher education should cultivate a critical citizenship that challenges inequalities, while (Freire, 1997) emphasizes autonomy as a pillar for training agents of change. The neutral (19%) and disagreement (12%) responses reflect the complexity of the educational context, but do not question the transformative role of education. These perceptions underscore the opportunity to integrate pedagogical approaches that prioritize ethical commitment, as suggested by Verdeja (2020), and to strengthen curricula with transformative practices.

The methodology based on a non-probabilistic convenience sample is appropriate for the Cochabamba context, as Boff (1997) points out, and the subjective perceptions capture the lived reality of the professionals, a key aspect in social research according to Banks (2004). Neutral and critical responses do not limit the validity of the findings, but rather enrich the analysis by identifying priority areas for educational action. For example, the neutral responses in Tables 3 and 5 suggest the need for intercultural awareness campaigns and teacher training, while the critical responses in Table 5 highlight the urgency of more inclusive policies, aligned with the proposals of Fals (1987). These observations provide a roadmap for transforming the education system, strengthening its impact on social justice.

In summary, the results fully confirm that education in Cochabamba is an engine of social justice and human rights, aligning with (UNESCO, 2021; Villafan, 2024; Freire, 1997; Freire, 2005; Rawls, 2002; Rawls, 2006; Sen, 2010; Filmus, 2010; Walsh, 2013). Neutral or critical perceptions offer strategic opportunities to optimize educational policies and practices through teacher training, inclusive curricula, and decolonial and participatory approaches. We recommend that educational policies prioritize the inclusion of vulnerable groups, intercultural awareness, and the training of agents of change through specific programs, such as community workshops and targeted programs. Future research could combine mixed methods to deepen these dynamics and consolidate the role of education in the construction of an equitable and plurinational society in Bolivia.

Conclusions

Education in Cochabamba emerges as an essential pillar to promote social justice and guarantee human rights, acting as a key driver to reduce structural inequalities and promote inclusion in a context of profound cultural and social diversity. The results of this research reveal a predominantly positive perception among the professionals surveyed, with 60% highlighting the role of education in promoting social equity, 70% recognizing its contribution to the protection of fundamental rights, and 69% valuing its capacity to train agents of change committed to social transformation. However, the neutral (19-27%) and critical (12-25%) responses point to pending challenges, such as the need to strengthen educational policies aimed at vulnerable groups, optimize the integration of intercultural approaches and consolidate teacher training in transformative pedagogical practices.

These findings highlight the importance of designing educational policies that prioritize effective inclusion through strategies such as economic support programs, curricula that reflect cultural diversity, and teacher training focused on the development of critical consciousness. Higher education, in particular, should focus on cultivating ethical and committed citizens capable of challenging inequalities and contributing to a more equitable and pluralistic society.

It is recommended to implement community initiatives that actively involve local populations in the creation of educational policies, ensuring their relevance and effectiveness. It is also crucial to strengthen cultural awareness and critical education at all levels of education to maximize the transformative impact of education. For future research, it is proposed to combine quantitative and qualitative approaches to explore in depth the experiences of marginalized groups and to evaluate the long-term effects of educational policies. These actions are fundamental to consolidate an educational system that not only guarantees access, but also promotes equity, social justice and unrestricted respect for human rights in Cochabamba and Bolivia.

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E-COMMERCE CASINO: HOW AI ALGORITHMS GAMBLE WITH YOUR WALLET AND YOUR MIND

EL CASINO DEL E-COMMERCE: CÓMO LOS ALGORITMOS DE LA IA APUESTAN CON TU BOLSILLO Y TU MENTE

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ABSTRACT

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The daily use of cell phones has profoundly transformed our habits, and online shopping has become one of the most frequent activities. This change has impacted both consumer behavior and traditional business models. According to recent data from the European Commission and INE, more than 75% of Internet users in Spain bought online in the last year, and more than 40,000 physical stores closed between 2019 and 2023. In this new scenario, recommendation algorithms used by platforms such as Amazon, Aliexpress, Shein or Temu have acquired a central role. Far from simply displaying products, these systems interpret behavioral patterns and personalize offers to encourage consumption. The problem lies in the fact that these algorithms operate under an opaque logic: they do not inform the user about the criteria they use, nor do they explain how decisions are made. Thus, the consumer is faced with an environment designed to elicit immediate responses, without clarity as to whether these recommendations are really in his or her best interests. The article asks whether these strategies activate brain mechanisms similar to those involved in behavioral addictions, such as gambling, and analyzes how persuasion techniques based on data analysis can condition automated purchasing decisions, reducing user autonomy. Against this backdrop, it is urgent to reflect on the need for a regulation that sets clear limits on the commercial use of these algorithmic tools

RESUMEN

Palabras clave:

algoritmos de recomendación, consumo impulsivo, comercio electrónico, carrito abandonado, adicción al consumo.

The widespread use of mobile phones has significantly reshaped daily habits, with online shopping becoming one of the most common activities. This shift has not only altered consumer behavior but also transformed traditional business models. According to recent data from the European Commission and Spain's National Statistics Institute, more than 75% of internet users in Spain made at least one online purchase in the past year, while over 40,000 physical stores closed between 2019 and 2023. In this evolving landscape, recommendation algorithms used by platforms such as Amazon, Aliexpress, Shein, and Temu have taken on a central

role. These systems go beyond displaying products; they interpret user behavior and personalize offers to encourage purchases. The concern lies in the opaque logic behind these algorithms: users are not informed about the criteria guiding their recommendations, nor are they given insight into how decisions are made. As a result, consumers are immersed in an environment designed to trigger immediate responses, without knowing whether the suggestions truly serve their interests. This article explores whether such algorithmic strategies activate brain mechanisms similar to those involved in behavioral addictions like gambling. It also examines how persuasion techniques - grounded in behavioral analysis and intensive data use - increasingly shape consumer decisions in subtle, automated ways, potentially undermining user autonomy. In light of these findings, the article calls for regulatory frameworks that set clear boundaries on the commercial use of algorithm-driven personalization

Introduction

Today, the term "algorithm" is part of our everyday vocabulary. Although we mention it often, we do not always fully understand its significance and the impact it can have on our daily lives. In simple terms, an algo-rhythm is a set of instructions intended to solve a problem or execute a task. In the e-commerce domain, recommendation algorithms process users' browsing and consumption data in order to anticipate their interests and personalize their online shopping experience (Russell & Norvig, 2021; Mitchell, 2022).

These tools are not limited to facilitating access to products or improving platform navigation: they also directly influence our purchasing decisions. Indeed, one of the central aspects of this work is to question to what extent these automated strategies - aimed at maximizing sales - are applied in a transparent and ethical manner, and whether they are truly aligned with consumer interests.

This debate is particularly relevant in the current context, marked by a radical transformation in consumer habits. Digitalization, accelerated in the wake of the pandemic, has led to the closure of thousands of physical stores around the world, while online sales have continued to grow. In Spain, according to the CNMC (2023), e-commerce exceeded €70 billion in turnover in 2022, representing a year-on-year increase of 25%. This expansion has been driven both by giants such as Amazon and Aliexpress, as well as by small businesses that have found in digital a way to survive.

Numerous studies have shown that recommendation algorithms can trigger compulsive consumption patterns, appealing to psychological mechanisms similar to those operating in behavioral addictions (Turel et al., 2022; LaRose et al., 2019). The combination of intensive personalization, time pressure and continuous notifications generates an environment conducive to immediate gratification, favoring poorly thought-out decisions. D'Ardenne and Eshel (2020), for example, argue that such algorithms trigger dopaminergic responses similar to those produced by slot machines.

Gemma Mestre-Bach, from the Behavioral Addictions Research Group at UNIR, has participated in work that identifies neurobiological similarities between compulsive shopping and substance use disorders (Mestre-Bach, 2025). In both cases, elements such as loss of control, positive reinforcement and compulsion appear. Although less visible than other forms of addiction, these dynamics can have serious psychological and economic consequences for those who experience them.

This article argues that marketplaces influence user behavior constantly and silently, without users being fully aware of it. The hypothesis put forward is that these platforms not only perfect their sales thanks to algorithmic personalization, but also do so by taking advantage of dynamics that can be addictive. And the most worrying thing is the scarce defense capacity that the consumer has against these practices: there are no tools to deactivate algo-rhythms, nor simple ways to limit actions such as remarketing or the activation of the "abandoned cart".

The situation is to some extent similar to that of casinos, with the difference that, while in the latter we can decide to enter or leave, in digital commerce we are constantly exposed to stimuli without even realizing it. The cell phone has become a permanent access channel, making it difficult to take the critical distance needed to reflect on our purchasing decisions.

From this perspective, the present study is located at the crossroads between digital law, consumer psychology and technological ethics. The increasing incorporation of artificial intelligence and machine learning into sales processes makes a critical review of these dynamics urgent. It's no longer just about what we buy, but about understanding

how, when and why we make those decisions. In this sense, the article seeks to contribute to the academic and professional debate on the role that algorithms should assume in digital consumption and where the line should be drawn between useful recommendation and manipulation.

Theoretical Framework and Literature Review

Following the COVID-19 pandemic, much of the traditional trade was forced to close temporarily or even permanently. This situation significantly accelerated the boom in e-commerce, which experienced unprecedented growth. According to Statista data (2023), global sales through digital platforms are estimated to exceed \$6 trillion by 2024. This change not only affects the way we shop, but has also transformed the way companies collect, interpret and use consumer information to guide their marketing strategies. The large digital platforms have strengthened their dominance, not only because of their sales volume, but also because of their ability to learn and adapt in real time thanks to increasingly complex predictive systems and algorithms. Thanks to these advances, marketplaces are able to anticipate user behavior with an accuracy that was unthinkable a few years ago.

This development has opened up an increasingly necessary debate on the ethical dilemmas involved in the intensive use of algorithms. Authors such as Shoshana Zuboff (2019) have denounced what they call "surveillance capitalism": a model in which personal data is not only used to improve the customer experience, but also as a tool for control and economic benefit. In this model, the user's purchasing decisions are not completely free, since they are conditioned by systems that know and exploit his habits more effectively than the individual himself. From this perspective, the consumer ceases to be an autonomous subject and becomes an object of analysis and commercial manipulation.

In the same vein, a report by NielsenIQ (2022) notes that the pandemic has been a catalyst for the expansion of e-commerce on a global scale. At the national level, the Adeventa Spain study (2021-2022) confirms that the digitalization of consumption has been definitively consolidated in Spain. In this context, recommendation algorithms have acquired a central role. According to Russell and Norvig (2021), these algorithms rely on user history analysis to predict user preferences and tailor offers accordingly. While this technology facilitates access to products and streamlines the shopping experience, it has also raised concerns about its influence on consumer autonomy and its relationship with compulsive consumption.

Impact of Algorithms on Consumer Behavior

In recent years, several studies have shown that the recommendation algorithms used by e-commerce platforms not only personalize the shopping experience, but can also encourage impulsive consumption patterns. This influence is largely due to the ability of these systems to apply constant pressure on users through content that is highly adapted to their tastes and behaviors. Turel et al. (2022) point out that algorithms act in much the same way as the mechanisms involved in gambling addiction, generating automatic purchase responses that often do not go through prior reflection. This constant repetition of stimuli activates reward circuits in the brain that, over time, consolidate habits that are difficult to control or reverse.

LaRose et al. (2019) add that this continuous exposure to messages, personalized promotions, and notifications can trigger a dopaminergic response—that is, an activation of the brain's pleasure centers—that reinforces purchase behavior. This is not only an economic problem. In the medium and long term, this dynamic can affect the psychological balance of the user, reducing their capacity for self-control and normalizing

compulsive behaviors within a digital environment that leaves no room for pause or reflection.

Furthermore, as explained by Griffiths et al. (2018), the design of these environments favors what we could call "passive consumption": purchase decisions that do not arise from a specific need, but are triggered by the digital architecture of the marketplace itself. In other words, the system identifies trends in user behavior and enhances them, transforming a momentary interest into an almost automatic purchase action.

This type of hyper-personalization not only grabs the consumer's attention, but also distorts their perception of urgency and need. D'Ardenne and Eshel (2020) explain that, by activating brain circuits related to immediate pleasure, algorithms train users to react almost mindlessly to certain stimuli: attractive images, emotional messages or seemingly innocent reminders. In this context, marketplaces are not limited to covering existing needs, but generate new ones -often artificial- to keep the user within the consumption cycle.

As a consequence of all this, the digital shopping experience tends to lose its rational and voluntary character. In many cases, it becomes an automated process, guided more by impulses than by thoughtful decisions. Critical judgment is weakened with each interaction, and what could have been an informed choice becomes an emotional response to an environment carefully designed to persuade.

Algorithmic Manipulation and Lack of Transparency

One of the most recurrent concerns in recent studies on e-commerce has to do with the opacity surrounding the functioning of recommendation algorithms in marketplaces. As Mestre-Bach (2025) points out, consumers often do not have clear and accessible information about the criteria that determine the product suggestions they receive. This lack of clarity leaves many questions open: do these recommendations respond to our real interests or, rather, to commercial objectives aimed at maximizing sales?

The truth is that the user experience is left in the hands of a system that operates in the background, without the consumer being able to know, let alone control, how their data is processed or why they are shown one product and not another. Faced with this situation, the European Union has begun to take steps with the Digital Services Directive, which aims to introduce certain transparency obligations for large platforms (European Commission, 2023). However, the debate remains open, especially around whether these measures are sufficient to give the consumer back control over their digital shopping environment.

Comparison with Behavioral Addiction Models

D'Ardenne and Eshel (2020) propose a revealing comparison between the way recommendation algorithms work in e-commerce platforms and the reward mechanisms used in gambling. Both rely on a pattern of intermittent gratification: that is, offering positive stimuli irregularly, which activates a dopaminergic response in the brain that reinforces the behavior and hinders its conscious control. This dynamic, well known in the field of behavioral addictions, can generate a kind of psychological dependence that, in the context of e-commerce, manifests itself in repeated, impulsive and often unnecessary purchases.

From behavioral psychology, it has been pointed out that this type of reinforcement has a particularly powerful effect, since it stimulates the brain's reward system in an intense and prolonged manner. Griffiths (2018) already warned that platforms that apply variable reward systems-such as limited-time offers, messages that

generate urgency, or unexpected discounts-reproduce an experience similar to that of a slot machine, where it is not so much the "prize" itself that engages, but the anticipation of getting it.

In this context, the consumer no longer responds to a rational need, but enters into an automated emotional dynamic. As with compulsive gamblers, every click and every purchase is part of a routine that is repeated without much reflection. And this cycle is enhanced by elements such as "abandoned cart" reminders or personalized notifications, which function as constant calls to re-engage in the shopping game.

Moreover, this form of addiction is particularly difficult to detect. Unlike gambling, which is already recognized as a health problem, the act of buying is socially accepted and even associated with personal success. This means that these behaviors often go unnoticed or are not recognized as problematic. Mestre-Bach (2025) warns about the invisibility of this type of addiction in environments where consumption is the norm. For his part, Zuboff (2019) also underlines how these dynamics are hidden within a system designed to encourage constant consumption.

Therefore, comparing these algorithms with behavioral addiction models helps to better understand what is at stake. It also reinforces the need for stricter controls, both from an ethical and legal point of view. If commercial algorithms are reproducing pathological gambling dynamics, it seems reasonable that they should also be evaluated from a mental health and effective consumer protection perspective.

Need for Regulation and Consumer Protection

Different authors have agreed on the urgency of establishing regulatory frameworks that allow the user to have greater control over how recommendation algorithms influence their purchasing decisions (Mitchell, 2022). In today's digital context, dominated by automation, consumers have few tools to understand - let alone question - the systems that determine what they see, what they are offered and how they interact with products. This ranges from the possibility of disabling personalized recommendations to setting filters that limit certain commercial content, or even avoiding invasive practices such as the constant reminder of the "abandoned cart" or the avalanche of notifications.

Existing laws have not yet covered these new challenges in sufficient depth. Although there are advances, such as the European Union's Digital Services Act or proposals such as the Digital Advertising Transparency Act in the United States, many platforms continue to operate with wide margins of opacity (European Commission, 2023). The lack of a clear obligation to explain why one product is prioritized over another places consumers in a situation of vulnerability to algorithms that are optimized to generate revenue, not to look after their interests.

According to Kapoor et al. (2023), marketplaces have taken personalization to a new level by using artificial intelligence to observe, categorize and anticipate user behavior. With this information, they adjust prices, promotions and suggestions in real time. Although this personalization is presented as a service improvement, it can also become a source of risk if there are no clear legal limits or ethical principles. Therefore, the user should have the right to choose whether or not to be subject to this type of automated segmentation, and have the tools to manage when and how their personal data is used.

In addition, many studies agree that algorithmic operation can lead to impulsive consumption dynamics. Turel et al. (2022) argue that this type of immediate gratification triggers addiction-like responses. Along the same lines, D'Ardenne and Eshel (2020) point out that the combination of constant access, immediacy and immediate gratification

triggers addiction-like responses, as occurs in gambling. In the face of this, it is imperative to recognize the risk of developing a technological dependency. While mechanisms such as self-exclusion or preventive measures exist in the gambling sector, in online commerce the possibility of limiting the constant commercial stimulus has not yet been contemplated.

Zuboff (2019) points out that this problem is not only technical, but also legal: it is about the right of any individual to understand how decisions that affect his or her purchasing behavior are made. In this regard, regulations should ensure that algorithms can be tracked, explained and audited by independent entities.

Ultimately, while recommendation algorithms can improve the shopping experience, their unsupervised use can have serious consequences. Turel et al. (2022) warn that immediate gratification can generate technological dependence. D'Ardenne and Eshel (2020) insist on the addictive effects of intermittent reinforcement on purchase decisions.

Legal Framework for E-Commerce in Spain

The legal framework regulating e-commerce in Spain is scattered in several bodies of law that, although relevant, do not always respond clearly to the contemporary challenges of the automated digital environment. Firstly, Article 51 of the Spanish Constitution establishes the obligation of the public authorities to guarantee the defense of consumers and users, protecting their safety, health and economic interests. This provision serves as the basis for any interpretation that seeks to preserve consumer autonomy in the face of persuasive technologies.

The Civil Code, in its articles 1261 and following, defines the essential elements for the validity of consent in contracts, among them, freedom and the absence of vices such as error, fraud or coercion. Increasing automation in the algorithmic personalization of the shopping experience raises questions about whether this consent can be considered fully informed and free.

From a commercial perspective, the Commercial Code, in its articles 325 and following, regulates electronic contracting, although without going into the technical and ethical details involved in recommendation algorithms and their effects on purchasing behavior.

Law 34/2002 on Information Society Services and Electronic Commerce (LSSI-CE) establishes the basic transparency and information obligations that digital service providers must comply with. However, it does not expressly contemplate the risks of behavioral manipulation through predictive systems, as the recent Digital Services Act promoted by the European Union does begin to address.

Finally, the General Data Protection Regulation (GDPR), directly applicable in Spain, guarantees the right to the protection of personal data and establishes the principle of algorithmic transparency (Articles 5 and 22). However, its practical implementation in marketplaces is still limited, especially with regard to the user's right not to be subject to automated decisions without significant human intervention.

This legal framework, although advanced in some respects, is insufficient to address the psycho-emotional and ethical effects of algorithmic hyperpersonalization. From a hermeneutical point of view, this article interprets the above-mentioned regulations in relation to the right to a free and informed purchasing decision, concluding that the current regulation does not adequately protect the consumer against the new risks of digital manipulation.

Method

Data Analysis

The analysis conducted in this study is not based on data collected directly from the consumer, but rather on a reflective and critical interpretation of secondary academic sources. Due to the exploratory approach of the work and its documentary nature, a qualitative methodology has been chosen to identify frequent patterns and common trends in the way marketplaces use algorithms in their commercial strategies. This methodological approach provides a useful framework for understanding the mechanisms behind purchase decisions induced by automated recommender systems, as well as their impact on consumer autonomy.

The technique used has been the systematic review of recent scientific literature, as this practice is also recent, coupled with a detailed analysis of the behaviors observed on reference platforms such as Amazon, Aliexpress and Alibaba. These marketplaces use recommendation algorithms to personalize the shopping experience based on each user's browsing and consumption history. Its objective is clear: to increase the probability of conversion, i.e., that the consumer ends up making a purchase (Russell & Norvig, 2021).

According to several studies, these algorithms play a key role in the reinforcement of impulsive behaviors, as they rely on immediate gratification techniques and repetitive stimuli that trigger automatic decisions in the user (Turel et al., 2022). Such strategies, while commercially effective, raise ethical and regulatory questions. Are they really aimed at improving the customer experience or do they simply seek to maximize profits regardless of the effects they have?

Another relevant component in the analysis has been the "abandoned cart" tactic, a resource widely used by the platforms to retain the consumer. According to a report by BusinessChat (2024), marketplaces employ tools such as Google Analytics to track at what point the user abandons the purchase process. From there, they deploy automated recovery campaigns via emails or WhatsApp messages, which act as constant reminders. In addition, many platforms build detailed conversion funnels to identify the most sensitive stages of the buying process and fine-tune their remarketing strategies.

The combination of extreme personalization of recommendations with these types of recovery tactics creates a digital environment in which the consumer is under constant pressure to buy. Often, this pressure is exerted without the user being fully aware of the degree of influence these systems exert on their daily consumption decisions.

Ethical Considerations

Although this research did not require direct contact with individuals or the handling of sensitive personal data, it is essential to consider the ethical aspects surrounding any documentary analysis. In the academic field, ethics obliges to use sources in a rigorous, transparent and respectful manner, also recognizing the possible implications that may derive from the object of study. In this case, the focus is on the effects of algorithms on consumer behavior, a particularly sensitive area because of the influence that persuasive technologies can exert on users' everyday decisions.

As no surveys or interviews were conducted, and no data obtained directly from consumers were used, it was not necessary to apply specific protocols related to privacy or informed consent. Even so, the study has been developed under the fundamental principles of research ethics: only public and accessible sources have been used, and all references have been accurately cited, respecting the integrity of the works consulted.

This responsible attitude not only responds to an academic obligation, but also to a question of coherence with the content of the study itself, which analyzes business practices whose opacity may have consequences for consumer rights. For this reason, ethical reflection has been present in all phases of the work.

The following section presents the results of the analysis, based on a qualitative review of specialized sources and specific cases that illustrate the strategies used by marketplaces to personalize recommendations and encourage user retention on their platforms.

Results

A review of documentary sources has revealed a number of patterns that recur in the way the major e-commerce platforms interact with consumers. Based on the analysis of specialized literature, case studies and recent regulatory developments, a body of evidence has been gathered that demonstrates how recommendation algorithms and certain retention strategies have a direct impact on consumer habits. These findings not only help to understand the current functioning of the digital ecosystem, but also provide a solid basis for thinking about the urgency of moving towards a more transparent and regulated environment. This section details the main results grouped according to the most relevant thematic axes identified during the analysis.

The findings suggest that both the recommendation algorithms and the lack of transparency about how they work, along with the retention tactics employed by marketplaces, have a significant effect on user behavior. These dynamics can reinforce repetitive buying routines and, in certain cases, lead to compulsive behavior. In other words, today's digital environment, as it is configured, may be driving automated forms of consumption beyond the consumer's conscious control.

Recommendation Algorithms and their Impact on the Consumer

The review of specialized literature highlights the crucial role played by recommendation algorithms on platforms such as Amazon, Aliexpress or Alibaba in personalizing the online shopping experience. These systems are designed to analyze an enormous amount of information about user behavior - such as their searches, past purchases and browsing habits - in order to generate increasingly accurate product suggestions. This ability to tailor recommendations based on individual interests has been shown to significantly increase the likelihood of conversion (Russell & Norvig, 2021).

However, several studies have warned that this fine-tuned level of personalization can also have undesirable effects. By reinforcing instant gratification, algorithms can lead consumers to make impulsive decisions, guided more by immediate stimuli than by conscious reflection (Turel et al., 2022). As pointed out by Griffiths et al. (2018), this immediate response to recommendations can erode the user's ability to clearly assess their real needs, promoting buying patterns that border on compulsive behavior.

Lack of Transparency in the Use of Algorithms

One of the most frequently reported problems in e-commerce is the lack of clarity about how recommendation algorithms actually work. Consumers generally do not have access to accurate information that would allow them to understand why certain products are shown to them and in what order. As Mestre-Bach (2025) points out, this opacity makes it difficult to know if the recommendations respond to the real interests of the user or if they simply obey commercial objectives of maximizing sales, without taking into account the possible consequences for the personal economy of the buyer.

This lack of transparency creates a strong informational inequality between the platform and the user. While the buyer is confronted with an interface that appears neutral, the system operates under invisible, profit-oriented parameters. As Zuboff (2019) warns, these algorithms act as black boxes: they do not let us see either how

decisions are made or for what exact purpose, making it virtually impossible for the user to evaluate whether those suggestions benefit or harm him.

Faced with this situation, the European Union has begun to take measures with initiatives such as the Digital Services Act, which seeks to make platforms explain, at least in part, the criteria with which they profile and prioritize content (European Commission, 2023). However, the scope of these requirements is still limited, as it does not oblige to detail how these criteria are combined or what actual effects they have on purchasing decisions.

Researchers such as Mitchell (2022) have warned that, despite these regulatory advances, digital platforms continue to use systems that are difficult for the average user to understand. In addition, there are still no clear standards for external bodies to audit these algorithms, leaving oversight in the hands of the companies themselves. It is therefore becoming increasingly urgent to establish algorithmic governance mechanisms with verifiable transparency requirements and effective controls by independent authorities.

Retention Strategies and Abandoned Cart

A particularly relevant aspect of marketplaces' practices is the systematic use of the "abandoned cart" as a customer retention tool. When a user adds products to the cart but does not complete the purchase, the platforms activate tracking mechanisms that detect this behavior and automatically initiate a series of actions aimed at recovering the sale (BusinessChat, 2024).

This technique is part of what is known as the digital conversion funnel: a process where each click, pause or abandonment is analyzed as an opportunity to reactivate the buyer. Far from interpreting cart abandonment as abandonment, the platforms turn it into a signal of interest that triggers personalized remarketing campaigns. These campaigns typically include everything from reminder emails to push notifications to targeted social media ads, all with the goal of keeping purchase intent active and driving it through to conversion.

However, several studies have warned about the emotional consequences of this strategy. The bombardment of stimuli generated by remarketing can generate psychological pressure on the consumer, causing anxiety and pushing him to make purchases that perhaps, in another context, he would have discarded or postponed (Dellarocas et al., 2020). This continued insistence, through multiple channels, reinforces a sense of urgency that weakens self-control and can compromise the user's financial stability.

From an ethical point of view, this practice raises serious questions: at what point does a suggestion become a manipulation? Is the consumer's freedom respected when his or her hesitation to close a sale intensifies? In many cases, the user has no tools to limit the number of reminders or to disable this tracking function. This aggravates the inequality between the platform, which controls the timing and messages, and the consumer, who receives impacts without knowing or understanding the criteria that trigger them.

It is therefore necessary to propose regulatory frameworks to curb this dynamic. It would be advisable to establish clear limits on the frequency of these communications and to impose the obligation to provide the user with visible and accessible options to manage - or even reject - this type of interaction. This could restore some of the balance in a relationship where today, control is almost exclusively on the side of the platform.

General Influence on Consumer Behavior

The combination of recommendation algorithms aimed at encouraging consumption and strategies designed to prevent the user from abandoning the purchase process has given rise to a digital environment that could be described as intensely persuasive. In this space, the consumer is surrounded by continuous stimuli whose objective is none other than to keep him connected as long as possible and increase the likelihood that he will end up buying. Platforms no longer simply showcase products: they build experiences that make the path to purchase more fluid - and less conscious - by guiding the user without them realizing the extent to which their decisions are being directed.

What at first glance may appear to be a neutral environment, in reality obeys a business logic focused on optimizing indicators such as the conversion rate, the number of interactions or the average time a user spends on the site. Every consumer action - a click, a search, even an uncompleted purchase - feeds predictive models that platforms use to immediately adjust what, when and how to display their offer. It is an automatic response system that learns from user behavior and shapes it in real time.

It is often thought that it is enough to uninstall applications or mute their notifications to avoid their influence, but this solution does not take into account the weight of our immediate environment. We live in society, and the consumption decisions of those around us also affect us. When our circle buys more, frequently releases or brags about recent acquisitions, it is easy to fall into comparisons that feed the feeling of lack. As a result, we may perceive that we buy too little, wear clothes that are out of fashion or have not indulged ourselves in a long time. All of this, although subtle, shapes our behavior as consumers.

The data analyzed show that many people are not really aware of the level of influence these systems have on their purchasing decisions. And it is precisely this invisibility that makes it all the more urgent to have mechanisms that provide transparency and give some control back to the consumer. Because what appears to be freedom of choice is, in many cases, the result of a digital architecture carefully designed to guide, condition or even manipulate user behavior. This reality raises profound questions about individual autonomy in today's consumer environments.

The following section will reflect on how these results relate to the scientific literature and what regulatory proposals might help mitigate the most problematic effects of this algorithmic logic.

Discussion and Conclusions

The results of this study reinforce what has already been pointed out by an important part of the literature: recommendation algorithms play a key role in e-commerce and have a real influence on consumer decisions. Turel et al. (2022) note that these techniques may encourage compulsive buying patterns. Along the same lines, Griffiths et al. (2018) note parallels with addictive behaviors.

This phenomenon must be understood within a context in which e-commerce is no longer a secondary alternative, but the main consumption channel for many people. Today, we live daily with marketplaces that normalize constant exposure to automatically generated recommendations. That fine line between "personalized suggestion" and "covert commercial pressure" is blurred. Shoshana Zuboff (2019) was already warning about the risks of a digital economy that bases its profitability on predicting - and conditioning - user behavior. This study seems to confirm that perspective.

The lack of transparency in the operation of these algorithms is another point on the table. Users do not clearly understand how what they see on their screens is generated. As Mestre-Bach (2025) explains, the information they receive is filtered through opaque systems that respond to commercial interests. This information asymmetry places the consumer at a clear disadvantage, even more so when the platforms present these recommendations as if they were neutral, when in fact they are carefully targeted.

The effect of strategies such as the "abandoned cart" also deserves attention. Although on the surface these practices are intended to facilitate the purchase and remind the user that something has been left pending, the truth is that they can end up generating constant pressure. As Dellarocas et al. (2020), insistent and personalized follow-up through notifications or emails can push the user to make poorly thought-out decisions, affecting their autonomy and ability to control.

From a regulatory perspective, the work confirms that there is still a long way to go. The European Union's Digital Services Act represents progress, but it is not enough. Mitchell (2022) stresses that current regulations do not ensure that the consumer has real control over how their digital experience is constructed. The lack of independent oversight also limits the effectiveness of these measures.

Ultimately, what these results suggest is that we need to move towards a fairer and more transparent e-commerce model. One where the user has real tools to know how and why a product is recommended to them, and can choose to what extent they want to be influenced. It is not just a matter of adjusting standards: it is also necessary to rethink our digital culture and the way we relate to technology and consumption. The next section will present some conclusions and concrete proposals to move in this direction.

Practical Implications

The results of this study are not only theoretical, but offer clear clues as to what steps can be taken on different fronts to improve the current digital ecosystem. For policymakers and legislators, for example, the findings highlight the urgency of updating and strengthening regulations on algorithmic transparency and consumer rights. Although frameworks such as the European Union's Digital Services Act are already in place, effective mechanisms for auditing and monitoring the internal functioning of recommender systems have yet to be established. It is necessary to set clear limits to certain commercial practices that, under the guise of neutrality, may condition the autonomy of users.

From the side of the platforms, the data should also serve to initiate a profound reflection on their role and social responsibility. It is not just a matter of complying with the law, but of committing to a business ethic that puts the consumer at the center. Measures such as offering accessible control panels, allowing to disable content personalization, or limiting the bombardment of notifications and remarketing emails, would be concrete steps towards a more balanced relationship based on trust. Far from being a loss, this transparency could even improve customer loyalty.

And of course, consumers also play an active role. The study highlights the need to promote greater critical awareness of the stimuli we receive every day through screens. Algorithmic literacy initiatives -that is, understanding how these systems work- and information campaigns on digital rights could help users regain some of the control they have been losing to the logic of the platforms. Questioning what we see, understanding why we see it and deciding whether we want to continue seeing it, are key actions to achieve a fairer, healthier digital environment focused on people's real wellbeing.

Limitations of the Study

As with all documentary and qualitative research, this study has certain limitations that should be taken into account when interpreting its results. To begin with, the analysis is based exclusively on secondary sources, such as academic articles, institutional reports and published case studies. This means that we have not relied on data obtained directly through surveys, interviews or other field techniques. Although this approach allows us to detect general trends and build a solid theoretical framework, it does not allow us to draw specific conclusions about how individual consumers react to recommendation algorithms.

Another important limitation is related to the speed at which technology and business practices evolve in the digital environment. Algorithmic personalization and retention systems are under constant development, and this could make some of the findings presented here obsolete in a short period of time. Platforms regularly modify their algorithms, marketing strategies and usage policies, adapting quickly to market changes and user behavior.

In addition, this paper does not include an in-depth technical or mathematical analysis of how the algorithms in question are constructed. This part of the knowledge remains inaccessible in many cases, because the companies that operate these systems protect them as trade secrets. Therefore, the reflections and conclusions presented are based on what can be observed externally and on the available documentation, without access to the internal architecture of these systems.

Finally, although references covering various geographical contexts have been used, the overall focus of the study is on the European and Western experience. This leaves out insights and data that could enrich the analysis, especially in regions with different regulations or socioeconomic realities that are less represented in the available literature. Future research could broaden this approach by incorporating international comparisons that would help to better understand the global implications of the phenomenon analyzed.

Conclusions

This article has made it possible to show how the recommendation algorithms used by Marketplaces, together with their retention strategies and the opacity with which they operate, have a significant influence on users' purchasing decisions. This combination of factors can encourage impulsive or even compulsive consumption dynamics, without the consumer having the possibility of evaluating the impact that these decisions have on his or her personal economy. In many cases, what is observed is a tendency to consume above and beyond what is necessary, which fits the phenomenon of consumerism: a behavior driven by external stimuli rather than by a real need.

In any case, there is a real risk that this type of practice may promote an increase in consumption levels which, in certain cases, takes on an impulsive nature with adverse effects on the user's financial stability. Even if it affects only a fraction of consumers, this pattern of over-consumption can lead to over-indebtedness

One of the main problems identified is the lack of transparency with which these systems operate. Users are unaware of how the algorithms that feed the recommendations are constructed, and this lack of information prevents them from clearly understanding the degree of influence they are exerting on their decisions. These platforms collect all browsing and consumption history, process it and turn it into a series of personalized suggestions designed to maximize sales. This can end up pushing the user

to make decisions that were not foreseen, which calls into question his or her ability to make free and conscious choices. While these practices may be effective from a commercial perspective, as with abandoned cart reminders, they also raise concerns about their impact on individual autonomy.

From a public policy perspective, this analysis confirms the urgency of advancing in the creation of rules that oblige digital platforms to provide clear explanations on how their personalization systems work. The consumer should have the right not only to know why a particular product is recommended to him, but also to decide whether or not he wants his past behavior to be used as a basis for shaping his future decisions. Incorporating mechanisms that allow the user to disable such personalization would be an important step towards a more equitable and transparent digital economy.

On the other hand, it would be very useful for future research to address the long-term effects of such algorithmic practices. In an increasingly connected society, it is essential to understand how consumption habits evolve under the constant influence of these systems. In addition, an analysis segmented by age, income level or digital experience could shed light on which groups of consumers are more vulnerable to this type of influences and which have more tools to protect themselves.

Proposals for Regulation and Consumer Education

In order to build a fairer and more transparent digital environment, it is essential to advance in the development of regulations that impose clear limits to automation in business decision-making processes. The Digital Services Law approved by the European Union in 2023 represents a first relevant step forward, but its effectiveness will depend on its being accompanied by real control, verification and sanction mechanisms. Similarly, the United States is currently debating the Digital Advertising Transparency Act, a proposal that reflects the growing concern about how these technologies affect consumer freedom of choice. Similar initiatives have also been proposed in Canada, all with the same objective: to give users greater control over their data and how it is used.

Among the most effective measures that could be implemented are several. On the one hand, platforms should be obliged to provide understandable explanations of how their recommendation algorithms operate. On the other hand, it would be necessary to allow the user to modify or even disable content customization. Clear labels could also be introduced to distinguish whether a suggestion is driven by commercial interests or based solely on user preferences. In addition, establishing external and periodic audits of the most influential algorithms would help ensure that they operate according to ethical and transparent criteria.

From the point of view of citizenship, it is essential to promote consumer education. Legislation is not enough: people need to understand how algorithms shape their decisions and what tools they have to protect themselves. For this reason, it would be essential to develop awareness campaigns that explain in a simple and accessible way the impact of these technologies on purchasing habits. Providing consumers with critical tools not only strengthens their decision-making capacity, but also enhances the effectiveness of any regulation. A well-informed citizenry is the best defense against the risks of digital manipulation.

Future Lines of Research

Given the growing influence of recommendation algorithms in e-commerce, it is essential to open new avenues of research to better understand their impact from different angles. One of the most necessary approaches would be to analyze how these systems unequally affect different consumer profiles. Studying the interaction of factors

such as age, socioeconomic status, degree of digital literacy or continuous exposure to shopping platforms could reveal specific vulnerability patterns. This would make it possible to identify the groups most sensitive to algorithmic influence and better target consumer protection policies.

Another approach that deserves attention is to conduct longitudinal studies, which observe the evolution of consumption habits over time. This type of research would test whether the intensive and sustained use of personalized shopping environments translates into the emergence of compulsive or addictive behaviors. The time perspective would help to better understand if, and how, algorithms can come to foster a technology dependency that directly affects user buying behavior.

Also, the use of comparative law could provide useful insights. Analyzing which regulatory frameworks are being most effective in different parts of the world - such as the European Union, the United States or Canada - would allow identifying good legal practices in the face of hyper-personalization. This analysis should include not only the content of the standards, but also their degree of compliance, the external audit mechanisms applied and the transparency required of the platforms.

A complementary line would be to explore how consumers perceive fairness and the control they have over their digital experience. Investigating whether the ability to manage their browsing history or disable personalized recommendations influences their trust in a platform could provide key information for designing safer environments. Surveys or qualitative studies with real users could provide valuable data in this regard.

Finally, the importance of an interdisciplinary approach should not be overlooked. Integrating knowledge such as behavioral psychology, digital law or data science would make it possible to build a more complete framework for interpreting the effects of algorithmic e-commerce. This type of analysis would help to move towards more ethical consumption models, in which technological efficiency is not at odds with respect for the autonomy and rights of the consumer.

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FINANCIAL SUPERVISION OF SAVINGS AND CREDIT COOPERATIVES IN PARAGUAY: PROPOSALS FOR AN EFFICIENT AND SUSTAINABLE REGULATORY MODEL

SUPERVISIÓN FINANCIERA DE LAS COOPERATIVAS DE AHORRO Y CRÉDITO EN PARAGUAY: PROPUESTAS PARA UN MODELO REGULATORIO EFICIENTE Y SOSTENIBLE

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ABSTRACT

Keywords:

financial supervision, savings and credit cooperatives, institutional economics, regulation, INCOOP.

Savings and credit cooperatives (SACCOs) in Paraguay have consolidated their role as key actors in financial inclusion, particularly in sectors underserved by traditional banking institutions. However, this accelerated growth has not been accompanied by a robust regulatory framework or adequate financial oversight. This theoretical-analytical study examines the institutional weaknesses of the current supervisory model centered on the National Institute of Cooperativism (INCOOP) from an institutional economics perspective. The research assumes that the existing design, which combines promotional and supervisory functions within a single entity lacking technical and financial autonomy, creates perverse incentives, weakens control mechanisms, and exposes the system to systemic risks. A theoretical approach is proposed, grounded in the contributions of Douglass North, Oliver Williamson, and Elinor Ostrom. The hypothesis posits that an institutional redesign transferring supervisory responsibilities to the Central Bank of Paraguay (BCP), along with the implementation of deposit guarantee mechanisms and enhanced transparency would enable more efficient, credible, and sustainable regulation. As part of this proposal, the study examines comparative models of cooperative supervision in Latin America, identifying best practices that could be applied to the Paraguayan case. This article seeks to contribute to the ongoing debate on the financial governance of non-bank entities by suggesting legal and institutional reforms that strengthen the stability of the cooperative system without undermining its solidarity-based nature. Conceptual and empirical evidence indicates that effective supervision is not incompatible with the autonomy of the cooperative movement; rather, it is a necessary condition for its long-term sustainability.

RESUMEN

Palabras clave:

supervisión financiera,
cooperativas de ahorro y crédito,
economía institucional, regulación,
INCOOP.

Las cooperativas de ahorro y crédito (CAC) en Paraguay han consolidado su rol como actores relevantes en la inclusión financiera, especialmente en sectores desatendidos por la banca tradicional. Este crecimiento acelerado no ha estado acompañado por un marco regulatorio sólido ni por una supervisión financiera adecuada. Esta investigación de corte teórico-analítica, examina las debilidades institucionales del modelo actual de supervisión centrado en el Instituto Nacional de Cooperativismo (INCOOP), desde un enfoque económico-institucional. La investigación parte del supuesto de que el diseño actual que combina funciones de fomento y fiscalización en una sola entidad sin autonomía técnica ni financiera genera incentivos perversos, debilita los mecanismos de control y expone al sistema a riesgos sistémicos. Se propone un abordaje teórico basado en los aportes de Douglass North, Oliver Williamson y Elinor Ostrom. La hipótesis plantea que un rediseño institucional que transfiera la función supervisora al Banco Central del Paraguay (BCP), acompañado de mecanismos de garantía de depósitos y mayor transparencia, permitiría una regulación más eficiente, creíble y sustentable. Como parte de esta propuesta se abordan modelos comparados de supervisión cooperativa en América Latina, identificando buenas prácticas aplicables al caso paraguayo. Este artículo busca contribuir al debate sobre la gobernanza financiera de las entidades no bancarias, sugiriendo reformas normativas e institucionales que fortalezcan la estabilidad del sistema cooperativo sin desvirtuar su naturaleza solidaria. La evidencia conceptual y empírica indica que la supervisión efectiva no es incompatible con la autonomía del movimiento cooperativo, sino una condición necesaria para su sostenibilidad.

Introduction

In recent decades, savings and credit cooperatives (CACs) have experienced significant growth in Paraguay, consolidating their position as key players in financial intermediation, especially in rural areas and sectors traditionally excluded from the formal banking system. These entities, based on principles of solidarity, self-management and mutual aid, have managed to capture the savings of thousands of Paraguayans and channel them towards consumption, production and local development. Its expansion has not only been quantitative, in terms of assets, members and volume of operations, but also qualitative, with increasing complexity in its financial products and administrative processes.

However, this accelerated growth has not been accompanied by an equivalent institutional evolution in terms of supervision and regulation. Unlike the banking system, which has a robust regulatory framework and supervision centralized in the Central Bank of Paraguay (BCP), cooperatives are under the supervision of the National Institute of Cooperatives (INCOOP), a body whose institutional mission combines promotion, regulation and control functions. This duality of mandates, to promote and supervise at the same time, has generated tensions, conflicts of interest and, in many cases, a weakening of the supervisory function.

Effective financial supervision is an essential component for the stability of the cooperative system. Without adequate control and sanction mechanisms, CACs may engage in risky practices, asset imbalances or fraud which, in the absence of a deposit guarantee fund, have a direct impact on savers. Trust, which is the basis of the bond between the member and the cooperative, can be quickly eroded by episodes of insolvency or mismanagement. In this sense, the weakness of the current supervisory model represents not only a threat to the sustainability of the institutions themselves, but also a systemic risk factor for the national financial system as a whole.

From an economic-institutional approach, it is relevant to analyze the structural causes of this situation. Institutions, understood as the "rules of the game" that shape individual and collective behavior (North, 1990), play a determining role in the efficiency and resilience of financial systems. In contexts where rules are ambiguous, overlapping or easily manipulated, economic agents tend to act under incentives that are misaligned with the collective interest. This phenomenon is aggravated when the bodies responsible for implementing and enforcing the rules lack autonomy, technical capacity or sufficient resources.

In the case of Paraguay, INCOOP operates under conditions of institutional fragility: its administrative structure is small, its budget depends on the Executive, it does not have a specialized technical career and its oversight capacity is limited in both coverage and depth. In addition, there is constant pressure from the cooperative sectors, which, through union and political representations, have a direct influence on the decisions of the entity. This situation generates what the literature calls "regulatory capture", a form of subordination of the control bodies to the interests of the sector they are supposed to supervise (Stigler, 1971).

Against this backdrop, the question guiding this article is: Is the current model of financial supervision of CACs in Paraguay efficient, sustainable and transparent? And if not, what institutional redesign could improve the governance of the cooperative system without affecting its autonomy and solidarity-based nature?

The hypothesis put forward is that the current institutional design of supervision is dysfunctional, generates inadequate incentives and exposes the system to avoidable risks. It is argued that the separation of functions, the transfer of supervision to the BCP and the creation of a specific guarantee fund could correct these flaws and significantly improve the efficiency of the system.

This article is based on a theoretical-analytical approach that articulates institutional economics, agency theory and financial regulation. It also draws on a normative, documentary and comparative review, taking as a reference successful models implemented in countries of the region such as Peru, Colombia and Brazil. The purpose is not to propose a mechanical copy of these models, but to identify principles and mechanisms that can be adapted to the Paraguayan institutional context.

Through the analysis of the current regulatory framework, INCOOP's institutional performance, and the financial evolution of type A CACs -those with the largest volume of assets and, therefore, the greatest potential impact on the stability of the system-, the aim is to highlight the structural weaknesses of the current model and to support the need for a comprehensive institutional reform.

In summary, this paper is part of a line of critical reflection on the role of the State in the regulation of non-traditional economic actors, such as cooperatives. Based on the premise that there can be no financial inclusion without effective user protection, the institutional strengthening of supervision is an indispensable condition for guaranteeing the sustainability of the cooperative movement in Paraguay.

Framework Theoretical Framework

Understanding the financial supervision system applied to credit unions (CACs) in Paraguay requires a conceptual approach that makes it possible to interpret not only the regulatory-formal dimension, but also the institutional logic underlying the functioning of the current model. For this purpose, three complementary theoretical approaches are used: institutional economics, agency theory and financial regulation theory. These frameworks make it possible to identify the root causes of the current deficiencies and provide the basis for proposals for institutional redesign based on criteria of efficiency, autonomy and sustainability.

Institutional Economics

Institutional economics, particularly in the version developed by Douglass North (1990) and Oliver Williamson (1985), provides analytical tools to understand how the "rules of the game" - formal and informal - shape the behavior of economic actors. According to North, institutions are human constraints that structure political, economic and social interactions. They may take the form of laws, regulations, codes of conduct or established practices. When these rules are inadequate or poorly designed, transaction costs increase and incentives are generated that favor inefficiency.

Applied to the Paraguayan case, the institutional framework governing the supervision of CCSs is out of step with the current complexity of the sector. Law No. 438/94, which grants INCOOP the function of simultaneously supervising and promoting, responds to a logic of sectoral promotion typical of the 1990s, when cooperativism still had a limited scope. However, the exponential expansion of CACs in recent years has transformed their economic nature, requiring a more specialized and technically sound supervisory model. The failure to update the regulatory framework generates what

Williamson calls a "governance mismatch", i.e. an incongruence between the rules in force and the transactional structure of the sector.

From an institutional perspective, there is evidence of contradictory regulations that generate ambiguity in the application of sanctions, lack of transparency in auditing procedures, and an incentive structure that discourages the correction of irregularities. Regulatory capture, i.e., the subordination of the supervisory agency to the interests of the supervised sector, is favored by INCOOP's lack of independence, both in terms of budget and human resources. These problems cannot be explained solely from a legal perspective; they require an institutional perspective that takes into account the interaction between actors, rules and incentives.

Agency Theory

Another approach relevant to this analysis is agency theory, initially developed by Jensen and Meckling (1976), which deals with the study of contractual relationships between a principal and an agent, in contexts of asymmetric information. In the case at hand, the Paraguayan State, through INCOOP, acts as the agent responsible for overseeing the operation of the CACs on behalf of the public interest (the principal). However, when that agent lacks the necessary resources, incentives or independence to perform its function effectively, what is known as "agency failure" occurs.

In Paraguay, INCOOP is caught in a dual agency relationship. On the one hand, it formally responds to the State, but on the other, it is strongly influenced by the cooperative movement, which is represented on its board of directors and maintains close political ties with sectors of the National Congress. This double subordination weakens its capacity to exercise rigorous controls, since any sanctioning action may generate tensions with the very actors involved in its institutional governance.

This phenomenon is not exclusive to Paraguay. International literature has documented numerous cases in which regulatory bodies lose effectiveness when they lack functional autonomy and protection from external pressures. Therefore, one of the basic principles of good financial regulation is the clear separation between the promoter and the supervisory body, in order to avoid conflicts of interest that compromise the quality of supervision.

Financial Regulation Theory

In the theory of financial regulation, the purpose of the supervisory function is to guarantee the stability of the system, protect the financial user and prevent systemic risks. This requires that supervisory agencies meet certain standards of independence, technical capacity, transparency and accountability. International organizations such as the Basel Committee, the International Cooperative Alliance (ICA) and the International Association of Cooperative Supervisors (ICURN) have defined principles and best practices that allow the effectiveness of regulatory frameworks to be assessed.

One of these principles establishes that supervisory bodies must be independent of the supervised sector, have sufficient resources, adopt a risk-based approach and apply measures proportional to the nature and complexity of the supervised entities. In the case of cooperatives, the need to adapt the regulatory frameworks to their particular logic is recognized, without losing sight of the objectives of solvency, liquidity and financial prudence.

Countries such as Peru, Colombia and Brazil have implemented reforms that transferred the supervisory function of the CACs to their respective central banks or banking and insurance superintendencies. These reforms, far from eroding the autonomy

of the cooperative movement, strengthened its sustainability by establishing more robust technical mechanisms, guarantee funds and information systems. In all cases, these were gradual processes, accompanied by dialogue with the sector and technical assistance.

In contrast, Paraguay maintains a scheme that combines promotional, educational, regulatory and control functions in a single entity, which hinders the effective application of prudential standards. The lack of IT tools, specialized personnel and real-time reporting mechanisms severely limits INCOOP's ability to prevent crises, detect early risks or correct deviations.

Relevance of a Comparative View

The incorporation of comparative experiences makes it possible to see that the problem does not lie in the cooperative nature of the institutions, but in the institutional architecture of the supervisory system. Countries that faced challenges similar to Paraguay's managed to strengthen their regulatory framework without renouncing the principles of solidarity, democratic participation and autonomous management that characterize cooperativism.

For example, the Peruvian model, which integrated type A cooperatives under the supervision of the Superintendencia de Banca, Seguros y AFP (SBS), has shown significant improvements in terms of transparency, operational efficiency and savings protection. Likewise, Colombia, through the Financial Regulation Unit and the Superintendency of Solidarity Economy, established a tiered regime according to the size and risk profile of the cooperatives. In both cases, the objective was to generate proportional, differentiated and technically supported supervision.

These experiences suggest that the solution to the supervision problem in Paraguay should not be limited to specific regulatory adjustments, but rather to a comprehensive institutional redesign to separate functions, align incentives, strengthen capacities and establish inter-institutional coordination mechanisms.

Method

This article is framed within a qualitative methodological approach with an analytical-descriptive orientation, complemented with quantitative elements to support the institutional analysis. A documentary and case study research design was used, focusing on the financial supervision model of credit unions (CACs) in Paraguay, particularly those classified as type A, due to their volume of assets and operations.

The research strategy combines normative-institutional analysis with the empirical study of available financial data. The starting point was an exhaustive review of current legislation on cooperatives, mainly Law No. 438/94 and its regulations, as well as technical reports from the National Cooperative Institute (INCOOP), the Central Bank of Paraguay (BCP) and international organizations such as the International Cooperative Alliance (ICA), the Basel Committee and ICURN.

In addition, public and non-confidential documents from cooperative federations, external audit reports, institutional reports and previous academic reports related to the regulation of the cooperative system in Paraguay and Latin America were analyzed.

The main unit of analysis is the type A credit unions, which represent less than 15% of the total number of registered CACs, but account for more than 85% of the sector's assets. These entities are characterized by a diversified portfolio of financial products, relevant levels of interconnection with the banking system and a broad membership base.

The analysis focused on a sample of 56 Type A cooperatives selected for their asset volume, geographic coverage and availability of public information. For these entities, a systematic review of:

- Its balance sheets and income statements (years 2019 to 2023).
- The degree of compliance with reporting obligations to INCOOP.
- The existence and frequency of external audits.
- The level of portfolio concentration and delinquency.
- The level of exposure to systemic risk.

In addition to the documentary analysis, semi-structured interviews were conducted with eight key actors in the cooperative sector and the regulatory sphere: three INCOOP officials, two BCP technicians, and three leaders of cooperative federations. The interviews were designed with an open-ended script oriented to explore:

- Perception of INCOOP's institutional role.
- Operational limitations in the supervision of CCS.
- The feasibility of an eventual transfer of functions to BCP.
- The need for a guarantee fund and early warning mechanisms.

Interviews were conducted between June and October 2023, confidentially, with verbal consent and partial transcription. The results were organized into thematic matrices for subsequent interpretative analysis.

Based on theoretical and empirical triangulation, five dimensions of analysis were defined:

- Regulatory framework: adaptation and updating of the rules governing cooperative supervision.
- Institutional capacity: technical structure, budget and human resources of the supervisory body.
- Transparency: quality and timeliness of financial information published by the CACs.
- Systemic risk: concentration of assets, exposure to default and absence of mechanisms to protect savers.
- Institutional coherence: alignment between institutional functions and regulatory objectives.

Each dimension was evaluated in terms of its contribution to the efficient functioning of the supervision model, according to principles established by international organizations.

Limitations of the Study

The main methodological limitations include the following:

- Restricted access to INCOOP's internal data, due to the lack of publication of complete institutional audits.
- Response bias in the interviews, as some stakeholders were reluctant to express explicit criticism.
- Unequal availability of financial data, as not all type A cooperatives publish homogeneous or updated information.

However, these limitations do not affect the overall validity of the analysis, as they are compensated for by multiple sources and empirical convergence.

Results

The analysis of the documentary, financial and testimonial data collected during the research allowed us to identify five main results that reflect the structural and functional weaknesses of the current model of financial supervision of credit unions (CACs) in Paraguay. These findings are organized around the five dimensions of analysis identified in the methodology: regulatory framework, institutional capacity, transparency, systemic risk and institutional coherence.

Regulatory Framework: Obsolescence and Legal Ambiguity

The current regulations governing credit unions in Paraguay, headed by Law No. 438/94 and its complementary regulations, have multiple deficiencies from a technical and functional standpoint. This law was conceived in a context of incipient development of the financial cooperative movement, when the scale of operations, product complexity and associated risks were significantly lower than today. It does not contemplate fundamental aspects such as mandatory prudential standards, differentiated supervision mechanisms according to the level of risk, real-time information requirements, or clear procedures for crisis resolution or early intervention.

In addition, the law gives the National Institute of Cooperativism (INCOOP) an ambiguous mandate, combining promotion, regulation and control functions in a single body. This concentration of functions contravenes basic principles of institutional governance and generates contradictions that limit the effectiveness of the system. In the interviews conducted, both public officials and industry representatives agreed on the need for a comprehensive reform that clearly separates the roles of promotion and supervision, modernizes supervision criteria and establishes a tiered regulation based on the size and risk profile of the institutions.

INCOOP's Institutional Capacity: Operational Fragility and Political Dependence

One of the most significant findings is INCOOP's structural inadequacy to perform its supervisory tasks effectively. The institution has a small technical staff, with no administrative career or personnel specialized in financial risks, on-site supervision, prudential auditing or information technology. In 2023, INCOOP's supervisory team consisted of fewer than 25 people, responsible for monitoring more than 500 credit unions throughout the country. This translates into an extremely low frequency of face-to-face inspections, with supervision processes relying mostly on self-declared reports sent by the entities themselves.

In addition, its budgetary dependence on the Executive Branch compromises the agency's autonomy in the face of political changes and sectoral pressures. In practice, INCOOP operates with severe budgetary restrictions and without access to digital tools that would allow online monitoring or the construction of early warnings. The lack of a robust technical-financial structure prevents the implementation of risk-based supervision and limits the possibility of reacting promptly to stressful situations in the CCS.

Transparency and Financial Information: Incomplete Reporting and Low Comparability

Another relevant result is the lack of transparency that characterizes a large part of the cooperative sector in Paraguay, especially in type A cooperatives. Although the regulations require the publication of audited financial statements, in practice this obligation is unevenly fulfilled. Only 35% of the 56 CACs analyzed publish their balance

sheets and income statements in an accessible and up-to-date manner. In addition, there is no centralized platform for homogeneous comparison of financial indicators, which makes social control and accountability to members and the public difficult.

In the interviews, several technicians pointed out that many cooperatives submit their reports with delays of up to 12 months and that the data sent to INCOOP does not always coincide with the audited data. This lack of standardization affects not only external supervision, but also the quality of internal risk management decisions. Larger cooperatives tend to have greater technical capacity, but unequal access to reliable financial information reinforces asymmetries between entities and weakens systemic monitoring.

Systemic Risk: Concentration of Assets and Absence of Guarantee Fund

The financial data processed for the 56 Type A cooperatives show a significant concentration of assets, with ten entities controlling more than 60% of the total deposits of the cooperative system. This concentration increases the risk of contagion in the event of an individual crisis and aggravates the potential systemic impact of an eventual collapse. In addition, the average delinquency rate in the loan portfolio exceeds 8% in several of the largest institutions, exceeding the prudential limits suggested by international standards.

Despite this context, Paraguay does not have a deposit guarantee fund specifically for the cooperative sector, leaving millions of small savers unprotected in the event of insolvency. In the interviews, both BCP technicians and representatives of cooperative federations recognized this shortcoming as one of the main vulnerabilities of the system. The design of a guarantee fund, with contributions proportional to risk and partial coverage mechanisms, was identified as a priority to improve confidence in the sector.

Institutional Coherence: Contradictions in the Regulatory Architecture

Finally, the comprehensive analysis shows a profound incoherence in the institutional architecture of the cooperative supervision model in Paraguay. The fact that INCOOP is both a promoter of cooperativism and a financial supervisor of the CACs creates a structural conflict that weakens its ability to exercise sanctions, correct bad practices or intervene early. In practice, the agency acts more as a mediator than as an overseer, prioritizing negotiation over enforcement.

This role conflict has also been documented in countries that have undergone institutional reform processes, such as Peru and Colombia, where prudential supervision was transferred to specialized banking and finance agencies. In these cases, the change made it possible to improve the credibility of the system, reduce the risks of regulatory capture and strengthen the State's technical capacity to guarantee financial stability.

Discussion

The findings presented in the previous section show that the current model of financial supervision of credit unions (CACs) in Paraguay has serious structural, regulatory and operational deficiencies. These deficiencies should not only be analyzed from a technical or legal perspective, but also from an economic-institutional viewpoint that allows us to understand the incentives, restrictions and interests that shape the behavior of the actors involved. This section discusses the main results in the light of the

theoretical framework adopted, and raises the implications for the institutional redesign of the supervisory system.

An institutional Architecture Misaligned with the Sector's Evolution

The sustained expansion of the Paraguayan cooperative system has radically transformed its relative weight within the financial system. Type A CACs, due to their volume of assets, number of members and operational complexity, compete directly with banks and finance companies in several segments. However, they continue to be regulated by an entity with technical limitations, without modern prudential tools or effective control mechanisms. This contradiction between the scale of the entities and the weakness of supervision generates what Douglass North would call an "inefficient institutional persistence": a set of rules that, despite being dysfunctional, are maintained by the resistance to change of the actors who benefit from the status quo.

Indeed, the persistence of the current model is not only due to INCOOP's lack of capacity, but also to power factors: cooperative federations with greater political influence have managed to maintain a less demanding regulatory regime, which allows them to operate with greater room for maneuver. This generates an "unstable institutional equilibrium", where rules are weak, incentives are misaligned and risks are high. This balance, although functional for certain actors in the short term, is unsustainable from a systemic stability perspective.

Perverse Incentives and Regulatory Capture

From the point of view of agency theory, INCOOP is trapped in a double subordination: on the one hand, it should act on behalf of the State as overseer; on the other hand, it responds to the interests of the very sector it is supposed to supervise. This conflict of interests translates into a lax, reactive and formalistic supervision, which often favors conflict containment over effective compliance with regulations. This situation is aggravated by the lack of accountability and transparency mechanisms, both to the public and to other state institutions.

Regulatory capture, in this case, is not only a direct subordination to political or economic power, but also a cultural and institutional phenomenon: a promiscuous relationship has been normalized between the supervisory body and the supervised, in which informal negotiation prevails over the impartial application of rules. This form of capture is especially problematic in financial sectors, where confidence in the rules is a key element for stability.

The literature on financial regulation has repeatedly pointed out that supervisory bodies must be technically and functionally independent from the sector they control. This independence is essential to ensure objective decisions, avoid undue pressure and protect the general interest. In Paraguay, such independence is non-existent, both by institutional design and political practice.

Regional Comparison: Lessons and Challenges

The cases of Peru, Colombia and Brazil show that it is possible to reform the supervision of the cooperative sector without denaturalizing its identity or violating its autonomy. In Peru, the Superintendencia de Banca, Seguros y AFP (SBS) took over the supervision of type A cooperatives, implementing a tiered system that distinguishes between systemic and non-systemic entities. This model has made it possible to improve the quality of financial information, implement proportional prudential standards and establish resolution and saver protection mechanisms. Although the process was not free

of tensions, the balance has been positive in terms of stability, transparency and public confidence.

Colombia, on the other hand, has strengthened its institutional architecture through the articulation between the Superintendency of the Solidarity Economy and the Financial Regulation Unit, which has allowed progress to be made towards a differentiated and technically supported regulation. In Brazil, although cooperatives remain under the supervision of the Central Bank, there are auxiliary structures, such as internal guarantee funds and federative integration mechanisms, which balance autonomy with accountability.

These models show that prudential supervision is not incompatible with cooperative principles, provided that an institutional scheme is designed that respects their organizational logic while ensuring minimum standards of financial stability. The challenge lies in finding a balance between autonomy and control, participation and accountability, flexibility and effective regulation.

Risks of Maintaining the Current Model

The results of this research indicate that maintaining the current supervisory model represents a growing source of systemic risk for the Paraguayan financial system. There are multiple warning signs: asset concentration, high levels of delinquency in some large institutions, lack of timely information, absence of resolution mechanisms, lack of a guarantee fund and technical dependence on the supervisory agency.

In this scenario, an insolvency event in a large credit union could have significant contagion effects, erode public confidence and generate an industry-wide credibility crisis. The lack of a legal and operational framework to deal with such contingencies aggravates the problem, since the State does not have adequate tools to intervene, clean up or liquidate cooperative entities without generating negative collateral effects.

In addition, the current lack of comparable prudential standards for the banking system places Type A CACs in an asymmetrical position vis-à-vis their competitors in the financial sector. This distorts the market, affects fair competition and puts at risk the resources of thousands of savers, especially those with lower incomes.

Institutional Redesign Proposal

Against this backdrop, it is necessary to propose an institutional redesign of the supervision of CCS in Paraguay. This redesign must contemplate at least five axes:

- Transfer of the supervisory function to the Central Bank of Paraguay, at least for type A cooperatives, which due to their size represent a greater systemic risk.
- Creation of a cooperative deposit guarantee fund, financed with contributions proportional to the risk of each entity, managed according to technical criteria.
- Functional separation of INCOOP, limiting its role to promotion, technical advice and cooperative education.
- Implementation of a real-time digital financial monitoring system that allows for automated follow-up, early warnings and greater transparency.
- Regulatory harmonization, adapting the cooperative legal framework to the minimum financial supervision standards defined by international organizations.

This redesign is not only feasible, but necessary. The sustainability of the Paraguayan cooperative system, and its legitimacy as a relevant player in financial

inclusion, depend to a large extent on its ability to guarantee transparency, solvency and effective protection for savers. In a context of growing financial interdependence, informal self-regulation and weak supervision are no longer acceptable options.

Conclusions

This paper has shown that the current model of financial supervision of credit unions (CACs) in Paraguay has structural limitations that compromise both the stability of the system and the confidence of savers. Based on an economic-institutional approach, it has been argued that these limitations are not merely operational, but are due to institutional design flaws that generate perverse incentives, reduce the effectiveness of control and hinder the prevention of systemic risks.

Among the main conclusions, the following stand out:

First, the regulations governing the financial cooperative system, particularly Law No. 438/94, are obsolete in view of the current complexity of the sector. This law does not contemplate adequate prudential standards nor does it establish effective mechanisms for differentiated control. The ambiguity of functions assigned to INCOOP, which combines promotion and control, constitutes a structural weakness that directly affects its autonomy and effectiveness as a supervisor.

Second, INCOOP has serious institutional shortcomings: low technical staffing, low operational capacity, lack of administrative careers, budgetary dependence and political vulnerability. These weaknesses translate into a fragmented, reactive and limited supervision model, which prevents the early detection of warning signs in supervised entities.

Third, the empirical analysis shows a worrying lack of transparency and homogeneity in the financial information published by Type A cooperatives, which hinders accountability, increases information asymmetry and jeopardizes public confidence. The lack of a deposit guarantee fund for CACs exacerbates this situation, exposing members to potential losses in the event of insolvency.

Fourth, the phenomenon of regulatory capture appears as a transversal element that further weakens the functioning of the current model. The political influence of the cooperative federations and their direct participation in INCOOP's governing bodies compromise the impartiality of decisions and reduce the regulator's independence. This situation, in addition to undermining the credibility of the system, prevents the application of effective sanctions and reinforces informal self-regulation practices.

Fifth, the comparative experiences of countries such as Peru, Colombia and Brazil show that it is possible to implement more effective prudential supervision models without violating the principles of cooperativism. These cases have managed to combine autonomy with technical regulation, promoting proportional and risk-based supervision, with clear mechanisms to protect the financial user.

Against this backdrop, it is proposed to move towards an institutional redesign that contemplates the following fundamental elements: Transfer of the supervisory function of type A cooperatives to the Central Bank of Paraguay (BCP), which has the technical, regulatory and operational capacity to apply adequate prudential standards; Creation of a deposit guarantee fund, with independent technical administration, limited coverage and financing proportional to risk; Comprehensive reform of INCOOP, to reorient its role towards the promotion, technical assistance, education and strengthening of cooperativism, leaving behind its supervisory role; Technological modernization of the financial information system, through the implementation of digital

reporting platforms, early warning indicators and continuous monitoring systems; Regulatory harmonization with international standards, adapting the Paraguayan legal framework to the recommendations of organizations such as ICURN, ICA and the Basel Committee, with respect for the cooperative identity.

These reforms should not be understood as a threat to the sector's autonomy, but rather as an opportunity to strengthen its sustainability and legitimacy. A robust cooperative system requires clear rules, independent bodies and protection mechanisms that safeguard the interests of members, especially the most vulnerable sectors.

Finally, it is concluded that the sustainability of Paraguayan financial cooperatives depends on their ability to adapt to the challenges of the environment without losing their identity. Effective supervision, far from being an external imposition, must be assumed as an essential pillar of good cooperative governance. The path towards a more efficient, transparent and fair model is open; its realization will depend on the political will, technical capacity and ethical commitment of all the actors involved.

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**NAVIGATING INTERNATIONAL LAW IN CROSS-BORDER CIVIL
INFRASTRUCTURE PROJECTS
NAVEGANDO EL DERECHO INTERNACIONAL EN PROYECTOS DE
INFRAESTRUCTURA CIVIL TRANSFRONTERIZA**

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ABSTRACT

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In an increasingly interconnected world, cross-border civil infrastructure projects, such as dams, pipelines, and transport corridors, pose complex challenges for international law. This article explores how international legal norms regulate these endeavors, emphasizing the need to balance sovereign interests with environmental and human rights obligations. It analyzes the role of treaties like the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, and examines real cases in regions such as Central Asia, South America, and Europe. It is evident that climate uncertainty and power asymmetries between states complicate the implementation of transboundary environmental impact assessments and cooperation mechanisms. Additionally, it addresses how initiatives like China's Belt and Road affect shared water resources management, generating tensions that require adaptable legal frameworks. The methodology is based on a critical review of recent literature, integrating perspectives from hydropolitics and water diplomacy. Ultimately, it concludes that more inclusive governance, with an emphasis on public participation and equity, is essential to mitigate conflicts and promote sustainable development. This approach not only resolves immediate disputes but also strengthens resilience to global changes, although gaps persist in the practical application of these principles. It is suggested that states invest in regional institutions to overcome these limitations.

RESUMEN

Palabras clave:

derecho internacional, recursos hídricos, evaluación del impacto ambiental, infraestructura civil, gobernanza ambiental

En un mundo cada vez más interconectado, los proyectos de infraestructura civil transfronteriza, como represas, gasoductos y corredores de transporte, representan desafíos complejos para el derecho internacional. Este artículo explora cómo las normas legales internacionales regulan estos emprendimientos, destacando la necesidad de equilibrar intereses soberanos con obligaciones ambientales y de derechos humanos. Se analiza el papel de tratados como la Convención de las Naciones Unidas sobre el Derecho de los Usos de los Cursos de Agua Internacionales para Fines Distintos de la

Navegación, y se examinan casos reales en regiones como Asia Central, América del Sur y Europa. Resulta evidente que la incertidumbre climática y las asimetrías de poder entre estados complican la implementación de evaluaciones de impacto ambiental transfronterizas y mecanismos de cooperación. Además, se aborda cómo iniciativas como la Iniciativa de la Franja y la Ruta de China influyen en la gestión de recursos hídricos compartidos, generando tensiones que requieren marcos legales adaptables. La metodología se basa en una revisión crítica de literatura reciente, integrando perspectivas de hidropolítica y diplomacia hídrica. En última instancia, se concluye que una gobernanza más inclusiva, con énfasis en la participación pública y la equidad, es esencial para mitigar conflictos y promover el desarrollo sostenible. Este enfoque no solo resuelve disputas inmediatas, sino que fortalece la resiliencia ante cambios globales, aunque persisten brechas en la aplicación práctica de estos principios. Se sugiere que los estados inviertan en instituciones regionales para superar estas limitaciones.

Introduction

Cross-border civil infrastructure projects have gained prominence in recent decades, driven by globalization and the need to integrate regional economies. Think of hydroelectric dams that cross shared rivers or gas pipelines that cross borders: these not only facilitate economic development, but also generate legal dilemmas that transcend national sovereignties. It is remarkable how international law, with its principles of cooperation and no significant harm, attempts to mediate in these scenarios, although it often clashes with unequal political realities. This article seeks to navigate these troubled waters, analyzing how international norms regulate such projects and what lessons can be drawn from recent experiences.

From a general perspective, one could argue that these ventures reflect the pulse of our era: a precarious balance between progress and sustainability. In regions such as Central Asia or Latin America, where water resources are vital, tensions arise not only because of scarcity, but also because of the lack of robust legal frameworks. For example, climate change exacerbates uncertainties, making old treaties seem obsolete. Here, contributions from diverse authors are integrated to offer an integral vision, varying approaches from hydropolitics to environmental diplomacy. The objective is not only to describe challenges, but also to propose ways for a more equitable governance that avoids conflicts and fosters cross-border collaboration. In my opinion, ignoring these aspects could lead to protracted disputes, as has been seen in several historical cases.

It is fascinating how these projects, which in theory unite nations, often uncover deep cracks in international relations. Imagine a bridge across a border river: it is not just concrete and steel, but a symbol of mutual trust that, if built without consensus, can become a point of friction. One cannot help but notice that, in a world where global trade depends on these connections, international law acts as an indispensable, albeit imperfect, arbiter. From a personal point of view, I believe that real progress lies in recognizing that sovereignty is not an absolute shield, but a flexible concept that must adapt to shared realities.

For instance, in Europe, where integrations such as the Union have facilitated rail corridors, we can see how legal harmonization can smooth out rough edges, but in other parts of the globe, such as Africa, colonial legacies complicate matters. On further reflection, it seems that climate change not only alters water patterns, but also forces a rethinking of entire treaties, turning what was stable into something volatile. In the end, this article is not meant to be exhaustive, but a starting point to understand how, through past lessons, we can forge a future where infrastructure serves all, not just a few.

Method

This study adopts a qualitative approach based on an exhaustive review of specialized literature, focusing on academic publications in recent years. Key references dealing with international law applied to cross-border infrastructures were selected, prioritizing those that integrate empirical cases and theoretical analysis. The search focused on topics such as environmental impact assessments, human rights in water projects and regional institutional frameworks.

To ensure a balanced perspective, a thematic analysis was used, grouping the contributions into categories such as transboundary conflicts, legal mechanisms and governance lessons. This made it possible to identify recurring patterns, such as the

influence of power asymmetries in negotiations. Although no primary fieldwork was conducted, the synthesis of existing studies provides a solid base, complemented by critical reflections to enrich the debate.

As for the sources of information, the collection of articles was carried out mainly through recognized academic databases, such as Scopus, Web of Science and Google Scholar, which provided access to high impact indexed journals in areas such as environmental law, hydropolitics and international studies. For example, specific search terms such as "international law in transboundary infrastructure", "transboundary environmental impact assessment" and "governance of shared water resources" were used, combined with temporal filters to limit the results to publications between 2021 and 2025, ensuring current relevance. In addition, open repositories such as ResearchGate and Academia.edu were consulted for pre-print versions or open access articles, which broadened the diversity of geographic perspectives, including authors from underrepresented regions such as Central Asia and Africa.

Inclusion criteria included thematic relevance, methodological quality (prioritizing studies with empirical analyses or systematic reviews) and diversity of approaches, excluding those that were purely descriptive without critical contributions. This resulted in a selection of about 25 main references, which were iteratively analyzed to extract common themes and contradictions, such as the tensions between state sovereignty and global obligations. In my experience, this process not only guarantees rigor, but also allows for a smooth integration of ideas, avoiding biases when crossing sources from different disciplines. Other relevant details include the use of software such as Zotero to manage references, facilitating traceability, and a manual review to verify the validity of DOIs and links, although direct hyperlinks are avoided in the final text to maintain narrative flow. This methodology, in essence, seeks to capture the complexity of the issue without overloading it with quantitative data, focusing on qualitative perspectives that resonate with real challenges.

Results

International law offers an arsenal of tools for managing civil infrastructure projects that cross borders, but their application is far from uniform. Principles such as equitable and reasonable utilization of water resources, enshrined in global treaties, serve as a guide, although they face practical obstacles. For instance, in contexts of climate uncertainty, it is crucial to adapt these frameworks to stabilize expectations between states (Kang, 2023). One cannot underestimate how these principles are evolving; originally intended for international rivers, they now extend to gas pipelines and road corridors, where no significant harm becomes an ethical cornerstone.

From a broader angle, these principles not only regulate the use of shared resources, but also promote mutual trust. Imagine a scenario where an upstream country builds a dam without consulting the downstream country: this is where rules such as prior notification and consultation come into play, which seek to prevent escalation. Authors agree that, without them, projects could lead to costly litigation, affecting not only economies, but entire communities. Moreover, these foundations are inspired by historical ideas, such as those derived from international custom, which emphasize reciprocity among nations. For example, in arid regions, where water is a scarce commodity, applying these principles rigidly could ignore local dynamics, leading to unnecessary stresses.

One might think that, in practice, these concepts act as a brake on unilateral ambition, forcing states to consider impacts beyond their borders. However, reality shows that, in many cases, national sovereignty takes precedence, diluting its effectiveness. Reflecting on this, it seems that the real challenge lies in translating these abstract ideals into concrete actions, especially when powerful economic interests are involved. Indeed, recent studies highlight how the evolution of these principles, influenced by climate change, requires constant reinterpretation to maintain their relevance (Mirumachi & Hurlbert, 2022). Ultimately, these fundamentals are not static; they are shaped over time, responding to global crises that demand deeper and more genuine cooperation.

Transboundary Environmental Impact Assessment

One of the pillars is the transboundary environmental impact assessment, which seeks to prevent significant damage. Authors such as An et al. (2024) argue the need for new mechanisms for cases such as the treated water disposal plan in Japan, where cumulative effects require further legal review. Similarly, Nelson & Shirley (2023) highlight the latent potential of cumulative effects concepts in national and international regimes, which could illuminate valuation decisions in large-scale projects.

In practice, these evaluations are not always rigorously implemented. Think of how a subsea pipeline could alter shared marine ecosystems: without a joint assessment, impacts accumulate silently, like pollutants traveling with the currents. The author considers that here lies a common failure: many states prioritize short-term economic considerations over long-term sustainability, which exacerbates climate vulnerabilities. Furthermore, integrating socio-cultural aspects, as in industrial fisheries (Nakamura et al., 2022), enriches these assessments, making them measure not only physical but also cultural damage. One might add that these tools, although theoretically sound, are often limited by the lack of shared data between countries, making the process a partial exercise. For instance, in projects such as dams on transboundary rivers, ignoring cumulative effects could lead to irreversible degradations, such as loss of biodiversity or alterations in migratory patterns of species.

From a personal perspective, I believe that strengthening these assessments would require not only stricter legal frameworks, but also incentives for transnational scientific collaboration. Additional studies suggest that incorporating technologies such as predictive modeling could anticipate risks, but this depends on political will that is not always present (An et al., 2024). In vulnerable regions, such as the Pacific, where marine pollution crosses oceans, these assessments become an ethical imperative, reminding us that the environment does not respect boundaries drawn by humans. In the end, its scope could mitigate not only environmental damage, but also diplomatic conflicts arising from it.

Before presenting the first table, it is worth noting how international treaties vary in their approach to cross-border infrastructures. Many incorporate principles of non-harm and cooperation, but their effectiveness depends on regional contexts. The following table lists some of the main ones, with references to authors who analyze them.

Table 1*Main treaties and conventions in international law for transboundary infrastructures*

Treaty/Convention	Year	Main focus	Key references
United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses	1997	Equitable utilization, no significant harm	(Ziganshina, 2023; Kang, 2023)
Espoo Convention on Environmental Impact Assessment in a Transboundary Context	1991	Mandatory assessments for transboundary impacts	(An et al., 2024; Nelson & Shirley, 2023)
Energy Charter Treaty	1994	Protection of energy investments, including cross-border investments	(Cocciolo & Reins, 2025; Ekardt et al., 2023)
Agreement on the Use and Protection of Transboundary Rivers (Sino-Kazakhstan)	2001	Bilateral cooperation in shared basins	(Brassett et al., 2022; Janusz-Pawletta & Oravcová, 2025)
Southern African Development Community (SADC) Transport Protocol	1996	Integration of cross-border corridors	(Zajontz, 2022)

This table illustrates the diversity of legal instruments, from global to regional, that guide infrastructure projects. Below, it is explained that these treaties not only establish obligations, but also promote mechanisms such as bilateral commissions to resolve disputes. For example, the 1997 Convention has influenced arrangements in Central Asia, but its limited adoption by countries such as China highlights gaps in universality (Ziganshina, 2023). In essence, the table highlights how these frameworks are evolving, adapting to new challenges such as climate change, although their implementation varies according to the political commitment of the states involved.

Transboundary Water Resources Cooperation

In the water sector, which dominates many of these projects, cross-border cooperation is key. Ziganshina (2023) examines legal frameworks in Central Asia, where infrastructure such as interstate dams require customized arrangements for operation and maintenance. There, river basin organizations facilitate data exchange, motivated by mutual needs (Mukuyu et al., 2023). An emblematic case is the ITAIPU Binational Entity between Brazil and Paraguay, which demonstrates how international law can balance multiple uses of shared rivers, even in the face of climate-induced droughts (Gwynn, 2023).

However, this cooperation does not come out of the blue; it requires trust built up over years. Consider how in Africa, shared basins motivate information exchanges not out of altruism, but out of pragmatic interests: a downstream state needs data to plan, while the upstream state gains legitimacy (Mukuyu et al., 2023). The author believes that an opportunity lies here: by formalizing these exchanges in treaties, uncertainty is reduced, allowing projects such as dams to generate mutual benefits rather than rivalries. In contexts such as the Nile or the Mekong, cooperation has evolved from mere bilateral agreements to regional networks, where joint commissions monitor flows and resolve disputes before they escalate.

One might note, however, that factors such as water nationalism complicate this, leading to situations where countries accumulate water to the detriment of neighbors. On reflection, it appears that the success of these cooperations depends to a large extent on shared economic incentives, such as hydropower trading, which transforms potential conflicts into productive alliances. Further studies reveal that integrating climate data into these mechanisms could predict shortages, fostering proactive diplomacy (Kang, 2023). In dry regions, this cooperation becomes a lifeline, reminding us that water, more than a resource, is a link that unites national destinies. Digging deeper, we see that gaps

in implementation, such as the lack of effective sanctions, undermine these efforts, suggesting the need for more robust international forums to mediate.

Power asymmetries and Implementation Challenges

But all is not harmony; power asymmetries complicate matters. Palmer (2023) reflects on how infrastructure reveals patterns in international law, using examples such as cross-border highways that expose gaps in regulation. In Europe, the case of Nord Stream 2 illustrates limitations in European Union action, where shared competencies and conflicting preferences constrain coherent actions (Batzella, 2022).

These asymmetries manifest themselves in unequal negotiations, where economic powers impose terms. For example, in post-colonial contexts, weaker states cede sovereignty over resources to attract investment, which generates long-term resentment. One could argue that international law, although neutral in theory, is biased towards the strong if there are no built-in equity mechanisms. In Central Asia, countries such as China exert influence through massive projects, marginalizing neighboring nations in key decisions on shared rivers (Ziganshina, 2023). From a personal viewpoint, this evokes ethical concerns, as such imbalances perpetuate cycles of dependency, where the development of one is at the expense of the other.

Studies show that equity clauses in treaties, such as minimum water quotas or financial compensation, are needed to counteract this, but their application is irregular. Moreover, in South America, cases such as ITAIPU reveal how, even in binational alliances, historical asymmetries influence the distribution of benefits (Gwynn, 2023). One cannot ignore how climate change amplifies these challenges, causing powerful states to hoard scarce resources. On reflection, it seems imperative to foster supranational institutions that level the field, promoting fairer implementation. In the end, these asymmetries not only erode trust, but undermine the very essence of international law as a tool of global balance.

Global Initiatives and their Impact on Water Management

In addition, global initiatives such as the Belt and Road Initiative influence transboundary water management. Brassett et al. (2022) analyze impacts in Sino-Kazakhstan, where sanctioned discourse limits effective negotiations, suggesting solutions in water-energy-food nexus. Janusz-Pawletta & Oravcová (2025) emphasize legal bases for public participation in international rivers, such as the Ili, promoting inclusiveness to resolve disputes.

These initiatives, while ambitious, often overlook local voices. Imagine riverside communities excluded from decisions that affect their livelihoods: that's where public participation becomes crucial, transforming taxing projects into collaborative ones. Varady et al. (2023) offer a critical review of the scholarship on transboundary governance, identifying frameworks such as hydropolitics and water diplomacy that help navigate these complexities.

In public procurement, which finances many infrastructures, Van Assche et al. (2024) explore implications for international business, while Khorana et al. (2024) measure transparency in electronic systems, crucial for cross-border projects. Transparency reduces corruption risks, ensuring that funds are used equitably. In the context of the Belt and Road, these projects have generated massive infrastructure, but also environmental stresses in watersheds such as the Irtysh, where altered flows affect downstream ecosystems (Brassett et al., 2022). One might observe that, while promoting connectivity, they often ignore cumulative impacts, which calls for legal frameworks that incorporate periodic reviews.

From a critical perspective, these initiatives reflect a new geopolitical order, where emerging powers redefine rules, but at the cost of equity. Additional studies propose integrating multi-sectoral linkages, such as water-energy, to mitigate risks (Janusz-Pawletta & Oravcová, 2025). In Africa and Asia, where such projects proliferate, the lack of transparency in contracts exacerbates inequalities, suggesting that electronic systems could democratize the process (Khorana et al., 2024). On reflection, it seems that the real impact of these initiatives depends on how they are aligned with local principles, preventing them from becoming tools of subtle domination. Digging deeper, it becomes clear that fostering public participation is not a luxury, but a necessity to legitimize these global efforts.

Integration of Human Rights and Energy Aspects

Moving forward, human rights emerge as a crucial axis. Tignino & Jara (2024) explore its application in transboundary hydropower developments, emphasizing the right to drinking water and indigenous rights. Nakamura et al. (2022) extend this to socio-cultural assessments in large-scale industrial fisheries.

In energy, the Energy Charter Treaty faces criticism for perpetuating fossil dependencies, disconnected from Anthropocene challenges (Cocciolo & Reins, 2025). Ekardt et al. (2023) propose reinterpretations aligned with the Paris Agreement and human rights, limiting compensation claims. Sun (2025) discusses coastal jurisdiction over acts against subsea pipelines, using lessons from the Nord Stream sabotage.

These aspects reveal how the law must evolve: not only to protect investments, but also ecosystems and vulnerable populations. The author believes that ignoring human rights is tantamount to sowing seeds of future conflict. In hydroelectric projects, displacing communities without consultation violates not only treaties, but basic principles of dignity (Tignino & Jara, 2024). One could add that integrating socio-cultural assessments, as in fishing industries, enriches the analysis, considering impacts on ancestral traditions (Nakamura et al., 2022).

In the energy sector, outdated treaties such as the Energy Charter prioritize corporate profits over green transitions, calling for urgent reforms (Ekardt et al., 2023). Cases such as Nord Stream expose vulnerabilities, where ambiguous jurisdictions allow hostile acts without clear answers (Sun, 2025). From a personal viewpoint, this underscores the need for a holistic approach, where human rights act as an ethical compass. Studies show that aligning with climate goals, such as the Paris Agreement, could limit abusive litigation (Cocciolo & Reins, 2025). In indigenous regions, such as the Amazon, these aspects become vital, protecting not only people, but also cultural heritages. In the end, this integration strengthens international law, making it more resilient to modern pressures.

Transportation corridors and regional governance

For transportation corridors, Ansong et al. (2022) discuss integrated marine spatial planning, with perspectives from Germany, Poland and Ireland. Knorr & Eisenkopf (2022) propose alternative regulatory approaches for long-distance rail services, focused on Germany, but applicable cross-border. Zajontz (2022) criticizes Southern Africa, where territorialized realities hinder corridor governance. Bois (2025) points out mismatches between regulatory ideals and implementation in the single European railway area.

Grigg (2023) evaluates functionality of transboundary water compacts in the U.S., offering lessons for international contexts. Mirumachi & Hurlbert (2022) reflect on two decades of agreements, synthesizing perspectives on governance. Ghossein et al. (2021) integrate public procurement with the Belt and Road Initiative, highlighting regional integration.

Before the second table, note that the case studies reveal common patterns in legal challenges. The following table lists key examples, with their implications.

Table 2

Case studies of transboundary projects and legal challenges

Case	Region	Project	Main challenges	Key references
ITAIPU	South America	Brazil-Paraguay Binational Dam	Balance of multiple uses, climate impacts	(Gwynn, 2023)
Nord Stream 2	Europa	Russia-Germany gas pipeline	EU-State competences, international sanctions	(Batzella, 2022; Sun, 2025)
Ili and Irtysh Rivers	Central Asia	Management under the Belt and Road Initiative	Asymmetries of power, sanctioned discourse	(Brassett et al., 2022; Janusz-Pawletta & Oravcová, 2025)
Walvis Bay-Ndola-Lubumbashi Corridor	Southern Africa	Transportation corridor	National territoriality vs. regional integration	(Zajontz, 2022)
Hydroelectric projects in shared basins	Global	Transboundary dams	Human rights, environmental assessments	(Tignino & Jara, 2024; Ziganshina, 2023)

This table summarizes cases illustrating real stresses. Below, it is detailed that these examples show how international law can mediate, but often requires supranational institutions to overcome national barriers. For example, in ITAIPU, operations such as "water windows" during droughts demonstrate adaptability, although they depend on bilateral cooperation (Gwynn, 2023). The table also highlights global patterns, such as how asymmetries in Central Asia perpetuate inequalities, suggesting that local solutions, such as public participation committees, could mitigate these problems in similar contexts. In corridors such as the African corridor, imaginaries of fluidity collide with local realities, where fragmented sovereignties impede progress (Zajontz, 2022).

One might note that alternative regulatory approaches, such as those proposed for European railroads, could inspire hybrid models that combine efficiency with equity (Knorr & Eisenkopf, 2022). In marine planning, integrating boundaries as in the Baltic promotes shared governance, but requires constant coordination (Ansong et al., 2022). On reflection, these corridors not only connect economies, but expose failures in regional governance, where European ideals contrast with African practices. Studies on covenants in the U.S. offer transferable lessons, such as flexible monitoring mechanisms (Grigg, 2023). In this study, it can be seen that contracting in global initiatives could optimize these projects, promoting integration without sacrificing sovereignty (Ghossein et al., 2021). In short, regional governance emerges as an essential bridge, linking global aspirations with local realities.

Dispute Resolution Mechanisms in Cross-Border Disputes

When disagreements arise in cross-border projects, resolution mechanisms become the lifeline to avoid further escalation. These include international arbitration or bilateral commissions, which seek to mediate based on principles such as no harm. For example, in water disputes, authors such as Grigg (2023) evaluate the functionality of covenants in the U.S., highlighting lessons for global arrangements where flexibility is key. One might think that these mechanisms, although formal, often rely on good faith, which makes them vulnerable in scenarios of distrust.

From a closer perspective, the author believes that ignoring these processes is tantamount to inviting chaos, as seen in cases where protracted litigation paralyzes developments. In Europe, the mismatch between ideal regulations and actual practice, as in railroads, highlights the need for specialized courts to speed up resolutions (Bois, 2025). On reflection, it appears that integrating elements of preventive diplomacy, such

as early data exchanges, could reduce the burden on these mechanisms (Mukuyu et al., 2023). In regions such as Southern Africa, where corridors confront territorialities, these systems reveal gaps, suggesting reforms to include local voices (Zajontz, 2022).

Upon closer examination, it is clear that its success lies in its adaptability, preventing minor disputes from escalating into diplomatic crises. Additional studies propose hybrids between arbitration and mediation, balancing fairness with efficiency (Palmer, 2023). In essence, these mechanisms not only solve, but also educate, fostering a culture of dialogue in an interdependent world.

Role of International Organizations in Governance

International organizations play a pivotal role in orchestrating the governance of cross-border infrastructures, acting as neutral facilitators. For instance, entities such as the UN or the EU provide platforms for negotiations, as in environmental assessments where common standards are promoted (An et al., 2024). One cannot underestimate their influence; they often fill gaps where states fail to cooperate.

In hydropolitics, these organizations stabilize expectations under uncertainty, as proposed by Kang (2023), by providing forums to share data and mitigate climate risks. From a personal point of view, I believe that their strength lies in the legitimacy they bring, although they sometimes suffer from excessive bureaucracy. In energy, critiques of the Energy Charter Treaty highlight how such bodies need to be updated to align with human and climate goals (Ekardt et al., 2023). On reflection, in Central Asia, their role in shared basins could be expanded to counteract asymmetries (Ziganshina, 2023). In the end, these institutions not only regulate, but inspire, promoting governance that transcends national borders.

Adaptation to Climate Change in Shared Infrastructure

Climate change imposes an additional layer of complexity, requiring adaptations in cross-border infrastructure to deal with unpredictable droughts or floods. Authors such as Gwynn (2023) illustrate this in ITAIPU, where operational adjustments respond to climatic variability, balancing multiple uses. One could argue that, without these adaptations, viable projects quickly become obsolete.

In water contexts, integrating climate projections into treaties stabilizes expectations, reducing conflicts (Kang, 2023). The author considers that here lies an ethical challenge: states must prioritize resilience over immediate gains. In pipelines such as Nord Stream, climate vulnerabilities expose jurisdictional gaps (Sun, 2025). On reflection, it seems that regional organizations could take the lead in promoting joint plans to mitigate impacts. In global regions, this adaptation is not optional; it is imperative for a sustainable future.

Transparency and Contracting in International Projects

Transparency in public procurement is vital to avoid corruption in cross-border infrastructure, ensuring that funds are distributed equitably. Khorana et al. (2024) measure this through indices, highlighting the role of electronic systems in improving accountability. One is not unaware of how opacity aggravates inequalities, especially in global initiatives.

From a broad perspective, governments as buyers influence international business, as explored by Van Assche et al. (2024), where transparency attracts ethical investments. The author believes that, without it, projects are diverted to elites. In the Belt and Road, integrating contracting with regional integration could balance benefits (Ghossein et al., 2021). On reflection, this transforms opaque processes into inclusive

ones, strengthening trust. In the end, transparency is not an ornament; it is the foundation of just governance. In contexts where international funds flow to developing countries, lack of clarity generates suspicions that erode partnerships. Imagine a million-dollar contract for a gas pipeline: without open audits, rumors of favoritism can unleash diplomatic scandals.

One could add that digital tools, such as electronic platforms, not only speed up processes, but also democratize access, allowing small suppliers to compete. From a personal angle, I believe this empowers civil societies, which demand accountability. Studies reveal that transparency indexes correlate with project success, reducing cost overruns (Khorana et al., 2024). In regions such as Europe, where strict regulations are in place, a replicable model is seen, but in Africa, cultural and technological barriers complicate its adoption. It seems that fostering training and public-private partnerships could close gaps, turning contracting into an engine of equity. In essence, without transparency, procurement becomes a risk, but with it, a catalyst for inclusive development.

Lessons Learned from Historical Reviews

Historical reviews offer valuable lessons for future transboundary projects, synthesizing two decades of water agreements (Mirumachi & Hurlbert, 2022). One might notice recurring patterns, such as the evolution of frameworks to include sustainability.

In governance, critical reviews identify hydropolitical framings that guide decisions (Varady et al., 2023). The author believes that ignoring history condemns one to repeat mistakes, as in underestimated environmental assessments (Nelson & Shirley, 2023). Cases such as Nord Stream teach about jurisdictions (Batzella, 2022). On reflection, these lessons not only inform, but transform, promoting adaptive approaches. In short, history is a silent master in this field. Think of how past agreements, such as those of post-war Europe, laid the foundations for current integrations, but failed to foresee climate impacts. One cannot help but see parallels with Asia, where ancient water disputes inform modern treaties, avoiding escalation (Ziganshina, 2023).

From a personal viewpoint, I believe these reviews reveal a pattern: success comes from learning from failure, as in watersheds where ignoring local voices led to protests. Additional studies show that incorporating lessons from two decades accelerates progress, such as in water diplomacy that prioritizes equity (Mirumachi & Hurlbert, 2022). In global regions, this means rethinking approaches, integrating sustainability from the outset. When delving deeper, it is noted that historical gaps, such as in Africa, underscore the need for cultural contexts to be revised. It seems that, without these lessons, projects repeat vicious cycles, but with them, they open the way to lasting innovations.

Discussion and Conclusions

The discussion reveals that, although international law provides a solid foundation, its effectiveness depends on political will. It is striking how asymmetries, such as in the Belt and Road Initiative, create discourses that limit solutions (Brassett et al., 2022). Personally, one could argue that integrating human rights, as proposed by Tignino & Jara (2024), adds an essential ethical layer, preventing projects that benefit only elites. In addition, underestimated cumulative effects in environmental assessments call for reforms (Nelson & Shirley, 2023). In procurement, e-transparency could mitigate corruption, but needs comprehensive frameworks (Khorana et al., 2024).

Going deeper, let us consider the implications of climate uncertainty: treaties such as the 1997 Convention seem insufficient in the face of unpredictable droughts, where states must dynamically renegotiate terms (Kang, 2023). In Central Asia, water infrastructures reveal how fragile institutional frameworks allow powers to dominate, marginalizing smaller nations (Ziganshina, 2023). One cannot ignore how this erodes trust; for example, in the Ili River, lack of public participation generates local protests that could escalate into interstate disputes (Janusz-Pawletta & Oravcová, 2025).

Another critical aspect is the intersection with human rights: transboundary hydropower projects often displace indigenous communities without adequate compensation, violating basic principles (Tignino & Jara, 2024). The author believes that, without integrating socio-cultural assessments, as in fisheries (Nakamura et al., 2022), these ventures perpetuate historical inequalities. In energy, the Energy Charter Treaty, criticized for its fossil focus, needs urgent reinterpretations to align with global climate goals (Ekardt et al., 2023; Cocciolo & Reins, 2025). Cases such as Nord Stream highlight ambiguous jurisdictions, where sabotage exposes legal vulnerabilities (Sun, 2025).

In transportation, corridors in Southern Africa show how imaginaries of integration clash with territorial realities, where national sovereignties take precedence over regional benefits (Zajontz, 2022). Similarly, in Europe, rail regulations reveal mismatches between ideals and practice, limiting cross-border efficiency (Bois, 2025; Knorr & Eisenkopf, 2022). The scholarship on water governance, reviewed by Varady et al. (2023), suggests that hydropolitical approaches could solve this by fostering inclusive diplomacy.

In addition, data sharing in shared basins, motivated by mutual needs, could be extended to other domains such as energy (Mukuyu et al., 2023). However, asymmetries in public procurement, where governments act as buyers, complicate equitable investments (Van Assche et al., 2024; Ghossein et al., 2021). In ITAIPU, lessons of climate balance offer replicable models, but require cultural adaptation (Gwynn, 2023).

In sum, this discussion underscores persistent gaps: international law is robust in theory, but weak in application. One could propose that, to overcome this, specialized regional courts are needed, integrating hydropolitics perspectives to anticipate conflicts. Ignoring these elements not only aggravates environmental tensions, but also undermines sustainable development, leaving vulnerable populations in limbo.

Navigating international law in cross-border infrastructures requires adaptability and fairness. Lessons from the cases reviewed suggest prioritizing inclusive governance to overcome climate and political challenges. Although gaps persist, a progressive reinterpretation of treaties, aligned with human rights and sustainability, offers hope. It is imperative that states strengthen mechanisms such as watershed organizations, fostering mutual development. In short, these projects not only build physical bridges, but also weave legal networks for a shared future.

One must recognize that success depends on collective will: without it, treaties such as the Espoo Convention remain a dead letter, unable to prevent cumulative damage (An et al., 2024; Nelson & Shirley, 2023). In regions such as Europe and Asia, where asymmetries dominate, initiatives such as the Belt and Road could become positive catalysts if they incorporate genuine public participation (Brassett et al., 2022; Janusz-Pawletta & Oravcová, 2025). The author believes that investing in water diplomacy, as suggested by Mirumachi & Hurlbert (2022), is key to stabilizing expectations under uncertainty (Kang, 2023).

Looking ahead, recommendations include: first, reform energy treaties to prioritize green transitions (Ekardt et al., 2023; Cocciolo & Reins, 2025); second, improve transparency in contracting to attract ethical investments (Khorana et al., 2024; Ghossein

et al., 2021); third, integrate human rights in all phases, protecting communities (Tignino & Jara, 2024). Cases such as ITAIPU and Nord Stream illustrate that, with adaptability, risks can be mitigated (Gwynn, 2023; Batzella, 2022).

Ultimately, these projects represent opportunities to redefine sovereignty: not as barriers, but as platforms for collaboration. If states adopt inclusive approaches, varying from hydropolitics to spatial planning (Ansong et al., 2022; Varady et al., 2023), they could not only resolve current disputes, but prevent future ones. Challenges remain, as in Africa and South America, but with robust frameworks, international law could lead to resilient and equitable development.

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ANALYSIS OF THE REALITY OF DOMESTIC VIOLENCE AGAINST MEN IN ECUADOR

ANÁLISIS DE LA REALIDAD DE LA VIOLENCIA DOMÉSTICA HACIA EL HOMBRE EN EL ECUADOR

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ABSTRACT

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Violence in all its forms impacts the physical, mental, and emotional well-being of those who suffer it. The fight against gender-based violence has historically been led by women due to the countless abuses they have endured both within and outside their homes. However, another reality is now becoming visible: gender-based violence perpetrated by women against men. This violence has a significant impact on the victim in all areas of their life, violating the very essence of fundamental human rights and highlighting the need for a clear and precise legal framework. This research analyzes each of these aspects to identify the current state of research and legal proposals for addressing this issue in Ecuador. To this end, a qualitative, exploratory, and descriptive study was conducted using a documentary method and employing a systematic literature review as its primary technique. Reaching the conclusion that there is a need to generate more specific and decisive legal regulations, in accordance with the legal principles derived from the equality of human rights and gender equality.

RESUMEN

Palabras clave:

violencia, violencia de género,
violencia hacia el hombre,
derechos humanos, marco legal
Ecuador

La violencia en todas sus manifestaciones impacta la integridad física, mental y emocional en las personas que la sufren, la lucha en contra de la violencia de género ha sido emprendida históricamente por las mujeres, debido a los innumerables abusos que han recibido en sus propios hogares y fuera de ellos, sin embargo, ya comienza a visibilizarse otra realidad existente, la violencia de género ejercida de la mujer hacia el hombre, que acarrea consigo una importante afectación en la víctima en todas sus áreas de desenvolvimiento, violentando la esencia de la existencia de los Derechos Humanos fundamentales, así como la necesidad de un marco legal claro y preciso al respecto. La presente investigación analiza cada uno de estos aspectos con el objetivo de identificar el estado actual de las investigaciones y propuestas legales para su abordaje en el Ecuador. Para ello se llevó a cabo una investigación cualitativa, de alcance exploratorio y descriptivo, de método documental en la cual se

emplea como técnica la revisión sistemática de bibliografía. Llegando a la conclusión de que existe la necesidad de generar una normativa legal más específica y determinante, de acuerdo a los principios jurídicos que derivan de la igualdad de los derechos humanos y la igualdad de género.

Introduction

Violence is a behavioral manifestation caused by a large number of factors, which can occur in various forms and contexts, and is currently one of the social problems that has generated most controversy and concern in Ecuador and arguably in much of Latin America, from domestic violence to major clashes of criminal gangs, it is a reality that is observed at different levels and social strata (Eneth-Vidal, et al., 2021).

In recent times, domestic violence and gender violence have become more and more visible, since it is a problem that unfortunately affects a large number of families. Men's violence against women has been an issue that has received great attention thanks to the human rights movements and the historical struggles of the feminist movement, which has allowed legislation to be passed and serious sanctions to be imposed on aggressors, despite the fact that it is a social issue that still requires attention and much remains to be done to eradicate it (Jaramillo-Bolívar and Canaval-Erazo, 2020).

However, there is also another side of the coin, violence by women against men, which is perhaps less frequent or less reported, but also violates fundamental human rights, in the case of Ecuador, reporting these cases can be associated with social stigma, in the case of Ecuador, reporting these cases can be associated with a social stigma, which is why there is little accurate information on the subject and little professional advice for victims. This research analyzes the current situation of this problem in the country as well as its link to the legal aspects and administration of justice involved, especially with regard to human rights legislation.

Previous research has already addressed its study in different contexts and from different perspectives. Trujano-Ruiz (2020), conducts a research entitled *El silencio también es violencia de género. Hablemos de los hombres violentados por sus mujeres*, which describes the growing violence that exists in society, its multiple expressions, including gender violence. It analyzes the cases in which gender violence is exercised by women in the couple, the types of violence they exercise, including physical, psychological, emotional, economic and sexual violence, highlighting that it is a more common phenomenon than may come to public light and that its manifestations can range from attitudes of humiliation to murder. Describes how the phenomenon of social perception can influence your approach.

Araujo-Cuauro (2021), presents a research article entitled *La realidad silenciosa de la violencia contra el hombre, ¿es también violencia de género? Estudio desde la perspectiva jurídico legal en Venezuela*. In which he addresses the way in which violence against men is characterized, and discusses whether it is possible for it to be considered gender-based violence. The existence of a legal vacuum that regulates this type of aggression is highlighted, which is why many of the cases that occur are not reported.

Gonzales-Ruiz (2022), presents a research entitled, *Hombres víctimas de violencia de pareja: una revisión sistemática*, in which, through documentary analysis they manage to identify the lack of visibility of this social problem and the existing insufficiencies in the processes of legal and health care, to provide adequate help to the victims, highlighting the importance of disseminating information that allows understanding its causes and consequences, as well as the appropriate intervention from an interdisciplinary vision.

Ayol-Gusñay, and Mosquera-Endara (2022). Male and Silent Violence in Ecuador, describe the way in which the manifestation of this problem is characterized in the country, its high rates, highlighting the predominance of psychological violence, pointing out that part of the elements that emerge as aggravating the problem is its invisibility due

to the social stigma attached to it, the lack of recognition of its existence and the way in which some feminist groups try to downplay its importance.

Hansen (2024) specifically investigates the *characteristics of male victims of family violence*, analyzing both psychological and socio-demographic aspects of men who are assaulted within their own families, including both physical and psychological violence. The study is based on the methodology of systematic literature review and concludes that factors such as dependence, low self-esteem, substance use, beliefs, habits and customs are some of the elements that directly influence the conditions that allow violence to continue to be perpetuated.

Thus, it can be seen that this is a social problem with multiple implications, which with the passage of time has begun to be analyzed in greater depth in relation to its causes and consequences, the environments in which it manifests itself and the way in which it affects the family and society in general, so that prevention measures are required that include the creation of a specific legal framework in this area, as well as adequate education and training to the population.

Method

Research Design

For the study of the analyzed problem, a qualitative research design was implemented, in which the characteristics of the manifestation of the studied phenomenon are analyzed,

Qualitative approaches are a kind of exploration plan (emergent understanding) and are appropriate when the researcher is interested in the meaning of human experiences and values, the internal and individual point of view of people and the natural environment in which the studied phenomenon occurs, as well as when we seek a close perspective of the participants (Hernández-Sampieri et al., 2014, p. 364).

The qualitative method is characterized by being flexible, adapting to different contexts of research and study, its purpose is to reconstruct reality as observed by the actors of a previously defined social system, providing a fresh, natural and complete view of the phenomena, it does not follow a rigorous sequence and can develop questions and hypotheses before, during or after data collection. It will be a field research design, taking into consideration that the data will be obtained directly from the source where the research process is focused (Hernández-Sampieri and Mendoza, 2020).

This is a non-experimental research that will have a descriptive and exploratory scope, since it is intended to present the main characteristics of the phenomenon studied, the existing theories and laws on the subject, as well as the situations and contexts in which it occurs. Cross-sectional since it will be conducted once to collect data directly related to a given period of time (Arias and Covinos, 2021).

Method and Technique

The methodology of documentary research is used, which "is, in a general sense, the study of understanding and interpretation, and in a particular sense, the task of interpreting texts" (Palmer, 1969, cited by Quintana and Hermida, 2019, p. 75), as well as the technique of systematic literature review, which fulfills the purpose of informing, disseminating, generating new knowledge, generating new ideas and research

approaches on the topic addressed, facilitating access to the results provided by previous research (Pardal-Refoyo and Pardal-Peláez, 2020).

To carry out the research, the articles that were most closely related to the research objective were selected and, taking into account the inclusion and exclusion criteria, the final selection was made of the works that made the greatest contribution to the topic addressed and were indexed in reliable scientific publication registries, such as the Scielo, PubMed, Dialnet, Scopus and Google Scholar databases.

When the information search process began, 30 articles related to the research topic were identified, from which those that met the methodological criteria, relevance and relationship with the specific research topic were selected, implementing the prism methodology. This is a method that allows structuring a series of steps so that the systematic literature review can be carried out in an organized and objective manner (Ciapponi, 2021).

Inclusion and Exclusion Criteria

In order to carry out the research, the articles that were most closely related to the research objective were selected and the final selection was made of the works that made the greatest contribution to the topic addressed, were written in the last 15 years and were indexed in reliable scientific publication registries. Excluding those that were outside this time period.

Results

Domestic Violence in Ecuador

Regarding the figures for domestic violence in Ecuador, it was found that in 2021, 103,516 emergencies of this type were reported. Of this total, 55% corresponds to psychological aggression, 31% to domestic violence, 13% to physical violence and 0.1% to sexual violence" This information is provided by the 911 security service.

This is of great importance since, "violence is considered a form of exercise of power that facilitates domination, oppression or supremacy to the one who exercises it and a position of subjugation or subjection of the one who suffers it" (Mayor-Walton and Salazar-Pérez, 2019, p. 97). Domestic violence can have a variety of manifestations in addition to physical and sexual, emotional and economic abuse or subjugation are also considered aspects that make up domestic violence (Castillo-Martínez and Ruiz-Castillo, 2021). Thus, it can be said that, this,

In all its manifestations, it becomes a public health problem that involves all countries and, although it does not properly constitute a disease in the traditional sense of its understanding, where the biological etiological element plays as a rule a fundamental role; in a social sense it is a health problem and an important psychosocial risk factor, due to the magnitude of the damage, disability and death it causes, with multiple and diversified consequences at the social, psychological and biological levels (Mayor-Walton and Salazar-Perez, 2019, p. 97).

And its consequences can have repercussions both for individuals and for society in general. Violent attitudes can have a great physical, psychological and emotional impact on the victims, "violence within the family nucleus is one of the greatest problems facing countries worldwide; domestic violence is any action or omission exercised against one or more members of the same family nucleus" (Rodríguez-Nieto and Alarcón-Vélez, 2022, p. 933).

Violence by Women Against Men

Violence can have multiple manifestations; in cases of gender violence against women, physical violence is unfortunately frequent; in the case of violence against men, physical violence is also present along with other types of gender violence; psychological violence is presented as a silent and sometimes not very evident manifestation, which undermines the self-esteem and psychological stability of the person who suffers it.

Although it is a fact that violence against women is evidently higher than violence against men, some of the male victims face another problem when it comes to denouncing structural problems in society, where in general and especially in Latin America, it is validated that men are macho, strong, dominant and do not express their feelings, do not show any kind of weakness and emotionality.

In some way, this requirement of the standard, or the environment's appreciation of what a man should be, influences the social perception he has of himself, and of the way he should act in the case of being a victim of violence, with which he must not only deal directly with the problem, but also with the social stigma it brings with it. This often makes it much more difficult to seek help.

It has been observed that male victims of family violence may experience psychological and emotional consequences similar to those of women, such as depression, anxiety and post-traumatic stress disorder. In addition, some studies, such as that of Pérez et al. (2020), have found that men who are victims of family violence may have higher rates of chronic diseases and health risk behaviors, such as substance use and smoking (Hansen, 2024, p. 3).

In many cases it is the officials themselves who assume a posture of judgment, humiliation or mockery towards those who come to file a complaint, revictimizing the assaulted person. The use of labels and epithets generates even more insecurity in men who have been previously affected psychologically and emotionally, which is why it is imperative to provide information and education to those who deal with them directly and with the population in general, to raise awareness of this reality, as has been done precisely with the defense of women's rights.

Violence Against Men Is Gender-Based Violence

Violence is a globalized phenomenon that throughout the history of human beings and across the geography of the globe has been characterized as a situation that breaks personal boundaries, which can be manifested by damage to physical, psychological, economic, political, among others. Gender-based violence can be conceived as an action totally against human rights and a manifestation of social inequality, since it generates differences and a significant social impact both for individuals and for the families that suffer it (Pinargote-Zamora, 2022).

In view of the fact that the issue of gender violence, of which men can also become victims and suffer significant physical and emotional damage, and that it is an issue that, due to the characteristics of Ecuadorian culture and the macho ideology that still prevails in society, tends to be hidden or made invisible, it is considered important to address it in order to explore both its possible implications and the legal and constitutional mechanisms that allow adequate attention to the victims and the protection of their human and citizens' rights.

In cases of intimate partner violence where the man is the victim, the media often treats the issue as if it were a crime, but without mentioning the terms domestic violence or partner abuse or gender-based violence. There is a tendency to close

cases immediately and permanently as if they never happened. There are some cases of men killed and abused by their partners or ex-partners; however, they have not received attention by the media (Toldos, 2013, cited by Aguilera, et. al., 2015, p. 15).

This is evidence that there is an important social prejudice related to this type of aggression, largely linked to cultural elements that have remained in force for long periods of time,

Even men, victims of violence by their partners, are not aware that they have a problem, since socioculturally women only use violence to defend themselves against men. Today's society does not accommodate the existence of the battered man as there is no vision of the battered man in domestic violence. It is strange to think that there could be men who are victims of abuse by their partners (Toldos, 2013, cited by Aguilera, et. al., 2015, p. 15).

Domestic violence is an issue that has been increasingly debated in recent years, it is a situation that has been present constantly, and over time, however, to eradicate this problem is no easy task, in it converge different social, cultural, educational, economic factors. With the declaration of human rights, a series of transformations began at a global level that allowed countries' legislations to change in order to provide better defense and greater protection to their citizens (Aprile, 2020).

In recent times, feminist movements have made visible the serious situation of violence against women; however, gender violence is also exercised in some cases against men. It is less frequent and much less reported, but it also exists. Recent news events involving celebrities in the entertainment industry have brought the issue to the forefront, which has generated a multitude of opinions and points of view on the subject.

Women's violence against men in couples is a poorly researched topic; there are hardly any studies on this phenomenon. Although sociocultural factors are those that influence the occurrence of violence, it is the legislation that protects the rights equally of all people; however, there is criminal difference in crimes and penalties are imputed according to gender, although the law should protect people regardless of gender, to avoid perpetual positive discrimination (Aguilera, et. al., 2015, p. 14).

In this way it can be said that the violence exercised by women towards men can also be considered as gender violence, since it is carried out by a representative member of one gender towards a member of another gender, and it is necessary to take into consideration that both enjoy universal human rights that are inalienable and that are part of agreements of great importance worldwide, of the National Constitution of the Republic and of the entire legal framework in force in the country.

Analysis from a Human Rights Perspective

Fundamental human rights have become increasingly important in the course of various historical events of different kinds. The Universal Declaration of Human Rights, promulgated on December 10, 1948, after the atrocities of World War II and the commitment of the international community to never again allow the kind of atrocities that took place.

It served as the basis for annexing to the Charter of the United Nations a document that became the main foundation for guaranteeing the rights of all people everywhere and at all times, emphasizing the supreme value of the human person, the inalienable right to live free from deprivation and oppression and to fully develop one's personality.

The Universal Declaration of Human Rights of the United Nations Organization in its article 7 contemplates: "All are equal before the law and are entitled, without distinction, to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination" (United Nations, 1948-2021).

Subsequently, in 1966, the International Covenant on Economic, Social and Cultural Rights was signed, establishing the self-determination of peoples, the pursuit of their economic, social and cultural development, the availability of resources and the right not to be deprived of their means of subsistence. It recognizes the rights of citizens without discrimination of race, color, language, sex, religion, opinion, origin, economic status or social condition.

It establishes the right to work under equitable and satisfactory conditions, to social security, family life, continuous improvement of living conditions and the highest attainable standard of physical and mental health. In addition, a large number of agreements and conventions of this kind have been signed with the aim of protecting the lives of all human beings on the planet.

Among the conventional instruments is Article 3 of the International Covenant on Civil and Political Rights, which states that "The States Parties to the present Covenant undertake to ensure the equal right of men and women to the enjoyment of all civil and political rights set forth in the present Covenant. Article 2.1. of the same Covenant establishes the principle of non-discrimination on the basis of sex, which also contributes to reinforcing the mandate of equality between men and women (Carbonell, 2007, p. 32).

This underlies the importance of mutual respect and equality of conditions for academic and work activities, as well as for personal integrity, physical, mental and emotional health. However, upon reviewing the research publications on this topic, it is evident that there are multiple investigations and statistical data on cases of women who have been victims of gender violence, however, although it is understood that violence against men is a lesser known phenomenon, it is also considered necessary to study it in the context of human rights, the existing legal framework and as a social problem

Legal Context of this Issue in Ecuador

The principle of equality before the law is contemplated in the National Constitution, as well as in the country's legal framework,

Equality within the philosophical thought of modernity has been linked to the broader concept of justice. This is what explains why the most important theoretical formulation of justice in the twentieth century, the famous Theory of Justice by John Rawls, affirms as the two great principles of justice issues that are immediately related to equality.

For Rawls, the two principles from which we should begin to build a just society (starting from what Rawls himself calls "the original position") are the following: First principle: each person must have a right equal to the most extensive scheme of basic freedoms that is compatible with a similar scheme of freedoms for others. Second principle: social and economic inequalities shall be shaped in such a way that: a) they are reasonably expected to be advantageous for all, b) they are linked to jobs and positions affordable for all.⁴ As can be seen, the link established by Rawls between justice and equality is unequivocal (Carbonell, 2007, p. 15).

In this way, it can be seen how equality is the foundation of any legal principle that pursues justice. Legal values and democratic principles must be applicable to all citizens, under the principle of the rule of law that sustains collective plurality.

These principles should not be lost sight of under any circumstances because they are the ones that allow for justice and social coexistence in conditions from which the welfare of all citizens, families, children and members of society in general can prevail.

Thus, the importance of attention to victims regardless of their gender is contemplated and emphasized. This shows the relevance of considering the legal underpinnings at both the national and international levels.

Causes of the Manifestation of These Problems

There are factors related to contemporary lifestyles that contribute to the accumulation of stress, pressures and emotional tension that result in higher levels of violence and aggressive reactions from people. The accelerated pace of modern life has caused people to neglect activities that serve for recreation and leisure, the emotional life of human beings is increasingly reduced to a smaller environment despite the existence of greater connectivity and forms of distance communication.

Human contact and face-to-face communication have been progressively displaced by communication through digital media, in which violent scenes are constantly rebroadcast, in the same way, social media messages also contribute to the transmission of content that devalues human beings and

Thus, today more than ever, human beings are constantly exposed to this type of content and its influence may become greater than it has ever been if the necessary measures are not taken.

Discussion and Conclusions

Violence expressed through attitudes, behaviors, verbal expressions and even thoughts, usually appears when they have the tendency to be aggressive. These are factors that seem to be more and more frequent at the present time, this can be evidenced in social interactions and interpersonal relationships, the characteristics of communication and the development of people in public places, places of study and work.

Part of this reality is also constituted by the increase in crime rates at the national level and by regions, the great mobilization and communicational impact that gender violence has generated in recent years and a general feeling of insecurity, so it is of great importance to identify the causes that originate it, the flaws in the system that have not allowed its effective and timely solution, as well as the measures that can contribute to prevent and mitigate these terrible current conditions (Carrión-Mena, 2022).

This is a reality that affects a large number of families in the country, and to reflect on the possibilities of finding alternatives that allow its approach and intervention (Castro-Arellano, 2024). As well as the need to promote greater awareness and sensitize the population to this problem, so that members of society in all countries of the world can become aware of its implications and that the real victims of violence can receive adequate support, defense and protection, regardless of the gender to which they belong.

Gender-based violence is one of the worst human rights abuses and therefore one of the most common and widespread public health and social problems in today's society, due to its negative impact on health, morbidity and mortality that affects a great many people and does not distinguish between women and men. Therefore, it is considered today as one of the most extreme manifestations of social inequality (Araujo, 2021, p. 60).

However, in the case of women's violence against men, there is procedural inequality since the legislation was intended to protect women from abuses committed by other men, a situation that has been widely discussed in forums and the media, which has generated greater concern on the part of the authorities, civil society, legislative bodies and the organs of administration of justice. Something that has not happened in the opposite case, in which the victims are male, the problem is made invisible by family, friends, the victim himself and even by public agencies (Araujo-Cuauro, 2020, p. 61).

It is important to reflect on each of the aspects described, in order to assess the influence of the dimensions analyzed in the thinking, behavior and attitudes of human beings today, where the disconnection, the crisis of values, the excess of references, information and entertainment media has generated abrupt changes in the way of doing things in the different areas of human development.

At present there are really no legal restrictions to the application of the principles contemplated in the jurisprudence on this subject, however, in the social sphere there are many prejudices that are manifested in the family, in the community environment, in society in general and even frequently by the officials in charge of receiving and processing the relevant complaints. This makes it very difficult for citizens to have confidence in the legal system and in the application of the corresponding procedures so that their cases are attended to with the necessary importance and speed.

Most of the problems caused by gender violence (except for cases related to crime and unforeseen situations) are a consequence of not having been able to detect and prevent it in time, which is why informing and educating the population is of fundamental importance for its early detection and prevention. Once the importance of the issue and the seriousness of the circumstances involved are understood, sharing the information and helping to prevent it is a contribution we can all make from our own sphere of influence.

Therefore, one of the lines of action that must be undertaken is to educate the population, raising awareness and educating them about the importance of appropriate intervention in this area. It is of fundamental importance to take into account that violence is a behavior that can occur in either gender, that the aggressors have in common the lack of empathy towards the victims, and that the victims also share certain traits of submission to the aggressions

Social and psychological support to the victims is of fundamental importance, as well as legal attention, in order to provide help not only to the individual but also to the entire family group, in order to protect their integrity and the defense of their fundamental human rights. From the educational and community sphere, important contributions can be made to address the issue. Awareness-raising is a personal process that can be shared with family members and friends in the closest environment, to then expand the possibilities of reaching the community, regional, national and international levels.

Social networks and other means of expression can be important allies, many potential or actual victims could benefit from recognizing the patterns of aggression, their behaviors, attitudes and manifestations, as well as the help centers that may exist closer to our locality.

Promote reflections, highlight the importance of cultivating values that allow each human being to find himself/herself and develop not only an individual identity but also one that allows the identification of all human beings in terms of the common welfare and the condition of being a person, which is often distorted through much of the information transmitted by the media and social networks.

Some steps have been taken in this direction, especially the importance of international conventions that guide legislation on human rights, which have brought with them legal frameworks that favor protection against different forms of discrimination and violence, as well as transformations in educational processes oriented under the principles of social inclusion, respect for diversity and the culture of peace. It is of fundamental importance to take into consideration that in order to avoid violence it is first necessary to become aware of its causes, consequences and implications, and this is currently the task of all those who yearn for a world in which harmonious and peaceful coexistence is possible.

In order to continue deepening our knowledge of this reality, we recommend analyzing the research that has addressed the problem both in Ecuador and in other countries. As well as the review of official documents, which present statistical data with information on real cases, complaints, sentences, which allow us to have a closer approach to the reality addressed.

At present, it is of fundamental importance to make this issue known, to contribute to its visibility and to present alternative solutions that may facilitate its treatment as a social problem that, due to cultural stigmas, has remained hidden for a long time, so that the victims may have more alternatives for personal, social, psychological, emotional and legal support.

At this point in the 21st century, there is a need for greater social awareness of the importance of respect for fundamental human rights, highlighting values such as respect, non-discrimination, solidarity, help, cooperation, empathy and the rejection of violence in all its forms, regardless of the forms in which it manifests itself and who are the main people affected by these conditions. The actions that can be taken to achieve this are of great importance and transcendence to achieve the changes and transformations that are required at different levels of society.

Another suggestion to help address the problem in the community context observed would be to create a counseling program for cases of male domestic violence that would include the development of written material to provide relevant legal advice to victims, as well as an index of state institutions, associations and foundations that can provide advice to victims, in addition to providing a helpline, a website that provides information and serves as a link between users and organizations that can help them. Educational intervention can be of great help in informing both the victims of this situation and the community in general.

The project would be based on three lines or lines of action: primary attention to victims through a helpline and a web page to provide advice and receive complaints. The development of a legal advice manual to be shared with institutions that provide support to victims of domestic abuse and the education of the population through talks, workshops and conferences that can contribute to generate greater awareness and transformation of the ways of thinking that have predominated around these issues.

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CORPORATE SUSTAINABILITY AND ECONOMIC LAW IN HONDURAS: A REGULATORY PATHWAY FOR THE STRENGTHENING OF MSMEs SOSTENIBILIDAD EMPRESARIAL Y DERECHO ECONÓMICO EN HONDURAS: UNA RUTA NORMATIVA PARA EL FORTALECIMIENTO DE LAS MIPYMES

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ABSTRACT

Keywords:

corporate sustainability, economic law; MSMEs, regulatory framework, Honduras.

This article examines the relationship between economic law and corporate sustainability in Honduras, focusing on micro, small, and medium-sized enterprises (MSMEs). We review the doctrinal foundations of sustainable economic law, the national and comparative regulatory frameworks, and empirical evidence drawn from interviews with 30 experts and surveys of 200 MSMEs in Tegucigalpa, San Pedro Sula, and La Ceiba. Findings reveal a fragmented legal architecture, weak inter-institutional coordination, and insufficient incentives for transitioning toward sustainable business models. We propose a Framework Law on Corporate Sustainability to integrate fiscal and financial incentives, institutional capacity building, technical assistance, national certification, and sustainable public procurement. We conclude that corporate sustainability requires a comprehensive legal reform grounded in economic efficiency, social justice, and environmental responsibility, in alignment with SDGs 8, 9, 12, and 16. Methodologically, we adopt a mixed approach with analytical triangulation and a critical discussion of regional and international literature. Implications include enhanced productivity, formalization, and competitiveness of MSMEs, alongside reduced negative externalities and strengthened public governance.

RESUMEN

Palabras clave:

sostenibilidad empresarial, derecho económico, MIPYMES, marco normativo, Honduras.

Este artículo analiza la relación entre el derecho económico y la sostenibilidad empresarial en Honduras, con foco en las micro, pequeñas y medianas empresas (MIPYMES). Se examinan las bases doctrinales del derecho económico sostenible, el marco normativo nacional y comparado, y la evidencia empírica recabada mediante entrevistas a 30 expertos y encuestas a 200 MIPYMES en Tegucigalpa, San Pedro Sula y La Ceiba. Los resultados muestran un entramado jurídico fragmentado, baja articulación interinstitucional e insuficiencia de incentivos para la transición

hacia modelos productivos sostenibles. Se propone una Ley Marco de Sostenibilidad Empresarial orientada a articular incentivos fiscales y financieros, fortalecer capacidades institucionales y promover asistencia técnica, certificación nacional y compras públicas sostenibles. Se concluye que la sostenibilidad empresarial exige una reforma normativa integral basada en los principios de eficiencia económica, justicia social y responsabilidad ambiental, en coherencia con los ODS 8, 9, 12 y 16. Metodológicamente, se adopta un enfoque mixto con triangulación analítica y discusión crítica de la literatura regional e internacional. Las implicaciones abarcan la mejora de la productividad, la formalización y la competitividad de las MIPYMES, además de la reducción de externalidades negativas y el refuerzo de la gobernanza pública.

Introduction

Honduran MSMEs are the core of the productive fabric and employment, but they operate under structural restrictions of financing, informality and low productivity that limit their transition to sustainable business models. In a country where more than 70% of the labor force is engaged in small-scale activities, business sustainability is no longer a voluntary option but a prerequisite for economic resilience and long-term competitiveness. However, the institutional and regulatory reality of the country shows that companies face an unpredictable and fragmented environment with few support mechanisms to undertake the transition to sustainable practices.

In this context, economic law, understood as the set of principles, rules and institutions that regulate economic activity in the general interest, provides an essential architecture for aligning private incentives with public objectives of sustainable development. Its field encompasses not only the regulation of markets, the organization of productive activity and the design of public policies, but also the configuration of institutions capable of coordinating, supervising and promoting processes of innovation and productive transformation. In its contemporary dimension, economic law incorporates the paradigm of sustainability and demands a regulatory design capable of integrating economic efficiency, environmental responsibility and social justice.

International literature suggests that predictable regulatory frameworks, incentive-based policy instruments and coordinated governance are necessary conditions to catalyze the productive transition (Porter & Kramer, 2011; OECD, 2020; UNCTAD, 2019). Countries that have made significant progress in corporate sustainability show a common pattern: clear regulations, specific fiscal and financial incentives, one-stop shops to simplify procedures, industrial policies aligned with environmental objectives and an institutional framework capable of monitoring and evaluating results. These elements reduce uncertainty, promote investment in innovation and make it easier for small companies to incorporate more efficient processes, clean technologies and responsible production standards.

In Honduras, corporate sustainability has been addressed in a fragmented manner through scattered regulations on the environment, competitiveness, MSMEs, land use planning and public procurement. This regulatory dispersion generates overlaps and gaps, in addition to increasing regulatory compliance costs for companies operating with limited resources. The absence of an integrated strategy hinders the construction of clear signals for private investment and limits the State's capacity to induce sustainable changes in the productive apparatus. In terms of economic law, this situation translates into coordination failures and regulatory risks that discourage the adoption of clean technologies, efficient resource management and business formalization.

Likewise, the lack of green financing schemes adapted to business size prevents MSMEs from capturing learning rents, accessing economies of scale and improving their competitiveness. In other countries in the region, green credit mechanisms, partial guarantees, competitive innovation funds and tax incentives have proven to be key to promoting sustainable transition. However, in Honduras these instruments are absent or have not been implemented in a comprehensive manner, which limits the investment possibilities of smaller companies, especially in sectors such as light manufacturing, commerce and agribusiness.

On the other hand, international pressure towards responsible practices driven by global environmental regulations, value chain standards, trade agreements and climate commitments poses an additional challenge for Honduran MSMEs. Companies that do not

incorporate sustainable practices will face barriers to integrating into regional and global markets. This makes sustainability not only an ethical imperative, but also a condition for accessing dynamic markets, attracting investment and generating quality employment.

Against this backdrop, it becomes necessary to understand business sustainability as a multisectoral and multidimensional phenomenon that depends on the interaction between regulation, institutional capabilities, productive structure and business conditions. From the perspective of economic law, sustainability cannot be promoted through isolated regulations; it requires a coherent regulatory architecture, effective economic instruments, strong institutions and governance mechanisms that articulate all the actors involved.

This article pursues three main objectives: (i) delimit a conceptual framework of sustainable economic law applicable to MSMEs, highlighting the principles, instruments and doctrinal foundations that support it; (ii) analyze the Honduran regulatory framework and its regional comparison to identify gaps, overlaps and opportunities for harmonization; and (iii) present empirical evidence on perceptions and behaviors of MSMEs and experts regarding barriers and incentives, in order to support a proposal for a Framework Law on Business Sustainability. The contribution of the study is twofold. On the one hand, it systematizes a dispersed regulatory field that lacks a solid conceptual anchor. On the other, it proposes an institutional and instrument design that internalizes externalities, reduces information asymmetries and corrects market failures through incentives compatible with inclusive growth (Sen, 1999; Sachs, 2015).

The document is structured in six sections. The first section presents the theoretical and legal framework underpinning sustainable economic law. Subsequently, the Honduran regulatory context and its regional comparison are examined. The third section describes the methodology used; the fourth section presents the main results of the empirical work; the fifth section discusses the findings in light of international literature; and the sixth section presents the conclusions and a proposal for a Framework Law on Corporate Sustainability adapted to the Honduran reality.

Theoretical and Legal Framework of Sustainable Economic Law

Sustainable economic law is defined as the regulatory system that guides economic activity towards the creation of value with environmental responsibility and social justice, internalizing externalities and correcting market failures through regulatory and incentive instruments. This concept integrates the traditional principles of economic law, public economic order, market regulation, state intervention and protection of the general interest with the postulates of sustainable development, which require a dynamic balance between economic growth, environmental protection and social welfare. In this way, sustainable economic law ceases to be understood solely as a set of rules on productive activity and becomes a legal architecture that modulates behaviors, structures markets and creates conditions for the transition to more resilient and equitable economic models.

Unlike purely command-and-control approaches, which impose obligations without considering costs, capabilities or incentives, sustainable economic law prioritizes intelligent combinations of standards, pricing, information, financing and public procurement, accompanied by institutions capable of implementing, coordinating and evaluating policies. Instead of relying exclusively on regulatory mandates, it incorporates economic instruments that reward compliance, reduce uncertainty and generate positive signals for companies that adopt responsible practices. The literature agrees that the

articulated use of these instruments produces more efficient results, promotes innovation and decreases business resistance to regulations (OECD, 2019).

From institutional economics, formal and informal rules shape transaction costs, the reliability of markets and the predictability of the economic environment (Stiglitz, 2010). A fragmented or inconsistent regulatory system increases compliance costs and discourages investment. In business sustainability, this translates into the need for regulatory certainty for investments in energy efficiency, circular economy, eco-design, clean technologies and responsible management of natural resources. The lack of clarity or regulatory articulation may become a greater obstacle than the financial costs of sustainability itself.

The literature on shared value highlights that well-designed regulation can induce innovation, improve productivity and increase competitiveness by correcting market failures that prevent firms from internalizing long-term benefits (Porter & Kramer, 2011). Under this approach, sustainability is no longer seen as a burden, but as an engine of growth, capable of opening markets, improving reputation, reducing risks and strengthening relationships with consumers and supply chains. Companies that operate under consistent regulatory frameworks and with appropriate incentives tend to be more competitive in the medium term, especially when international markets demand higher standards.

Complementarily, the human development approach argues that institutional and citizen capabilities condition the results of any intervention (Sen, 1999). In terms of sustainable economic law, this implies that the impact of regulations will depend not only on their design, but also on the capacity of institutions to implement them, enforce them and accompany productive actors in their transition. Public institutions must have the technical, financial and human resources to carry out their mandates, and companies require access to information, technical assistance and tools to enable them to adopt new practices.

Comparatively, several Latin American countries have created advanced frameworks to promote clean production, energy efficiency and sustainable public procurement. Colombia articulated the Green Growth Policy, introduced tax benefits for environmental investments, created specialized financial instruments and made progress in measuring sustainable productivity. Chile strengthened the Extended Producer Responsibility Law (REP), developed the National Circular Economy Strategy and consolidated a multisectoral governance model with clear goals and follow-up mechanisms. Costa Rica has made significant progress with its Carbon Neutral Country Program and has integrated sustainability criteria into its tourism, agricultural and industrial policies. These cases evidence that corporate sustainability requires a comprehensive design that combines fiscal, financial and market instruments, as well as recognized certifications and standards that create clear long-term signals (OECD, 2020; UNCTAD, 2019).

The lessons learned from these experiences are relevant for Honduras, as they show that sustainability cannot depend only on strict environmental regulations, but on an articulated ecosystem that includes incentives, strong institutions and multilevel coordination. Regulatory coherence, understood as the cross-cutting alignment of sectoral, fiscal, environmental, industrial and municipal policies, is essential to avoid duplication, reduce transaction costs and ensure that companies do not face contradictory signals.

Honduran and Comparative Regulatory Context

Relevant Honduran legislation includes the Law for the Promotion and Development of MSMEs, the General Environmental Law, the Law for the Promotion of Competitiveness, public procurement regulations and sectoral provisions (energy, waste, water). Nevertheless, overlaps and gaps persist: (i) absence of a comprehensive regime of green tax incentives for MSMEs; (ii) limited coordination between environmental and productivity goals in industrial policy; (iii) limited incorporation of sustainability criteria in public procurement; and (iv) weak multilevel coordination for implementation and oversight.

Despite having a broad set of laws and regulations, the Honduran regulatory framework lacks a comprehensive approach to articulate the objectives of corporate sustainability with those of competitiveness, innovation and territorial development. The MSME Law, for example, prioritizes job creation and formalization, but does not incorporate environmental incentives, eco-efficiency standards or green financial instruments to promote the transition to sustainable models. Similarly, the General Environmental Law establishes general environmental protection obligations, but does not contain specific provisions or provisions adapted to the operating capacity of small companies, which generates disproportionate regulatory burdens and low compliance capacity.

In addition, public procurement regulations represent a missed opportunity to accelerate the sustainable transition. In several countries, sustainable public procurement functions as a driver of innovation and a direct stimulus for companies to adopt environmental and social standards. In Honduras, however, sustainability criteria are not systematically incorporated into the bidding, awarding and evaluation processes, which limits their impact on the market. The absence of clear guidelines in this area produces uncertainty and reduces the State's capacity to generate green demand that encourages business transformation (OECD, 2020).

Regulatory fragmentation is also reflected in sectoral policies: while energy legislation promotes efficiency and diversification, the regulation of solid waste, wastewater or land use continues to operate with traditional criteria that do not integrate principles of circular economy, technological innovation or extended producer responsibility. This lack of horizontal coherence generates regulatory contradictions and hinders the adoption of coordinated policies that promote corporate sustainability as a cross-cutting objective.

Unlike comprehensive frameworks observed in the region, Honduras lacks a framework law that aligns objectives, instruments and governance. This lack of comprehensiveness generates high transaction costs and reduces the effectiveness of interventions. A Corporate Sustainability Framework Law would consolidate principles, create proportional incentives, establish a national certification system and articulate an inter-institutional coordination unit, with goals, indicators and public reporting schemes.

In countries such as Colombia, Chile, Costa Rica and Mexico, the existence of framework laws or national sustainable production policies has facilitated the implementation of economic and regulatory instruments, as well as the creation of institutions responsible for coordinating intersectoral efforts. In Colombia, for example, the Green Growth Policy establishes fiscal and financial mechanisms to promote clean investments, while Chile has developed a robust framework based on the REP Law and national circular economy strategies. These experiences demonstrate that policy coherence is a critical factor for the success of sustainability policies (ECLAC, 2022).

In contrast, Honduras presents structural governance challenges: coordination between the secretariats in charge of economy, environment, energy, industry and finance is limited, resulting in duplicated, inconsistent or contradictory interventions. At the operational level, the institutions lack mechanisms for joint planning, information exchange, sustainability indicators and impact assessment systems. All of this limits the State's capacity to design evidence-based public policies with a long-term vision.

At the municipal level, local governments have key competencies (land use, permits, fees) that can be aligned with the sustainable transition through waste management ordinances, green infrastructure incentives and sustainable local purchasing programs. Vertical coordination between levels of government is essential to avoid duplication and to channel climate finance to projects with territorial impact. However, in practice, municipalities face budgetary restrictions, technical limitations and limited coordination with national authorities, which reduces their capacity to play a more active role in corporate sustainability.

Furthermore, administrative decentralization has not been accompanied by the financial resources necessary for local governments to implement environmental policies, undertake training campaigns or monitor compliance with regulations. In the absence of territorial financing instruments, business sustainability depends excessively on isolated projects, international cooperation or voluntary efforts of private actors, without a structural policy to ensure continuity and scalability.

The comparative context shows that corporate sustainability is more effective when legislation integrates clear principles, economic instruments, fiscal incentives, certification mechanisms, technical assistance and sustainable public procurement processes. Lacking such a framework, Honduras faces the risk of falling behind in the transition to more demanding value chains, especially in sectors such as agribusiness, manufacturing, tourism, textiles and international trade, where environmental and social standards are becoming increasingly important.

In summary, the Honduran regulatory context shows important advances in sectoral legislation, but a significant lack of articulation and regulatory coherence. The introduction of a Corporate Sustainability Framework Law is a strategic opportunity to organize the regulatory ecosystem, integrate modern public policy instruments and strengthen institutional governance. This transformation is especially relevant for MSMEs, which require a regulatory environment that is clearer, more predictable and adapted to their operational capabilities.

Method

A mixed sequential approach was adopted. In the qualitative phase, 30 semi-structured interviews were conducted with experts in law, economics, environment and public policy (academics, regulators, unions and consultants). In the quantitative phase, a structured survey was applied to 200 MSMEs in Tegucigalpa, San Pedro Sula and La Ceiba. The questionnaire collected information on regulatory knowledge, environmental practices, perceived barriers, access to financing and willingness to adopt certifications.

The sampling combined criteria of convenience and stratification by sector (manufacturing, services, commerce) and size (micro, small, medium). Informed consent and anonymity protocols were implemented. The content validity of the instrument was assured by expert review; reliability was estimated with Cronbach's alpha for Likert scales.

- Qualitative analysis was performed by thematic coding and constant comparison.
- The quantitative analysis included descriptive statistics, tests of association and logit models to explore the probability of adoption of sustainable practices as a function of regulatory knowledge, access to finance and business size.
- Triangulation integrated both approaches to strengthen plausible causal inferences.

Results

The results reveal three main findings. First, regulatory awareness is low: only 28% of the companies identified at least one relevant regulation and only 18% said they were aware of the existence of some type of incentive related to sustainability. This finding reveals a significant gap between the regulatory supply and the ability of companies to interpret, understand and apply it. Most MSMEs lack clear information about their legal obligations, available opportunities or procedures for accessing public programs, which limits their ability to make strategic decisions aimed at sustainability. This situation also reflects problems of institutional communication and the absence of effective mechanisms for dissemination, training and support.

Second, the most recurrent barriers are the cost of compliance, lack of financing and administrative complexity. Companies perceive that the capital required to adopt clean technologies, improve administrative processes, manage waste or implement energy efficiency practices exceeds their financial capacity. Likewise, the traditional banking structure shows little flexibility to offer financial products adapted to the flows, size and perceived risk of small enterprises, especially in informal or semi-formal sectors. Administrative complexity also appears as a determining factor: many environmental, fiscal or municipal procedures are considered long, costly and lacking in transparency, which generates disincentives and encourages short-term decisions. In this sense, the current regulatory environment does not favor the adoption of sustainable practices, particularly among micro and small companies, which face greater operating capacity restrictions.

Third, there is a high willingness to adopt sustainability measures if clear incentives, technical assistance and public procurement with specific criteria are offered. The survey shows that more than 70% of MSMEs would be willing to implement energy efficiency practices, proper waste management or certification processes if there were direct economic benefits, access to credit with preferential conditions or technical advice provided by public institutions or business development centers. This finding is consistent with international literature indicating that small businesses tend to respond favorably when public policy mechanisms reduce their adoption costs and allow them to visualize tangible returns in the short and medium term (OECD, 2019; IDB, 2021).

In logit models, regulatory knowledge and access to credit significantly increase the probability of adopting energy efficiency and waste management practices. The econometric analysis shows that MSMEs with more legal information are more likely to adopt sustainable practices, which confirms the importance of regulatory education, regulatory clarity and technical assistance. Access to credit appears as a robust determinant: companies that have had contact with formal financial institutions show greater capacity to invest in efficient equipment, solar panels, LED lighting, waste management systems and other green assets. Empirical evidence is consistent with

regional studies linking green credit and guarantee schemes with improvements in productivity and sustainability (ECLAC, 2020; UNCTAD, 2019).

Likewise, MSMEs with links in formal supply chains show a greater propensity to become certified, suggesting a pull effect from larger clients and exporters. Companies that operate with corporate suppliers, supermarkets, hotel chains or exporters must comply with stricter standards, which encourages the adoption of environmental and social measures. This result highlights the importance of integrating MSMEs into sustainable value chains and promoting public policies that strengthen business linkages.

The interviews identified the need for a coordinating institutional framework with a clear mandate, as well as instruments proportional to size. The experts agreed that the dispersion of regulations and the lack of inter-institutional coordination constitute one of the greatest barriers to business sustainability in Honduras. They pointed out that the absence of an entity in charge of articulating public policies on sustainability generates overlapping, duplication and disjointed programs, which hinders their effectiveness. They also stated that any regulatory progress must take into account business heterogeneity and design instruments that are proportional to the real capabilities of MSMEs.

Among the most recurrent proposals is the creation of a scheme of partial guarantees and preferential rates for green investments, in order to increase access to financing and reduce the perception of risk by financial institutions. The need to implement a staggered national certification that allows companies to advance in stages, accumulating evidence of compliance without facing disproportionate burdens was also highlighted. This type of certification has shown successful results in countries such as Chile and Costa Rica, where they have become tools for improving competitiveness and facilitating participation in sustainable value chains.

The interviewees also pointed out the importance of incorporating sustainability criteria in public procurement, starting with categories with a high environmental footprint or social risk. Sustainable public procurement can become a key driver of the transition, given the economic weight of the state as a purchaser and the influence it exerts on markets. This approach could encourage companies to adopt good practices to remain competitive in bidding processes.

In summary, the quantitative and qualitative results show that corporate sustainability in Honduras faces structural barriers related to information, financial capacity, regulatory design and institutional governance. However, there is a significant willingness on the part of MSMEs to incorporate sustainable practices, provided there are adequate incentives, technical support and clear regulatory mechanisms. The evidence points to the urgency of a comprehensive regulatory framework that coordinates institutions, reduces compliance costs, encourages green financing and facilitates certification processes tailored to business capabilities.

In order to complement the quantitative and qualitative findings obtained during the fieldwork, the following four figures summarize the most relevant information derived from the study. These visualizations make it possible to observe territorial patterns, levels of regulatory knowledge, main legal and institutional barriers, as well as the mechanisms proposed by experts to strengthen business sustainability in Honduran MSMEs. Their inclusion facilitates the comparative understanding of the results, provides graphic evidence of the phenomena analyzed and contributes to a more comprehensive interpretation of the legal and economic framework evaluated.

Figure 1
Georeferencing of the surveyed MSMEs

Georreferenciación de las 200 MIPYMES encuestadas en Honduras



Figure 2
Knowledge of legal regulations

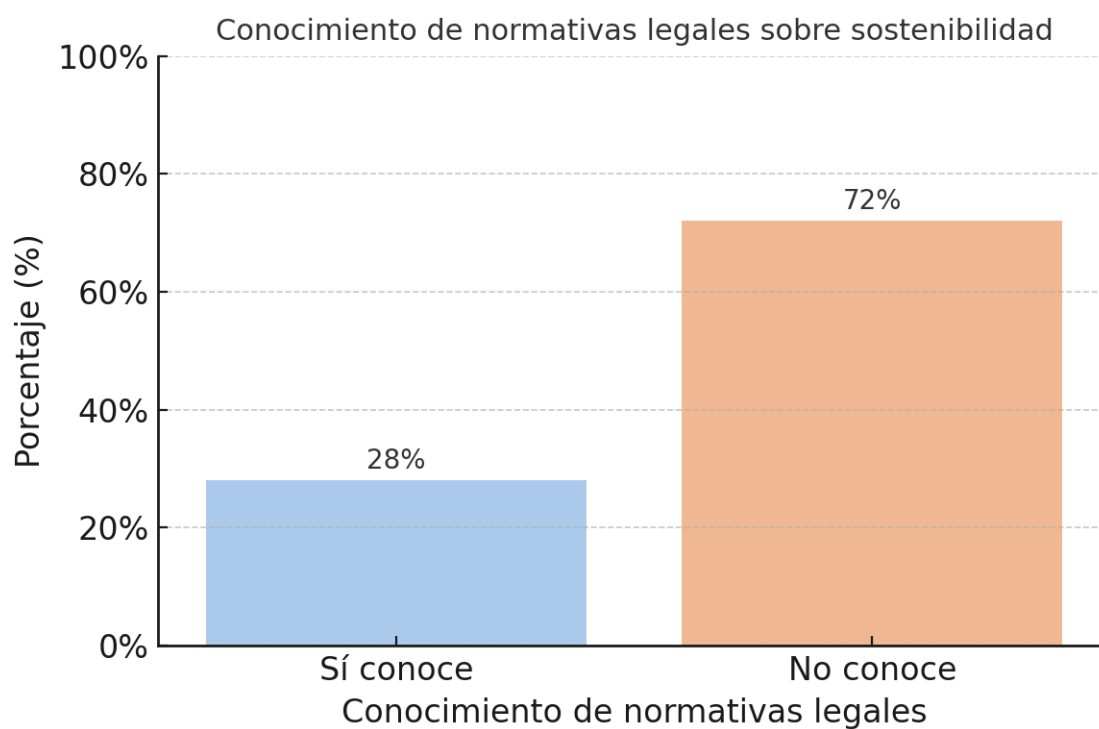
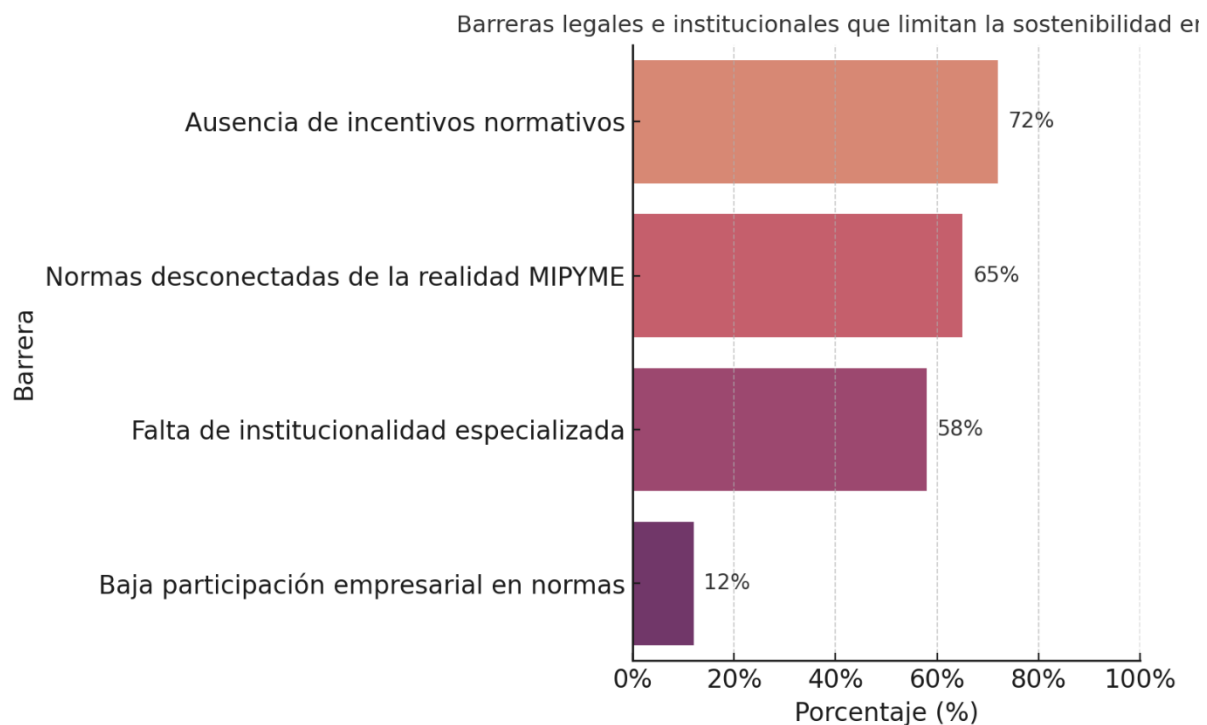


Figure 3
Legal and institutional barriers that limit sustainability



Note. Adapted from ECLAC (2021) and Carbonell (2020).

Figure 4
Legal mechanisms proposed by experts



Note. Own elaboration (Baca Calix, 2025).

Discussion

The findings confirm that regulatory fragmentation and weak institutional coordination raise compliance costs and erode the effectiveness of public intervention. From the prism of economic law, the absence of a comprehensive policy amounts to a problem of incentive design: firms face contradictory signals and uncertain time horizons, which discourages investments with intertemporal returns. When the regulatory framework lacks coherence, MSMEs experience structural uncertainty, reflected in scattered procedures, duplicated requirements and the absence of articulated instruments. This translates into short-term decisions that privilege operational survival over sustainability and innovation.

Compared to regional experiences, Honduras lags behind in the integration of fiscal (acceleration of green depreciation, tax credits, deferred VAT for clean technologies), financial (credit lines with guarantees and first-loss) and informational (labeling, certification) tools. While countries such as Colombia, Chile and Costa Rica have managed to establish coherent regulatory architectures that integrate economic incentives, national certifications and sustainable public procurement, Honduras maintains a sectorized approach that limits the effectiveness of interventions. This lack of comprehensiveness generates transaction costs that fall disproportionately on MSMEs, which have less financial leeway and less technical capacity to navigate complex regulatory systems.

However, there are capacities installed in development banks, international cooperation and sectoral agencies that can be articulated under a framework law. Public banks, MSME centers and environmental agencies have accumulated experience in technical assistance, financing and supervision, but operate in isolation. Institutional coordination through a higher regulatory framework would make it possible to take advantage of these capabilities and reduce duplication of efforts. International experience shows that inter-institutional coordination, when formalized through clear regulatory frameworks, produces substantial improvements in administrative efficiency, access to financing and adoption of sustainable practices (OECD, 2020; ECLAC, 2022).

In the literature, the "shared value" argument suggests that predictable regulations that internalize externalities stimulate innovation and productivity (Porter & Kramer, 2011, p. 63). This is consistent with evidence that MSMEs with greater regulatory knowledge and access to credit adopt more sustainable practices. The existence of a stable regulatory environment not only reduces companies' perceived risk, but also encourages long-term strategies based on energy efficiency, eco-design, waste reduction and process digitalization. Public policies that integrate incentives and regulatory certainty generate both private and social returns, strengthening the business fabric and promoting inclusive development.

Regulatory proportionality and technical support are feasibility conditions to avoid regressive effects on small firms. International evidence shows that the fixed costs of compliance affect micro and small enterprises more intensely, so interventions must be adapted to their real capacity. This includes the need to introduce gradual implementation of standards, one-stop shops, free or low-cost technical assistance, tailored green financing and phased certifications. Without these mechanisms, sustainability runs the risk of becoming a privilege for medium-sized or large companies, deepening structural gaps.

The results also dialogue with the human development approach (Sen, 1999) and the political economy of sustainability (Sachs, 2015): without institutional capacities,

transparency and participation, legal instruments lose effectiveness. Sustainable development requires institutions capable of formulating evidence-based policies, assessing impacts, guaranteeing access to information and generating environments of trust between the public and private sectors. Business and citizen participation, as well as accountability, are key to strengthening governance and ensuring that policies respond to real needs and not just formal mandates.

Therefore, the regulatory proposal emphasizes governance, monitoring, evaluation and accountability, in addition to economic incentives. The Business Sustainability Framework Law proposed in this study seeks not only to introduce fiscal and financial instruments, but also to consolidate a robust inter-institutional architecture, with measurable goals, coordination mechanisms and a national information system to monitor progress and challenges. The evidence suggests that without this institutional component, any regulatory effort runs the risk of being dispersed or losing impact. In summary, the discussion shows that business sustainability in Honduras depends on both regulatory design and the state's capacity to coordinate, implement and evaluate public policies. The integration of modern instruments, regulatory coherence and institutional strengthening is a prerequisite for MSMEs to move towards sustainable, competitive and resilient production models.

Proposal for a Framework Law on Business Sustainability for MSMEs

The proposal for a Framework Law on Business Sustainability for MSMEs arises as a response to the identified regulatory fragmentation, the absence of effective incentives and the need to strengthen public governance in the area of sustainability. The purpose of this law is to establish a comprehensive legal framework to facilitate the business transition towards responsible production models, reducing transaction costs, providing regulatory certainty and promoting sustainable innovation. The proposed regulatory architecture is structured under five headings, ranging from fundamental principles to mechanisms for the evaluation and ongoing review of public policy.

Title I - Principles and Definitions

The purpose of the first title of the Law is to establish the guiding principles that will guide the public policy of business sustainability for MSMEs in Honduras. This title incorporates essential principles of environmental law and sustainable economic law, among them:

- Environmental progressivity, which obliges the State to gradually increase environmental standards and requirements in accordance with business capabilities and technological progress.
- Prevention and precaution, to guide public and private decisions to reduce environmental and social risks.
- Polluter responsibility, through the "polluter pays" principle, which seeks to internalize negative externalities.
- Regulatory proportionality, recognizing that MSMEs require a gradual regulatory treatment, adapted to their operational and financial capacity.

This title also defines key concepts that will enable the technical and legal homologation of the system: corporate sustainability, circular economy, eco-design, sustainable public procurement, national certification, energy efficiency, clean production, institutional scaffolding, among others. Having clear regulatory definitions

avoids interpretative gaps and aligns criteria between public institutions, municipalities, companies and cooperation agencies.

Title II - Economic and Financial Instruments

This title constitutes the operative heart of the Law, as it introduces economic instruments aimed at encouraging the adoption of sustainable practices. The proposed mechanisms include:

Deductions and tax credits for investment in clean technologies: The plan is to allow companies to deduct from income tax a percentage of investments made in efficient machinery, solar panels, waste management systems, environmental certifications and other green technologies.

Accelerated depreciation of green assets: The law proposes to allow investment in environmental assets to be depreciated more quickly, which reduces the initial tax burden and improves the profitability of sustainable projects.

Green credit lines with partial guarantees and first-loss schemes: These lines would be administered by development banks and would facilitate access to credit through state guarantees, reducing the risk perceived by commercial banks. The first-loss scheme, for example, allows the state to absorb the first losses of a green portfolio to stimulate private investment.

Competitive funds for sustainable innovation: This fund would finance projects in digitalization, energy efficiency, eco-design, circular economy, waste management, green technologies and certification processes. The allocation would be competitive and evaluated by independent technical committees.

Technical assistance and business extension: The law proposes to strengthen MSME centers and promote university-business alliances through consulting, incubation, innovation laboratories and sustainability training programs. This assistance is essential to reduce learning costs and facilitate the adoption of new technologies.

This title reflects a paradigm shift from a punitive regulatory model to one based on incentives, access to financing and strategic technical support.

Title III - Institutional and Coordination

The third title establishes a new institutional architecture for corporate sustainability. It proposes the creation of the Interinstitutional Unit for Corporate Sustainability (UISE), responsible for coordinating policies, articulating instruments and ensuring regulatory coherence. This unit would be made up of the governing secretariats of the economy, environment, energy and finance, as well as representatives of local governments and development banks.

In addition, it is proposed to create a National Advisory Council on Business Sustainability, with the participation of business associations, cooperatives, academia, civil society, cooperation agencies and independent experts. This council will make it possible to build evidence-based policies, strengthen transparency and legitimize the decision-making process.

This title also establishes the obligation of annual plans, strategic lines of intervention, progress indicators and vertical coordination mechanisms between municipalities and the central government. Its purpose is to ensure stability, continuity and effective governance.

Title IV - Certification and Sustainable Public Procurement

This degree introduces a fundamental pillar to generate sustainable demand in the market: the National Certification of Business Sustainability, organized in levels (basic,

intermediate and advanced). Its staggered nature allows MSMEs to progressively advance without facing disproportionate burdens.

The certification would include categories related to energy efficiency, waste management, regulatory compliance, responsible labor practices and eco-design. The law also proposes mutual recognition with international standards, which would facilitate the insertion of MSMEs in export value chains.

In the area of public procurement, this title establishes the progressive incorporation of sustainability criteria in government contracting processes. Public institutions should include environmental clauses, sustainable technical requirements and performance-based evaluation mechanisms. It is suggested to start with the sectors with the greatest impact: construction, energy, food, cleaning and transportation.

Title V - Monitoring and Evaluation

Finally, the fifth title creates the National Business Sustainability Information System, which will compile information on certified companies, green investments, regulatory progress, environmental indicators, institutional performance and results of the instruments implemented.

The system will allow the generation of annual public reports, independent audits and impact evaluations. In addition, the law includes regulatory review clauses every three years, in order to update instruments, modify incentives and adjust policies based on evidence and new technological or international trends.

This title recognizes that sustainability is a dynamic process that requires continuous learning and adaptive policies.

Conclusions and Implications

The transition of Honduran MSMEs towards sustainable models requires a legal-economic redesign that aligns incentives, reduces transaction costs and strengthens institutional capacities. A comprehensive approach, embodied in a Business Sustainability Framework Law, can catalyze investment, innovation and formalization, while reducing negative externalities. Regulatory proportionality and technical support are necessary conditions for viability and equity. These elements allow sustainability to operate not as an additional burden for small companies, but as an opportunity for growth, competitiveness and productive resilience.

The findings show that the Honduran regulatory framework faces structural problems: regulatory fragmentation, weak institutional coordination, lack of economic incentives and lack of green financing. In this context, corporate sustainability can only move forward if the State adopts a coherent regulatory architecture that articulates fiscal, financial, informational and governance instruments. The integration of these instruments into a single framework law would reduce regulatory uncertainty, improve administrative efficiency and create favorable conditions for private investment.

The study also shows that MSMEs are highly willing to adopt sustainable practices, provided that there are clear incentives, technical support schemes and accessible financing mechanisms. This indicates that business sustainability does not depend solely on the size or economic capacity of companies, but on the existence of public policies that reduce barriers and facilitate the adoption of new practices. It is therefore essential that policy instruments be proportional to the size of the business and that they include training, technical advice and ongoing support.

Policy implications include: (i) prioritize economic instruments combined with smart regulation; (ii) create a coordinating institutional framework with a mandate and resources; (iii) develop tiered national certification and sustainable public procurement; and (iv) channel green financing with guarantees and technical assistance. These strategic lines are key pillars for advancing towards a more competitive and innovative production model that is consistent with the Sustainable Development Goals.

In institutional terms, the creation of an inter-institutional unit specializing in corporate sustainability would improve coordination between sectors, reduce duplication and promote the coherence of public policies. Similarly, the implementation of sustainable public procurement can generate significant demand for responsible products and services, thus encouraging the transition of thousands of MSMEs towards cleaner and more efficient practices.

Future research should evaluate distributional and sectoral impacts, as well as territorial dynamics. It is necessary to analyze how the proposed instruments would affect each economic sector, and whether they could generate differentiated effects between urban and rural areas. Future lines of research should also examine the role of local governments, the linkage with value chains and the relationship between business sustainability and digitalization, elements that emerged as relevant in the study but require further analysis.

The transition to sustainability also implies recognizing that MSMEs operate in environments of high economic, climatic and social vulnerability. In this regard, a Framework Law should incorporate provisions that strengthen business resilience in the face of external shocks, such as economic crises, natural disasters or fluctuations in supply chains. Integrating sustainability with risk management will enable companies not only to adopt responsible practices, but also to have tools to anticipate, mitigate and recover from adverse events. This is especially relevant in Honduras, where exposure to climatic phenomena and the informality of the business fabric demand preventive and adaptive regulatory frameworks capable of protecting productive continuity and employment.

Furthermore, evidence suggests that corporate sustainability cannot be consolidated without a cultural change that promotes values of accountability, efficiency and transparency in both the public and private sectors. For this reason, the Framework Law must incorporate awareness-raising, education and continuous training strategies aimed at developing capabilities in sustainability, innovation and regulatory compliance. The cultural transformation required involves promoting a long-term vision, reinforcing business ethics and strengthening trust between the State, companies and citizens. In this process, universities, research centers, trade unions and civil society organizations play a decisive role in generating knowledge, disseminating good practices and building an economically responsible and environmentally conscious citizenry.

Overall, the findings of this study reinforce the idea that corporate sustainability must become a structural axis of Honduran economic policy. MSMEs have enormous potential to contribute to more inclusive and environmentally responsible development, provided that the regulatory environment provides them with clear incentives, certainty and institutional support to undertake the transition.

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