

The Entrepreneurship as a Strategy for Employment Generation in Crisis Situations

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Abstract

This research delves into the importance of entrepreneurship in crisis situations, focusing on a detailed analysis of two of the most significant events in terms of economic and social repercussions that have taken place in Ecuador, such as: The earthquake of April 16, 2016 that affected the provinces of Manabí and Esmeraldas and the COVID 19 pandemic, a global crisis that also affected the country. The methodology used to develop this research combined qualitative and quantitative approaches, using a transversal-correlational design and considering two temporal events for data collection. Direct observation was used as research techniques, which made it possible to monitor the ventures that emerged in response to both events. These data were complemented with a survey applied to 353 inhabitants of Pedernales. The results show that entrepreneurship served as a mechanism to process economic crises by reallocating resources and generating sources of income, allowing them to develop creativity and innovation within businesses. In both crises, different patterns were evident; however, in both crises the implementation of formal and informal enterprises predominated. To guarantee the sustainability of these ventures that were generated in the context of crisis, it is concluded that the implementation of strategies is required to remain competitive in the market.

Keywords: *Entrepreneurship, Crisis, Earthquake, Pandemic, Entrepreneurs.*

Introduction

Entrepreneurship has become a fundamental strategy for economic development in any context, as it allows for the generation of employment and economic resources. In times of crisis, such as economic recessions or adverse global situations, where many companies reduce their operations and close their businesses, entrepreneurship acts as a resilient mechanism by strategically reallocating resources. Additionally, by creating a new business or company, it offers employment opportunities for those who, in one way or another, may have faced difficulties in accessing the labor market.

For authors like Stevenson (2000), entrepreneurship is pursuing opportunity beyond the resources available to the entrepreneur at that time. Peter Drucker, in his book "Innovation and Entrepreneurship," mentions that the entrepreneur always seeks change, responds to it, and exploits it as an opportunity, also relating entrepreneurship to innovation, which is the means to exploit change and create a different project (Drucker, 2014).

It should be considered that for entrepreneurship to take place, a person called an entrepreneur is needed. From the point of view of different authors, being an entrepreneur means having the ability to create something new or give a different use to something that already exists (Fundación Acción contra el Hambre, 2013), thus generating a positive impact on the person's own life and the community in which they develop (Formichella, 2004).

Authors like Monsalve (2014) agree that an entrepreneur is someone who identifies opportunities and creates new ways of acting or new possibilities of doing, which they subsequently put into practice.

Despite the challenge posed by modern and dynamic societies, the entrepreneur must be willing to work with an idea and make it a reality, focusing on what initially seems unattainable, having enough flexibility to adapt their project to the instability of the outside world. Drucker (2014) mentions that entrepreneurship is

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not easy, a great need for achievement, entrepreneurial attitude, self-confidence, and high self-esteem are required to discover the opportunities offered by the market.

For Guédez (2003), the entrepreneurial person must have a series of characteristics that guide and enable personal development, including creativity, emotional security, autonomy and independence, need for achievement, need for power, locus of control, perseverance, and risk perception. The simple fact of taking the risk of entrepreneurship means that the person possesses what is known as an entrepreneurial spirit, which, according to Stoner, Freeman, & Gilbert (1996), occurs when a person or group of people start a new business.

But what makes people decide to become entrepreneurs? According to the United Nations Conference on Trade and Development, a United Nations agency for trade and development, based on McClelland's need theory, identified three possible causes that are seconded by Delgado (2017):

1. The need for achievement, which refers to the effort to excel and demonstrate that one is capable of achieving what one sets out to do;
2. Need for affiliation, which motivates sociability, enhancing relationships with people and the environment; and
3. Need for power, in order to influence others.

Consequently, like all human beings, the entrepreneur has basic psychological needs. However, it is the need for achievement that determines the person's attitudes and actions (Alcaraz, 2011).

There are other ways to classify entrepreneurs according to Alcaraz (2011): the reason why they undertake, which includes those ventures that seek to capitalize on a pre-existing market opportunity, that is, these entrepreneurs identified an unmet need or a niche market and seek to take advantage of it. On the other hand, there are entrepreneurs who start their projects out of necessity or because they are going through an adverse situation, either because they were fired, due to the scarce availability of jobs or simply because they seek to become independent and generate their own source of income. Hence, one of the main drivers of entrepreneurship is need.

On the University of La Sabana's website, it is mentioned that entrepreneurship out of necessity consists of launching a business idea quickly, with less formality and oriented towards generating income in the short term. In contrast, opportunity-driven entrepreneurship is based on market research, is based on an innovative idea and has a well-defined business model, with the aim of satisfying customer needs (Universidad de La Sabana, s.f.)

Based on the foregoing, in contexts where employment opportunities are limited, many people choose to start their own businesses as a way to generate income and ensure their economic livelihood. In fact, according to the Global Entrepreneurship Monitor (GEM), 82.71% of entrepreneurships in Ecuador are motivated by the scarcity of employment (Lasio et al., 2020).

Ecuador, as mentioned by Santander & Ordóñez (2022), has one of the highest entrepreneurship rates in Latin America and shows its best indicators in necessity-based entrepreneurship, which tends not to have a great impact on the country's economy, in addition to the fact that these companies may have a short life cycle.

And due to these antecedents, the present research is the result of the project "Analysis of the consumer behavior of the lower middle class in the Canton of Pedernales, after the earthquake of April 16, 2016" executed in the Pedernales Extension of the Laica "Eloy Alfaro" University of Manabí.

This project delves into the importance of entrepreneurship in crisis situations, focusing on a detailed analysis of two of the most significant events in terms of economic and social repercussions that have taken

place in Ecuador, such as: The earthquake of April 16, 2016, which severely affected the provinces of Manabí and Esmeraldas; and the COVID-19 pandemic, a global crisis that also affected the country.

Both events left a deep mark on the infrastructure and well-being of the affected families, triggering a series of important economic challenges for the region, with entrepreneurship being a crucial element for recovery and adaptation to new circumstances. Therefore, this study aims to analyze how entrepreneurship has acted as a catalyst in the economic reactivation of the canton of Pedernales in times of crisis.

Development

Entrepreneurship and its importance in the context of a crisis

Entrepreneurship and its importance in the context of a crisis Entrepreneurship in times of crisis or recession is also included in the study of entrepreneurship. When there are needs or adverse circumstances, people are motivated to start some kind of economic activity to generate income in the short term, allowing them to take greater financial and professional control, especially in times of labor uncertainty.

Authors such as Peris et al. (2014) link the crisis with the ability to identify opportunities, with an innovative mindset being fundamental to adapting to the new conditions and challenges of the market. On the other hand, there are those who argue that the economic slowdown has a negative impact on the entrepreneurial mindset, reducing the ability to discover opportunities and innovation (Rodríguez & Zapata, 2023). The Royal Spanish Academy Dictionary defines a crisis as a profound and significant change in a process or situation. Therefore, it can be affirmed that entrepreneurship is essential at these times, as it promotes innovation, drives job creation, strengthens economic resilience, and facilitates adaptation to new circumstances.

For Miranda (2014), entrepreneurship serves as a mechanism for processing economic crises by reallocating resources. This means that many people who had never thought about it before become entrepreneurs out of necessity by generating their own income and for their families, that is, they move from the typical opportunity entrepreneurship to social entrepreneurship that solves the same social and environmental problems that are generated by the crisis (poverty, unemployment, pollution, etc.), confirming some theories that propose that the best innovations have been initiated in times of crisis.

However, it is unlikely, according to Miranda (2014), that ventures that are generated in times of crisis will become innovative businesses that achieve high growth and enter international markets.

In Ecuador, there have been crises due to natural and health events, so this study analyzes and compares two important crises that occurred in the canton of Pedernales, province of Manabí, at two different points in time. The first characterized by great human and material losses, considered the most catastrophic natural event of this century so far, and the second a global health crisis that drastically changed the way we live. The following provides more information on each crisis respectively:

Earthquake of April 16, 2016

On April 16, 2016, at exactly 18:58, Ecuador was shaken by a devastating earthquake of magnitude Mw 7.8, with a maximum intensity of IX according to the European Macroseismic Scale (EMS-98). This earthquake left a deep mark of destruction, especially in the coastal regions of the north and center of the country. According to data from the (Geophysical Institute - EPN, 2020), the devastation caused by this natural event resulted in an alarming number of victims. According to official reports provided by the authorities, the earthquake resulted in the unfortunate loss of around 676 human lives, leaving more than 6,274 people injured and approximately 80,000 individuals displaced, seeking shelter in precarious conditions (World Bank, 2021). The magnitude of the disaster was also reflected in the infrastructure and built environment, where thousands of productive, tourist, commercial buildings, and homes were reduced to rubble or became uninhabitable, generating a housing crisis of considerable proportions. The economic losses, estimated by the authorities at around three billion dollars, illustrate the significant impact on the country's economic

fabric. The government estimated that reconstruction costs for the affected areas amounted to 3.3 billion dollars, mainly in the social, productive, and infrastructure sectors, in order of impact. The impact of the earthquake caused the destruction of approximately 21,823 jobs and generated 515 million dollars in losses (in terms of lost flows) in the productive sector according to the World Bank. Specifically, in the productive sector, the cost of the impact was US\$676.5 million (considering damages, loss of income, and additional expenses), based on the post-disaster survey conducted by the INEC (Molina et al., 2017). If the cost of the impact on the informal productive sector is included, the amount rises to US\$1,032 million. In Manabí and Esmeraldas, according to data provided by the Internal Revenue Service (SRI), until before the earthquake these two coastal provinces had 185,304 such businesses, but the earthquake left only 15% of these businesses standing (El Diario, 2018). Thanks to the policies implemented by the government, a total of 60,711 small and medium-sized businesses related to the commercial, tourism, and agricultural sectors managed to reactivate in 21 cantons (Alcívar et al., 2019). According to research developed by Serrano-Valdiviezo et al. (2018), the 16-A earthquake influenced the emergence of new informal micro-enterprises; of which 71.96% already existed at the time of the natural event. As a result of this event, informal businesses underwent significant changes, as new businesses are seen in the streets and avenues and the growth of those that already existed. The total of the micro-enterprises registered corresponds to the sale of food and groceries, followed by the sale of clothing and similar items and catalog sales.

COVID-19 Pandemic

On December 31, 2019, a new virus caused by a coronavirus called SARS-CoV-2 was spreading around the world, triggering the worst global health crisis according to the World Health Organization, WHO (2023). Although epidemics have been a constant in the history of humanity, the arrival of COVID-19 shook the foundations of 21st-century society, posing unprecedented challenges to health systems, the global economy, and generating new ethical challenges on how to effectively combat this virus (Ochoa Escobar et al., 2021).

In the global context, the COVID-19 pandemic has triggered situations that have drastically transformed the way we live, work, and relate to each other. Faced with this global health crisis, entrepreneurship emerged as a crucial element for adaptation and economic recovery. Entrepreneurs have demonstrated their ability to adapt and be agile by presenting innovative solutions to the market, thus helping to overcome the challenges posed by the pandemic.

According to data provided by the Central Bank of Ecuador, the Covid-19 pandemic has had a significant impact on the country's economy. Between March and December 2020, the destruction of 532,359 jobs and a decrease in income of USD 16.382 million were recorded. These total losses are equivalent to 16.6% of the Gross Domestic Product (GDP) in 2020, in current values. Of which, 78.1% of the losses or, what is the same, USD 12,791 million corresponds to the private sector. While the remaining 21.9% or the equivalent of USD 3,591 million was from the public sector.

The greatest job losses have been recorded in accommodation and food services, commerce, construction, transportation, and storage. On the other hand, 4,648 jobs were created in the oil and mining industries, and in aquaculture and shrimp fishing.

In the private sector, the activities hardest hit by the health emergency have been commerce, with a reduction of USD 5,515 million compared to 2019. This is followed by tourism, with a fall of USD 1,810 million, and manufacturing, with a decrease of USD 1,717 million. On the other hand, in the public sector, health has faced the greatest loss, with USD 2,886 million less, according to the BCE.



Figure 1. Rate of change of Gross Value Added by industry.

Source: Ecuadorian National Customs Service (2020)

Regarding entrepreneurship, research conducted by Useche et al. (2021) highlights that the Ecuadorian economy has experienced significant imbalances in the face of a systemic crisis, also affecting the business sector. This is mainly attributed to difficulties in accessing inputs, the decrease or scarcity of skilled labor, obstacles to obtaining financing, and the lack of adjustment of production processes to urgent needs, which hinders their remote or automated operation.

The Global Entrepreneurship Monitor ECUADOR 2019-2020 report reveals that 53% of ventures generating sales have ceased operations. Additionally, 84% of entrepreneurs have seen their cash flow decrease and 75% have reduced their productive activity (Lasio et al., 2020). The research by López & Rivera (2020) indicates that 80% of ventures have been severely hit by COVID-19, with their income reduced by more than two-thirds, especially those with a shorter track record.

Another additional fact is that most of the ventures that emerged in the context of the pandemic were motivated by necessity. This phenomenon is supported by Morán (2020) who corroborates that these ventures, emerging out of necessity, operate with limited budgets. Likewise, the vast majority of these ventures do not survive the first few months of operation, and 99% of them do not generate employment, as they are self-sustaining.

For Calá et al. (2015), a large number of SMEs operate in the informal sector due to the high costs of bureaucratic procedures.

Post-crisis entrepreneurship

The crises generated by the earthquake of April 16th and the COVID-19 pandemic have caused significant changes in the way Ecuadorians acquire products, driven both by the need for supplies and by the decrease in economic income (Peñaherrera & Berrones, 2021). This phase of adaptation to the new normal has led to the emergence of new ventures as a way to cope with the crisis and has been a solution for many families who lost everything or who needed a way to generate economic income.

Although the crises studied differ in nature, both have resulted in a notable increase in the number of ventures, both formal and informal. However, a deeper analysis of the future needs of entrepreneurs is required. According to (Martínez & Bañón, 2020), entrepreneurs require institutional support to establish or maintain their organizations after the crisis caused by COVID-19. When faced with significant challenges such as the need for digitalization, the scarcity of financing, the decrease in human capital, and the

identification of opportunities as potentially viable businesses. This institutional support is essential to guarantee the resilience and sustainable development of ventures in a post-crisis scenario.

Methods

This research, conducted within the framework of the project: "Analysis of the behavior of low-middle class consumers in the canton of Pedernales, post-earthquake of April 16, 2016," focused on examining the inhabitants of the canton of Pedernales, in the province of Manabí in Ecuador. The methodology adopted in this study combined qualitative and quantitative approaches, using a cross-sectional correlational design and considering two temporal events for data collection.

During both events, consistent research techniques were applied, such as direct observation, which allowed for the monitoring of ventures that emerged as a response to both events. These data were complemented by a survey administered to 353 inhabitants of Pedernales, structured with multiple-choice questions and Likert scales. To ensure the validity of the survey, it underwent a validation process by experts to ensure the relevance and effectiveness of the questions.

The reliability of the data collection instrument was evaluated through the statistical calculation of reliability using SPSS 25 software. The results revealed a relatively high reliability, with a value of 0.893. ¹This value indicates that the instrument is consistent and stable, providing reliable responses.

Results and Discussion

On the one hand, the results of the direct observation technique reveal that after the crises experienced in the canton of Pedernales, micro-enterprises and informal ventures emerged as alternatives for those who lost their real estate due to the earthquake of April 16, 2016. The total or partial loss of infrastructure led people to implement alternative measures, improvising in the few spaces in good condition within their homes. Others started street vending due to the existing infrastructure limitations. It is important to highlight that these ventures did not emerge immediately, as the response at both the personal and government levels to the crisis was delayed, being an unexpected event. If we take as reference the evolutionary stages of a crisis proposed by Cohen, it can be affirmed that this occurred in the adaptation and response stage.

On the other hand, in the context of the COVID-19 pandemic, on the contrary, given the restrictions on mobility in the country, the appearance of new ventures was observed. These ventures focused mainly on the implementation of home delivery services, including essential products, prepared food, medicines, cleaning products, among others. These findings contrast with the results obtained from the survey applied to the inhabitants of the Canton of Pedernales. According to the responses, the sectors that experienced significant growth during the earthquake of April 16 were, with 23.1%, the hardware sector (hardware stores, sale of construction materials, etc.), followed by accommodation businesses (hotels, hostels, pensions, cabins, hostels). Other highlighted sectors were food and beverage establishments (restaurants, cafes, bars, etc.) with 17.8%, grocery stores (neighborhood stores, minimarkets, etc.) with 15.5%, the pharmaceutical sector with 9.5%, delivery services with 6.4%. Additionally, a minority percentage stated that no sector experienced significant growth. During the COVID-19 pandemic, a notable growth was evident in several economic sectors. In particular, delivery services led this increase with 27.6%, followed by the pharmaceutical sector (pharmacies) with 23.7%. Likewise, grocery stores (neighborhood stores, minimarkets, etc.) with 16.1% and food and beverage establishments (restaurants, cafes, bars, etc.) with 13.2%. Other sectors to a lesser extent were accommodation businesses and the hardware sector. The specific details of these sectors are presented in detail in Table 1.

Table 1. Sectors that experienced growth after the April 16th earthquake and the COVID-19 pandemic

Earthquake Sectors	Sectors	Responses	Percentage of Responses	Percentage of Cases
	Lodging businesses (hotels, hostels, pensions, cabins, shelters)	211	21.2%	67.4%
	Food and beverage establishments (restaurants, cafeterias, bars, etc.)	177	17.8%	56.5%
	Grocery stores (neighborhood stores, minimarkets, etc.)	154	15.5%	49.2%
	Pharmaceutical sector (pharmacies)	95	9.5%	30.4%
	Hardware sector (hardware stores, sale of construction materials, etc.)	230	23.1%	73.5%
	Delivery services (express errands)	64	6.4%	20.4%
	No sector	65	6.5%	20.8%
Total		996	100.0%	318.2%

Pandemic Sectors	Sectors	Responses	Percentage of Responses	Percentage of Cases
	Lodging businesses (hotels, hostels, pensions, cabins, shelters)	78	8.6%	24.9%
	Food and beverage establishments (restaurants, cafeterias, bars, etc.)	120	13.2%	38.3%
	Grocery stores (neighborhood stores, minimarkets, etc.)	147	16.1%	47.0%
	Pharmaceutical sector (pharmacies)	216	23.7%	69.0%
	Hardware sector (hardware stores, sale of construction materials, etc.)	65	7.1%	20.8%
	Delivery services (express errands)	252	27.6%	80.5%
	No sector	34	3.7%	10.9%
Total		912	100.0%	291.4%

These data show an increase of more than 20% in the number of ventures that emerged after the crises in the canton of Pedernales, as confirmed by 40.3% of respondents when referring to the perception regarding the increase in the number of ventures as an alternative to face the crisis.

Among the emerging trends after the crises, online sales stand out with 29.1%. Likewise, home deliveries experienced a considerable increase with 24.5%. Additionally, respondents point out the use of new digital channels to promote the brand with 15.7% and the implementation of more effective advertising strategies. Other trends with a lower percentage are business collaborations and alliances, the implementation of a

sustainability and social responsibility approach, and the diversification of the product portfolio, as can be seen in Table 2.

Table 2. Observed trends in ventures after the crises.

Trends	Responses	Percentage of Responses	Percentage of Cases
Online sales	261	29.1%	74.1%
Home delivery	220	24.5%	62.5%
Diversification of product portfolio	52	5.8%	14.8%
Use of new digital channels to promote the brand	141	15.7%	40.1%
More effective advertising strategies	110	12.3%	31.3%
Business collaborations and alliances	58	6.5%	16.5%
Focus on sustainability and social responsibility	55	6.1%	15.6%
Total	897	100.0%	254.8%

Table 3 shows that 34.7% of respondents consider that in crisis situations it is a priority to provide financial advice to entrepreneurs. In second place, a significant 30.20% consider that training and education are essential for this group. Similarly, access to networking with 14.4% and government subsidies and aid with 14.4%.

Table 3. Types of support required by entrepreneurs during crises.

Type of support for entrepreneurs	Responses	Percentage of Responses	Percentage of Cases
Financial advice	246	34.7%	69.9%
Training and education	214	30.2%	60.8%
Access to networking	146	20.6%	41.5%
Government subsidies and grants	102	14.4%	29.0%
Total	708	100.0%	201.1%

Another important finding from the study is that entrepreneurs should implement actions to remain competitive in the market, as many of them started their businesses out of necessity. Among the most important actions to be implemented, the innovation of processes and services stands out with 17.20%, followed by the reinvention of their business model with 16.3%. Some argue that it is necessary to reinforce marketing and advertising strategies, strengthen the presence on digital platforms, and improve financial management. Other options with a lower percentage include evaluating the feasibility of changing location, expanding to other markets, and fostering collaboration with other ventures (see Table 4).

Table 4. Actions that ventures should implement after a crisis.

Actions	Responses	Percentage of Responses	Percentage of Cases
Reinvent their business model	177	16.3%	50.3%
Innovate their processes and services	187	17.2%	53.1%
Expand to other markets	89	8.2%	25.3%
Evaluate the viability of changing location	103	9.5%	29.3%

Consider closing if they are not profitable	54	5.0%	15.3%
Reinforce marketing and advertising strategies	141	13.0%	40.1%
Improve financial management	120	11.0%	34.1%
Strengthen the presence on digital platforms	135	12.4%	38.4%
Foster collaboration with other businesses	81	7.5%	23.0%
Total	1087	100.0%	308.8%

The research conducted shows that entrepreneurship is a crucial pathway for generating employment and income for individuals in crisis contexts, fostering creativity and innovation within businesses. However, it is essential to note that ventures founded on opportunity are more likely to succeed, as they seek to capitalize on market openings.

Despite the adverse conditions in the region, some ventures have managed to sustain their projects and implement significant innovations, particularly in the digital realm, in response to the crises. According to García-Madurga et al. (2021), information and communication technologies have been prevalent in this context, giving rise to new operational models in businesses, both in the context of the earthquake and the pandemic. This is especially reflected in the surge of digital marketing, with a specific focus on promotion, sales, and delivery operations of goods and services. Additionally, the integration of digital interconnection devices has been observed in both production processes and interactions with suppliers.

In this sense, numerous ventures have emerged, with home delivery services using mobile applications being particularly prominent. These ventures focus on the commercialization and sale of products, leveraging technology, digital platforms, and strategic collaborations and alliances.

Another important aspect is that when discussing entrepreneurship, one should not only consider economic activities but also those behind them. Interestingly, it has been found that women are at the forefront of entrepreneurship. As García et al. (2019) argue in their study, women have slightly surpassed men in entrepreneurial intentions in Ecuador.

Conclusions

This study includes two events for the study of entrepreneurship in which the people of Pedernales specifically have had to face their difficult situations to generate income. Some entrepreneurs were born out of necessity and their ventures ended once they found employment. Perhaps due to a lack of the necessary resources for the venture to grow, they have hardly been able to sustain them. Other entrepreneurs have probably had the soul of an entrepreneur and despite the adversities their businesses have been able to be more sustainable over time by adapting to changes and using innovation. Therefore, based on the above, the following can be concluded taking into account the natural event and the global health event that the city of Pedernales in the Province of Manabí has experienced:

- The government could implement policies to support entrepreneurs who are created out of necessity.
- New entrepreneurs should have the motivation to resort to courses that allow them to manage or control resources correctly.
- A study and data collection should be carried out of entrepreneurs who were born after the crises experienced in Ecuador.

- Local organizations such as municipalities or prefectures should aim to provide local support to those who undertake entrepreneurship because it is a way to activate the economy not only in Pedernales but also nationally.
- Universities should be the ones who can provide knowledge support to entrepreneurs in their community.

References

- Alcaraz, R. (2011). *The successful entrepreneur* (4th ed.). Mexico: McGraw-Hill.
- Alcívar, B., Zamora, Y., Montesdeoca, M., & Loor, Y. (2019, January 10). Analysis of the proposals for economic reactivation for the tourism sector of Manabí, Post 16 A. <https://www.redalyc.org/journal/5885/588561543010/html/>
- Action Against Hunger Foundation. (2013). *The entrepreneur and the business idea*. Spain.
- Calá, C. D., Arauzo-Carod, J. M., & Manjón-Antolín, M. (2015). The determinants of entrepreneurship in developing countries.
- Delgado, A. (31 May 2017). *Entrepreneurs*. Retrieved on 03 June 2018, from <http://www.emprendedores.es/crear-una-empresa/competencias-emprededor-motivacion-unctad>
- Drucker, P. (2014). *Innovation and Entrepreneurship*. London : Routledge.
- El Diario. (15 April 2018). *Entrepreneurs re-emerged*.
- Formichella, M. (2004). *The concept of entrepreneurship and its relationship with education, employment and local development*. Buenos Aires: National Institute of Agricultural Technology .
- García, Y., Jiménez, M., & Escamilla, S. (2019). *Female Entrepreneurship in Ecuador | Publicando Magazine*. <https://revistapublicando.org/revista/index.php/crv/article/view/1094>
- García-Madurga, M.-Á., Grilló-Méndez, A. J., & Morte-Nadal, T. (2021). The adaptation of companies to the COVID reality: A systematic review. *Challenges*, 11(21), Article 21. <https://doi.org/10.17163/ret.n21.2021.04>
- Guédez, V. (2003). *Learning to learn*. Caracas: Planeta.
- Geophysical Institute - EPN. (20 of 10 of 2023). <https://www.igepn.edu.ec/>. Obtained from <https://www.igepn.edu.ec/interactuamos-con-usted/1810-four-years-after-the-pedernales-earthquake-a-testimony-on-the-seismic-danger-in-ecuador>
- Geophysical Institute - EPN. (2020, April 16). Four years after the Pedernales Earthquake: A testimony on the seismic hazard in Ecuador - Geophysical Institute - EPN. <https://www.igepn.edu.ec/interactuamos-con-usted/1810-cuatro-anos-despues-del-terremoto-de-pedernales-un-testimonio-sobre-el-peligro-sismico-en-el-ecuador>
- INEC. (2023). *Statistical Registry of Companies 2022*.
- Lasio, V., Amaya, A., Zambrano, J., & Ordeñana, X. (2020). *Global Entrepreneurship Monitor Ecuador 2019/2020*.
- Lasio, V., Guido Caicedo, X. O., & Samaniego, A. (2017). *Global Entrepreneurship Monitor , Ecuador 2016 . Guayaquil : Espae - Espol .*
- López, G., & Rivera, J. (2020). From theory to practice: Entrepreneurship in Ecuador in times of COVID 19. *Research and Development*, 12(1), Article 1. <https://doi.org/10.31243/id.v12.2020.982>
- Martínez, C. N., & Bañón, A. R. (2020). Entrepreneurship in times of crisis: An exploratory analysis of the effects of COVID-19. *Small Business International Review (SBIR)*, 53-66.
- Miranda, M. S. P. (2014). Entrepreneurship in times of crisis. *Economic Observatory*, 80, 2-3. <https://doi.org/10.11565/oe.vi80.130>
- Monsalve, J. E. (2014). *Youth, talent and entrepreneurial profile*. Madrid: Youth Institute.
- Molina, A., Bello, O., & Benítez, D. (2017). Estimating the costs of a disaster. The cost to the productive sector of the April 2016 earthquake in Ecuador: A methodological approach.
- Morán, R. (2020, June). *On the Organic Law of Entrepreneurship and Innovation*. 15-17.
- Naranjo, E. O. (2020). Impact of COVID-19 in Ecuador: From Inaccurate Data to Excess Deaths. *Ecuadorian Journal of Neurology*, Vol. 29, No. 2.
- Ochoa Escobar, L. M., Litardo Uvidia, E. D., Ortega de la Cadena, E. S., Ochoa Escobar, L. M., Litardo Uvidia, E. D., & Ortega de la Cadena, E. S. (2021). The economic crisis in the face of the COVID-19 pandemic in Ecuador, 2021 period. *Contemporary dilemmas: education, politics and values*, 9 (SPE1). <https://doi.org/10.46377/dilemas.v9i.3025>
- Peñaherrera, C. C., & Berrones, J. S. (2021). What did we learn from the April 2016 earthquake? The Ecuadorian government's response to the emergency. *Estudios de la Gestión: Revista Internacional de Administración*, 10, Article 10. <https://doi.org/10.32719/25506641.2021.10.2>
- Peris, M., Fuster, V., & Devece, C. (2014). *Entrepreneurship and Innovation in a Context of Crisis*. Springer Books, 1-10.
- Rodríguez, A., & Zapata, Á. (2023). The crisis as a scenario for the emergence of social entrepreneurship: The case of the Universidad del Valle. *Sociedad y Economía*, 41, 121-142.
- Santander, F., & Ordóñez, A. L. (2022, April 1). Dynamics of entrepreneurship for development | CIENC IAMATRIA. <https://www.cienciamatriarevista.org/ve/index.php/cm/article/view/702>
- Serrano-Valdiviezo, M. P., Giler-Giler, M. A., Pinargote-Pinargote, H. M., Rengel-Jiménez, W. E., & López-Landa, D. L. (2018). Informal micro-enterprises led by women after the 16-A earthquake in the northern area of Manabí, Ecuador. *Journal of the Faculty of Agronomy of the University of Zulia*, 35(3), Article 3.

- Serrano-Valdiviezo, M. P., Giler-Giler, M. A., Pinargote-Pinargote, H. M., & López-Landa, W. E.-J. (July-September, 2018). Informal micro-enterprises led by women after the 16-A earthquake in the northern area of Manabí, Ecuador. *Rev. Fac. Agron. (LUZ)*, 365-386.
- Stevenson, H. H. (2000). Why entrepreneurship has won! Coleman White Paper.
- Stoner, J., Freeman, E., & Gilbert, D. (1996). *Administration*. Mexico: Pearson Education.
- Toapanta, G., Paucar, A., Chango, M., Córdova, A., Guerrero, M., & Cedeño, D. (2018). The entrepreneurial student at the university as an important factor of change in society. *Didasc@lia: Didáctica y Educación*.
- Universidad de La Sabana. (n.d.). From entrepreneurship by necessity to entrepreneurship by opportunity. Retrieved October 18, 2023, from <https://www.unisabana.edu.co/portaldenoticias/al-dia/del-emprendimiento-por-necesidad-al-emprendimiento-por-oportunidad/>
- Useche, M. C., Pereira, M. J., & Barragán, C. A. (2021). Challenges and challenges of Ecuadorian entrepreneurship, transcending the post-pandemic. *Retos*, 11(22), 271-286. <https://doi.org/10.17163/ret.n22.2021.05>.
- Vega Falcón, V. S. (2021). Impact of Covid-19 on the Ecuadorian economy. *University and Society Journal* 13(S1), 536-544.
- WHO. (2023, March 28). Basic information on COVID-19. <https://www.who.int/es/news-room/questions-and-answers/item/coronavirus-disease-covid-19>.
- WHO. (March 18, 2023). Basic information on COVID-19. Obtained from <https://www.who.int/:https://www.who.int/es/news-room/questions-and-answers/item/coronavirus-disease-covid-19>
- World Bank. (2021, April 27). Five years after the earthquake, Ecuador continues to work on its resilience to disasters. World Bank. <https://www.bancomundial.org/es/news/feature/2021/04/27/a-cinco-a-os-del-terremoto-ecuador-sigue-trabajando-en-su-resiliencia-frente-a-desastres>