



Tax reforms and activity indicators in the aquaculture industry in the province of Santa Elena, 2018 - 2022

Reformas tributarias e indicadores de actividad en la industria acuícola de la provincia de Santa Elena, 2018 – 2022

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Abstract

This article aims to evaluate the impact of tax reforms on the activity indicators of the aquaculture industry in the province of Santa Elena, 2018 - 2022. Several techniques and tools were used to analyze the business sector, highlighting the importance of financial evaluation, and tax planning in business decision making; in addition, the relationship between income tax data and previous regimes was analyzed. A descriptive type of research was used in the study by means of the desegregation of variables, which allowed the situational diagnosis, on the other hand, correlational research was used by means of the analysis of indicators to analyze the variable of interest.

Keywords: Tax incentives, activity indicators, tax planning, tax reform, corporate profitability.

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Resumen

El presente artículo tiene como objetivo evaluar la incidencia de las reformas tributarias en los indicadores de actividad de la industria acuícola en la provincia Santa Elena, período 2018 - 2022. Se emplearon varias técnicas y herramientas para analizar el sector empresarial, resaltando la importancia de la evaluación financiera, y la planificación tributaria en la toma de decisiones empresariales; además, se analizó la relación entre los datos de impuesto a la renta y los regímenes anteriores. En el estudio se empleó una investigación de tipo descriptiva mediante la desagregación de variables, además permitió realizar el diagnóstico situacional, por otro lado, se empleó la investigación correlacional mediante el análisis de indicadores para analizar las variables de interés.

Palabras clave: Incentivos tributarios, indicadores de actividad, planificación tributaria, reforma tributaria,

Introduction

Cabrera (2021) indicates that the analysis of financial ratios is a strategic tool in organizations, allowing the visualization of ratios such as: indebtedness, solvency, liquidity and profitability. These indicators are necessary for making decisions related to profitability, since comparisons can be made between fiscal years, which helps financial analysis in companies where annual production is variable, as in the case of shrimp companies.

Proper financial management focuses on the correct allocation of monetary resources from various sources such as shareholders, bank loans, among others. Due to the nature of the business line of shrimp companies, they must invest in land and technologies that require a solid financial control, which is a weakness that affects the preparation of budgets and financial projections, putting at risk the attraction of new investors, and not being sufficiently prepared before the control agencies (Brigham and Ehrhardt, 2018).

According to Chávez and Gamboa (2017) in the Latin American context, three important aspects are addressed: processes that help to correctly analyze financial indicators, strategy formulation, and external diagnosis and implementation of strategies. These aspects, ranging from contributing to job growth to achieving sustainable growth, help to identify indicators that do not favor the company and can lead to its extinction.

In Latin America, there is concern regarding the tax systems used in the countries of the region Baquerizo (2022). These systems, for the most part, fail to effectively address disparities in income and expenditures, which perpetuates inequality gaps Altamirano (2017). Moreover, depending on the type of government, there is a tendency to make populist decisions in this area, either by reducing or increasing tax collection through poorly informed reforms, which does not contribute to establishing a fair balance in this aspect. In Latin America, the marine aquaculture sector, according to Dávila et al. (2020) is an important representative of world food production, constituting a food source of protein, employment and income, produced mainly in Asia, Central and South America,

generating wealth, development and economic growth in the countries where this activity is developed.

In the Ecuadorian provinces where this type of activity is developed, León et al. (2020) indicate that it has been strengthened by distributing a high value product in both national and international markets, so that shareholders in this sector have decided to invest in planting land together with the implementation of advanced technology, thus achieving better yield and quality.

However, the National Chamber of Marine Aquaculture states that the production of Ecuadorian shrimp is 24% more expensive compared to the costs of 2021 (CNA, 2023), reports that there are important factors such as the elimination of the deferred price of diesel that makes the production of this crustacean more expensive by 0.16 cents per pound, which affects 82% of companies engaged in marine aquaculture. To this should be added that the leaders of different guilds in this sector state that during the presidency of Guillermo Lasso, Executive Decree 614 seeks to reduce diesel subsidies, but this reduction affects both small and medium shrimp farmers in the country, as reported by El Universo (2022).

The increase in production costs of this crustacean is due to the increase in security measures. El Universo (2023) states that there are losses of approximately \$150,000 due to criminal acts. This research focuses on the analysis of tax reforms and activity indicators of the aquaculture industry in the province of Santa Elena, since the main industry in this sector is the shrimp industry. The shrimp sector is one of the most important for Ecuador, since its economic income represents 24.8% of exports. Given the high demand and acceptance of the shrimp product, its relevance at the national level is constantly growing.

At the local level, companies located in the province of Santa Elena are affected by tax reforms to the point that they can increase or decrease their taxable base for IR income tax, as there have been countless changes and reforms in recent years. For Rodríguez, (2018), the impacts due to tax reforms have generated discomfort in taxpayers mainly due to the constant modifications and reforms that, from his point of view, are not implemented with an adequate socialization or training process by the Internal Revenue Service of Ecuador (S.R.I) as there are gaps in the knowledge of law in the liquidation of taxes, especially in the tax declaration that is triggered by the taxpayers when omitting these tax obligations that in many occasions lead to fines and sanctions by the control body.

The shrimp industry is one of the most important for the province of Santa Elena, for the local economy represents one of its major sources of income. However, it also feels the effects of the tax law, affecting them negatively. According to data provided by the Internal Revenue Service of Santa Elena in the year 2020, most of the small and medium-sized companies became part of the micro-enterprise regime, while by the year 2022 many of them became part of the general regime, acquiring more obligations. Only a few accounts managed to remain in the previous regime, which makes the owners of this business sector feel uncertainty due to the constant changes in the tax law, affecting

their financial ratios, which are not constant, nor do they remain balanced between the different fiscal periods (Valladares et al., 2021).

Cordoba (2017) indicated that, at the national level, there have been changes in tax reforms and the implementation of new regimes since 2017 when the income tax was increased from 22% to 25%, applicable to income generated by corporations and creating some benefits to other taxpayers. In 2019 with the arrival of the COVID-19 pandemic, the micro business regime was created, which directly affected micro and small businesses. For the year 2021 a new regime called RIMPE (tax regime for micro and popular businesses) was implemented, which led to the elimination of the RISE taxpayer (simplified tax regime). Against this background, shrimp companies in Ecuador must be prepared for changes in tax policies in the face of possible changes related to external factors or the arrival of a new government.

As indicated by Brigham and Ehrhardt, (2022), the dynamics of tax reforms in Ecuador began in 2009, it was an economic measure in the face of the fall in the price of a barrel of oil in international markets to adjust this income (Calvo, 2019). The executive branch established new tax reforms that would help sustain the debt and acquired public spending, in addition to the absent foreign investment in the country, were the causes that led to the applicability of these measures that sought to restore the country's economy at the time. For the year 2018, the Organic Law for the productive promotion was created and approved, attracting investments, employment generation, and stability in the fiscal balance; where one of its main objectives was the exoneration of the income tax income tax from 8 to 15 years to investments made to productive sectors considered as priority.

Consequently, in 2019 the Organic Law of Tax Simplification and Progressivity was launched, which entered into force in the fiscal year 2020, which modified the system of advance payment of income tax. The micro-entrepreneurial regime was established for taxpayers with income over \$300,000, both laws generated confusion in the taxpayer due to the fact that in the country the tax culture is still weak and in some cases there is tax rusticity, which makes these laws far from simplifying the tax liquidation to be confusing and ambiguous.

According to Sánchez and Lazo (2023), after the arrival of the COVID-19 pandemic, the Executive approved the Law for Humanitarian Support (2020), which did not mean major changes for income tax purposes, since it established the voluntary prepayment of this tax. However, Executive Decree 1109 (2020) was issued, which obliged legal entities to collect income tax, generating discomfort in these taxpayers who were just relating to the law issued in 2019. Two years after the Organic Law for Tax Simplification and Progressivity was restructured, it was replaced at the end of 2021 by the Organic Law for Economic Development and Fiscal Sustainability, among the main reforms were the elimination of the RISE and Micro-entrepreneurial regimes, merging into a single one called RIMPE Simplified Regime for Entrepreneurs and Popular Businesses.

According to Baquerizo (2022), tax reforms are mechanisms sought by governments to modify a previously established process, which through a reform project the executive

branch has the power to establish. The tax reform is of public interest, whose purpose is to seek the financing of projects by obtaining income or specific benefits for a business, social or environmental sector. On the other hand, taxes are mandatory taxes paid by taxpayers, individuals and legal entities to the active subject represented in the State, whose income is used for public management reflected in the various works carried out, in addition, they also serve to support the national economy in the event of a global or national event that threatens the economic health of a country.

According to the authors Navarro et al. (2018), it is essential to understand the political and economic realities prevailing in the society of the country in which the research variables are analyzed: the economic impact at the national level and the RIMPE regime. The implementation of this new regime has a significant positive effect on the country's economy, since its main purpose is to increase the registration of taxpayers, without leaving anyone out, which contributes to Ecuador's economic development by increasing the sources that contribute to its economy. The simplified regime for entrepreneurs and popular businesses (RIMPE) has been conceived with the purpose of ensuring greater compliance with the tax obligations imposed on taxpayers.

According to Sanchez and Lazo (2023) the Tax Regime for Entrepreneurs and Popular Businesses benefits entrepreneurs because it helps them to have a better management in terms of cash flow, liquidity, profitability and tax reduction, under this context several countries have adopted different strategies through regulations to regulate taxpayers called small businesses, in this sense the RIMPE regime in force in Ecuador seeks the optimization in the collection of taxes by most taxpayers in a simplified and faster environment.

Table 1. *Income Tax RIMPE Regime*

From	To	Basic Fraction	Marginal Tariff
\$ 0,00	\$ 20.000,00	\$ 60,00	0 %
\$ 20.000,00	\$ 50.000,00	\$ 60,00	1 %
\$ 50.000,00	\$ 75.000,00	\$ 360,00	1,25%
\$ 75.000,00	\$ 100.000,00	\$ 672,50	1,50%
\$ 100.000,00	\$200.000,00	\$ 1.047,20	1,75%
\$200.000,00	\$ 300.000,00	\$ 2.797,52	2,00%

Note: Data obtained from the Internal Revenue Service.

The simplified regime for entrepreneurs and popular businesses was created under the organic law for economic development and fiscal sustainability. It came into effect through Resolution No. NAC-DGERCGC21-00000060 as of January 1, 2022 with a 3-year term, whose tax collection scheme follows the provisions set forth in Table 1.

According to Baquerizo (2022), he argued that tax and financial incentives are very useful for SMEs of any business sector, because they contribute to the development and growth in terms of profitability, which is a matter of interest in management issues.

According to the theory of economic incentives, it states that small industries are taxed according to their net income and do so progressively according to the profitability obtained.

The State is in charge of enacting tax and financial incentives, through compensations in the different returns obtained by the business sector, by means of incentives that have been previously planned and justified. In this sense, it is important to indicate that the large differences in the profitability generated, regardless of the type or branch of industry to which the companies belong, are explained by the circumstances and conditions under which they operate and generate their income. (Amado, 2021).

These scenarios are sometimes complex for certain taxpayers; they are the ones that the State seeks to benefit and protect under legal provisions of a tax nature, in order to temporarily reduce the tax burden, assuming this benefit as a tax expenditure. Brigham and Ehrhardt, (2022) indicated that tax benefits are the incentives granted by the State with the objective of helping entrepreneurs to achieve their goals and business growth in economic and social matters. The effects of these incentives imply for the State a decrease in tax collection, as well as an increase in tax collection costs, and they must be applied in a correct and articulated manner in order not to reduce tax equity and to ensure transparency in the tax reimbursement system.

Tax benefits are classified into two groups: the first are those that generate objective exemptions and the second is that which seeks to protect and stimulate certain productive activities of a given region or business sector (Navarro et al., 2023). In both scenarios it is important to identify to which part of the tax incentive mechanism they belong according to the law, in order to ensure the benefit to the right taxpayers.

Based on Calvo (2023), the predominant tax concepts may change depending on the tax environment and encompass a diversity of ideas. Among the most common tax terms are:

Deduction: Incentives based on deducting from the pre-tax profit certain items such as expenses generated to obtain income, allows reflecting a better net profit and reducing its taxable base for income tax or similar. Deductions such as these are typified in the Organic Law of Tax Regime.

Exemption or exoneration: These are certain economic activities that generate income, but are taxed for a specific reason determined by the Law. This helps taxpayers to enjoy greater liquidity after the payment of tax in a given fiscal period.

Reduction: This tax benefit has to do with the decrease of percentage points from 25% to 22% of the income tax rate. Such exclusion occurs when the tax administration decides under certain specific assumptions to leave out of the scope with respect to the provision of any rule.

Tax credits: Relieves some taxpayers temporarily on activities such as investments and payment of labor of amounts generated. These deductions are applicable to certain priority business sectors.

Deferral: This incentive has to do with companies where it is indicated that companies that have 5% of their capital stock represented by their workers will be benefited in deferring the payment of income tax and its advances.

Garzón (2022) emphasized that for the industries and business sectors, having tax incentives from the state implies the benefit of several aspects, such as the following:

- Increased tax revenues due to possible higher investment and growth
- Tax benefits: according to its legal basis, it allows companies to be exempt from certain taxes.
- Creation of new businesses: eradicating unemployment and therefore poverty.
- Product diversification: existence of diverse products that can be exported or substitute imports.
- Diversification of new companies: through the creation and diversification for the development of strategic sectors for a State.
- Science and technology development: which derives from the generation of new companies and products, which require knowledge to create sophisticated technology.
- Other potential social or environmental benefits depending on the incentive

However, even though there are benefits such as tax incentives aimed at companies, these often lack technical knowledge about the tax rules that cover them, because managers do not invest in training, but hire professional experts that allow them to make a proper tax and financial planning, which would become a strength for decision making; which are the generators of wealth and employment, according to I.N.E.C. the commercial sector with 37.72%, the service sector with 25.14% and the manufacturing sector with 20.97%, these three sectors together represent 83.83% of sales generated in the country.

The tax incentives applicable to the aquaculture sector are detailed below:

Table 2. *Incentives in the aquaculture sector*

Tax	Legal Basis	Purpose of incentive/benefit	Nature of incentive/benefit	Type of incentive/benefit	Fiscal objective	policy
Income Tax	LRTI-37	22% corporate income tax rate (reduction of 3 points with respect to the current rate for 2010).	Incentive	Reductions Deductions	Product / Employment Matrix Savings/Investment	
Income Tax	R A L R T I - 28.6.c	Accelerated depreciation of fixed assets	Incentive	Accelerated depreciation	Production matrix/ Employment	

Income Tax	LRTI-10.9	Additional deduction of 100% of salaries and social benefits for net increase in employment. Direct hiring of workers	Incentive Benefit	Deductions to obtain taxable income	Production matrix/ Employment
Income Tax	LRTI-37	10-point reduction in the rate applicable to the amount of profits reinvested in the country for productivity improvements	Incentive	Reductions	Product / Employment Matrix Savings/Investment
Taxes-to motor vehicles	TRT 41/20017b	80% rebate on vehicles of one ton or more that are used exclusively in productive or commercial activities.	Incentive	Reductions	Production matrix/ Employment
Value Added Tax	LRTI-55.8	Products for refrigeration, cooling and freezing services to preserve the foodstuffs of article 55.1 and in general of all perishable products or those to be exported.	Incentive	Exoneration	Production matrix/ Employment
Value Added Tax	LRTI-56.20	Services of slaughtering, cutting, milling, crushing and extraction by mechanical or	Incentive	Exoneration	Production matrix/ Employment

		chemical means to produce edible oils.				
Tax on Foreign Exchange Outflows	L R E T- p o s t 162	Payments made for ISD on the importation of raw materials, inputs and capital goods that are incorporated in production processes will constitute an IR tax credit.	Incentive	Tax Credit	Product / E m p l o y m e n t Matrix	Savings/Investment
Income Tax	LRTI-9.1.	New and productive investments outside the canton of Quito or Guayaquil	Incentive Benefit	Exoneration		Savings/Investment
Income Tax	LRTI-10.7	Additional deduction of 100% of depreciation and amortization of equipment and technologies for cleaner production and generation of energy from renewable sources.	Incentive	Deductions to obtain taxable income		Savings/Investment
Income Tax	LRTI-10.17	Additional deduction of 100% of expenses incurred by medium-sized companies for: research training, productivity	Incentive	Deductions to obtain taxable income		Savings/Investment

<p>Tax on Foreign Exchange Outflows</p>	<p>LRET-159</p>	<p>improvement, expenses incurred in travel for commercial promotion and access to international markets. Payments made abroad for the amortization of principal and interest of loans granted by international financial institutions, with a term of more than one year, for the financing of investments contemplated in the Production Code.</p>	<p>Incentive</p>	<p>Exoneration</p>	<p>Savings/Investment</p>
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Note: Data obtained from the Internal Revenue Service.

Prepared by: Author

Based on Oñate (2020), activity indicators are quantitative measures that are currently used as tools to obtain important information on the performance of one or several companies. These indicators evaluate key aspects such as health, profitability, stability and financial viability, which helps to identify financing problems in time. This is especially relevant in the marine aquaculture sector, where these ratios are used to verify the future of the sector through the analysis of financial information.

The importance of an adequate management of finances is focused on achieving objectives, allowing decision making, supporting sustainability and managing the money that companies dedicated to marine aquaculture have, which are directed to invest in specific goods and resources, being indispensable and opportune to carry out the different analyses that these indicators provide us with.

The importance of an adequate management of finances focuses on the use of the lightest resources in the world, money and shareholders or credits the existence of new sources of resources to the company, to which, shrimp farmers are concerned about investing in land and technology to obtain a higher yield taking into account the quality.

Corporate profitability has to do with the returns obtained after an investment, and the capacity of retribution towards the financial resources used by the company, be they its

own, such as equity, or coming from third parties, such as credit granted by financial institutions (Baquerizo, 2022). It is a term that measures the efficiency and effectiveness with which the company works in the area of human, productivity and financial resources. Business performance indicators are generally represented by profitability, which measures the effectiveness in controlling costs and expenses to convert them into sales.

According to Oñate (2023) the performance indicators are as follows:

Return on assets (ROA) measures the company's capacity to obtain income through the use of assets. It is an indicator that helps to know the profits in relation to the investment made in productive assets. In practical terms, it represents the profits generated by the company's core resources.

The return on equity (ROE) measures the return on the capital invested by the owners and shareholders. When this indicator is favorable, it provides security and confidence to the investments made by its owners, and encourages third parties to opt to become part of the company's shareholding package, thus giving the company the advantage of increasing its shares and at the same time securing financing for its future investments.

According to Bazerque et al. (2021) liquidity is given by the sufficient amount of cash (or available in its bank accounts) that the company has for daily operations, such as for purchases of raw materials or short-term investments. The success of having good liquidity will depend on the proper management of cash, cash flow and bank accounts (Rodríguez, 2018).

Brigham and Ehrhardt, (2022) indicated that financial analysis is determined by the evaluation of the financial components of a company, such as: balance sheet, income statement, and cash flow statement. They become tools that, through a detailed analysis of each one and by establishing connections between them, supported by statistics on profitability and financial performance of the company, facilitate decision making directed towards the acquisition of machinery, equipment, properties or possible mergers in order to expand and grow.

Altamirano (2017) indicated that the profit for the year is the difference between revenues, and all the costs that the company incurred to obtain revenues. It is called profit for the fiscal year, because the period in which the company performs this accounting exercise can be quarterly, half-yearly or annual. The result of this accounting operation will be the taxable base for the tax calculation, and after that, the profit for employee profit sharing will be determined and the various reserves that the company considers, as well as the distribution of dividends to its shareholders, will be contemplated.

These are all the financial resources that the owners or third parties have at their disposal at the time of making an investment in order to obtain profitability in a given period. Investments can also be financed through access to bank loans, which generate costs and expenses associated with their use (Bazerque et al., 2021). In any of the scenarios, investment is a constant dynamic that should prevail in the company in order to ensure

liquidity and profitability, important indicators that help business development and growth.

Sanchez and Lazo (2022) A tax savings plan is determined by different strategies that companies choose to reduce the tax burden, it also consists of taking advantage of the different tax benefits that exist in the tax legislation, in order to reduce the payment of income tax.

Decision-making is a fundamental part of business development and growth, and involves taking and assuming opportunity and cost-benefit risks. Undoubtedly, in order to make the best decisions, it will depend to a great extent on the experience of the owners and managers. On the other hand, the technical and professional knowledge of the owners and collaborators, since for better decision making, qualitative and quantitative data such as financial ratios must be analyzed (Chávez et al., 2022).

Materials and methods

This research was carried out in the province of Santa Elena with the purpose of evaluating the tax reforms on the activity indicators of the shrimp industry in the province of Santa Elena. For this purpose, a descriptive approach was used to deepen the topic of study by theoretically breaking down the variables; in addition, an analysis of the situation of micro, small and medium-sized enterprises (MSMEs) belonging to the shrimp sector was carried out in order to identify the problem under study.

In this project, correlational research was also used through the analysis of indicators to analyze the variables of interest. In this way, the results obtained in the survey data collection were examined in order to identify the critical factors linked to the impact of tax reforms on activity indicators.

In this study, a qualitative approach was adopted to understand the factors associated with the tax reforms occurring between 2018 and 2022, as well as the activity indicators of the shrimp industry in the province of Santa Elena. This understanding was achieved through an exhaustive literature review focused on the variables under study.

On the other hand, a quantitative approach was applied in order to identify the critical elements linked to financial indicators. In addition, different practical and experimental methods were used to investigate the current situation of shrimp industry companies in the province of Santa Elena.

This approach allowed the acquisition of information on the research topic and the development of tools and strategies appropriate to the context. This was achieved through direct observation of the object of study and interviews with the people involved.

This approach facilitated the formulation of conclusions based on the study variables, in order to identify the critical aspects associated with the tax reforms between 2018 and 2022.

The study population is divided into two groups in order to carry out a detailed analysis between Micro, Small and Medium-Sized Enterprises (MSMEs) that have been recently established and those that have a consolidated presence in the market. In order to obtain primary information on the object of study, a survey was conducted among these 31 MSMEs. The Google Forms tool was used and it was distributed through e-mails addressed to the managers of the MSMEs belonging to the shrimp sector in the province of Santa Elena.

The first group is comprised of 12 MSMEs established in less than five years, while the second group includes 19 MSMEs with more than five years of experience in the shrimp sector in Santa Elena province. These companies are dedicated to shrimp and shrimp larvae farming, maintaining their active status and complying with the regulations established by the Superintendencia de Compañías.

Various sources and methods of data collection were used in the development of the research on income tax reforms and financial indicators in the shrimp industry in the province of Santa Elena. These are described in detail below:

Expert interviews: This technique was used to obtain an in-depth understanding of the current situation of MSMEs in the shrimp sector in the province of Santa Elena. A questionnaire was conducted with experts in the area of study to identify the critical factors relevant to the research.

Observation: Indirect observation was used to identify the factors associated with tax reforms and financial indicators in the shrimp industry, in order to highlight the central problems of the study.

Surveys: Surveys were conducted among 31 MSMEs in the shrimp sector in the province of Santa Elena. These surveys, which consisted of 4 identification questions and 10 research questions, were aimed at evaluating income tax reforms and financial indicators in this industry.

Documentary and virtual review: An exhaustive review of secondary sources such as books, scientific articles, theses and related documents was carried out. This provided theoretical support for the research and the proposal designed, providing a solid frame of reference on the topic of study.

Results

Highlights the results obtained in relation to the tax incentives granted to Micro, Small, and Medium Enterprises (MSMEs) with 5 years of activity in the commercial shrimp sector in the province of Santa Elena. It was determined that, in 2019, none of the companies evaluated applied the tax incentives. For 2018, the MSMEs Cultivos Marinos CULMARINSA S.A. and Camaronera La Comarca DCMC S.A. also made use of tax incentives, including tax exemptions and tax credits, obtaining a total of \$27,408.42 in deductions. In 2019, none of the companies examined opted to use incentives, while, in 2020, the application of tax incentives by Camaronera La Comarca DCMC S.A. stands

out, in accordance with the additional deduction established for micro, small and medium-sized companies oriented to technical training and productivity improvements in the shrimp sector, achieving a total deduction of \$22,648.37.

Presents the results obtained in terms of tax incentives applied by Micro, Small and Medium Enterprises (MSMEs) with more than 5 years of activity in the shrimp sector in the province of Santa Elena. In 2018, CABANI S.A., a MSME, used tax incentives such as tax exemption and tax credit to reduce its tax liability, achieving a total of \$4,928.80 in deductions. During 2019, none of the companies studied benefited from these incentives. Finally, in 2020, two companies stood out for their use of tax incentives: Jesús del Gran Poder, J.D.G.P. S.A. applied the additional deduction intended for micro, small and medium-sized companies for technical training and productivity improvements in the shrimp sector; and VINSOTEL S.A. also used tax incentives, in its case, the tax exemption and tax credit to reduce its tax payable, achieving a total deduction of \$24,952.81.

Information obtained from the Superintendency of Companies reveals that, in 2019, 68% of MSMEs achieved profitability per dollar invested in assets, while a 33% decrease was evident in 2020, mainly attributed to the COVID-19 pandemic. In addition, 94% of MSMEs had the ability to use their earnings to cover operating costs, with a 13% decrease in gross margin profitability in 2020.

In 2019, 74% of MSMEs were able to cover non-operating costs with total revenue, representing the proportion of sales that became revenue after paying operating costs. In 2020, there was a decrease of 29%. Likewise, 74% of MSMEs had profit per unit sold in 2019, with a significant 48% decrease in profitability on sales in 2020.

In 2019, 74% of MSMEs provided profitability to shareholders or partners without considering financial expenses and taxes on invested capital, while in 2020 there was a decrease of 31%. On the other hand, 71% of MSMEs provided net profit to shareholders or partners taking into account financial expenses, taxes and workers' participation, with a decrease of 29% in 2020.

According to surveys of 31 MSMEs in the shrimp sector in the province of Santa Elena, the tax that most affects entrepreneurs financially is income tax (71%), followed by value added tax (16%), vehicle tax (10%), and foreign currency outflow tax (3%). In addition, 64% consider that the tax burden is reasonable with respect to the income obtained, while 26% perceive it as low and 10% consider it high. According to the data collected, it is observed that MSMEs that applied tax incentives obtained a considerable profitability due to the exemption of that item in the tax return, in contrast to those that did not take advantage of the incentives, which obtained a less significant profitability.

The collection of taxes is an essential component of a country's fiscal policies and economy, since it makes it possible to evaluate the effectiveness of governments in generating revenue through tax collection. In this sense, it is imperative that the relevant authorities implement appropriate collection strategies to increase their resources for social investments. In addition, it is crucial to promote tax awareness, since it is through

the collection of taxes and levies that sustainable development is strengthened in society.

The results of illustration No.-3 show that 29.03% of the 31 companies surveyed indicate that the main factor that prevents them from complying with their payment obligations is due to the inconveniences presented by the digital platform of the Internal Revenue Service System, which collapses, while 19.35% state that compliance is made difficult due to the constant changes in accounting and tax regulations. It is evident that 51.61% of the companies have difficulties in complying with payment due to the lack of information on new regulations, percentages, benefits, among other tax issues, and sometimes this generates insecurity or fear on the part of the person in charge of complying with the payment of the company's taxes.

It is crucial to bear in mind that tax evasion represents an obstacle for the State in terms of collection and equitable distribution of resources. In the business sphere, some of the main causes of this practice are attributed to the lack of a tax culture, changes in management or leadership, and sometimes, to the complexity of the tax system. According to state regulatory institutions, a decrease in taxes has been observed in several productive sectors in Ecuador, resulting in tax revenues below collection projections. This situation limits the ability to carry out adequate social investment.

According to the surveys conducted, it was determined that 39% of the companies consider that the government's efficiency in collecting taxes is very bad, 19% consider it to be very good, but a mechanism should be sought to improve this collection, while only 13% consider the government's efficiency to be excellent; therefore, a more efficient tax collection system should be implemented to benefit social investment.

The tax system in Ecuador has deficiencies in both the regulatory structure and tax management, which has resulted in considerable levels of evasion and a decrease in the collection of taxes that should be standard. In addition, there is a poor allocation of resources by the State in terms of expenditures. In response to these problems, Ecuador has implemented mechanisms that seek to make society aware of their duties as citizens and their responsibility as taxpayers, with the purpose of promoting the country's sustainability. This is carried out through a tax culture that seeks to educate and encourage responsibility in the payment of taxes, in order to combat tax evasion.

According to the surveys conducted, it was determined that the shrimp sector industries do not have training programs on a constant basis, since 3% mentioned that they are carried out on a monthly basis, followed by 13% that they are carried out on a quarterly basis; 35% of the training is carried out annually, which generates lack of knowledge among employees due to the constant changes in laws or tax reforms.

The lack of tax awareness and culture leads to a deficit in tax collection, negatively affecting the economic aspect of public finances. This prevents the government from having the necessary resources to implement public policies aimed at the most vulnerable sectors of society. On the other hand, taxpayers may obtain benefits by carrying out their economic activities, but by not declaring their income, these may be

considered fraudulent, which could result in the commission of tax fraud offenses. These offenses carry sanctions, including fines and penalties up to imprisonment.

Tax collection presents complex challenges in Ecuador, arising from various problems within the sector. However, it is essential to implement strategies that foster a better tax culture in order to improve tax collection and enable the State to fulfill its obligations. The analysis of tax culture determines that if citizens comply with their tax duties on a mandatory, voluntary or collaborative basis, it strengthens the fulfillment of national development programs, thus improving the living conditions of Ecuadorians.

It is essential to strengthen tax revenue collection, as it plays a significant role in Ecuador's finances, having a crucial impact on the country's economy. Efficient tax collection enables the execution of development programs, including the construction of infrastructure, improvement and maintenance of works, as well as the financing of social services provided by public entities. This contributes to the fulfillment of the objectives of Good Living for the citizens.

According to the surveys conducted, it is evident that the larvae industries generate profitability due to the effect of the significant volumes of larvae and shrimp production in their commercialization and export, and does not prevent the payment of their tax obligations on time, for this reason, 80.65% of the people emphasize that the income does allow compliance with their payments in the medium and large companies.

Tax evasion refers to the practice of not complying with the payment of taxes, encompassing a set of actions through which an individual evades the responsibility of paying the taxes required by law. This results in an illegal act in which income generated in a given period or assets in possession are concealed, with the aim of reducing the tax burden. Despite this, tax evasion represents a constant challenge, especially due to the political and economic instability that characterizes a country. Therefore, it is essential to make individuals aware of the importance of adopting a tax culture for the sake of national development.

According to the surveys carried out, it was determined that 23% of the companies consider that due to the high competition in the market, tax evasion is a factor; while 35% of the companies consider that it is due to the lack of knowledge of the regulations, followed by 19% who state that it is due to the deficiency of the tax culture, it is important to mention that it is a key factor in every company, it is a matter of morality and values of the individual when assuming his payment obligations.

Tax evasion involves illicit practices, such as the use of fraudulent documents and the performance of legal acts with the objective of reducing the tax burden of the taxpayer, without considering compliance with tax obligations and legal provisions (Carrera, 2020). Another facet of evasion is related to the lack of real awareness on the part of the individual, resulting in ignorance of the tax programs established by the government.

The proposed model MGTSSA - 2024, is a metamodel of its own authorship that has the name by its acronym identified as: sustainable tax management model for the aquaculture sector of the province of Santa Elena, developed in the year 2024, aims to

strengthen the tax culture, and business sustainability. The model is designed in relation to the criteria determined in this research, thus improving the critical factors that affect tax management.

The aquaculture industry plays a crucial role in the economy of the province of Santa Elena. In order to strengthen business sustainability in this sector, a sustainable tax management model is proposed that adapts to the specific needs and characteristics of the aquaculture industry. This model seeks not only to optimize tax collection, but also to promote responsible and sustainable tax practices that benefit both businesses and the environmental and social environment.

Corporate sustainability in St. Helena's aquaculture industry is essential to ensure balanced and responsible development. This proposal is based on eight key factors to design a Sustainable Tax Management Model that not only optimizes tax collection, but also promotes the environmental and social sustainability of aquaculture enterprises.

The proposed Sustainable Tax Management Model for the aquaculture industry in the province of St. Helena is a comprehensive tool that seeks not only to optimize tax collection, but also to promote business management aligned with principles of environmental and social sustainability. The eight key factors outlined, from the comprehensive analysis of the industry to the continuous evaluation and improvement of the model, form a solid and holistic framework that addresses the specific challenges of the aquaculture industry in the region.

The key factors of the model are described below:

- **Aquaculture Industry Analysis:** Conduct a comprehensive analysis of the aquaculture industry in St. Helena to understand its particularities, challenges and opportunities.
- **Tax Education and Awareness:** Develop specific educational programs for the aquaculture industry that improve understanding of tax obligations and promote ethical and sustainable tax practices.
- **Environmental and Social Monitoring:** Integrate environmental and social indicators in the evaluation of tax sustainability, ensuring compliance with environmental regulations and the contribution to the social welfare of the community.
- **Community Participation:** Encourage the active participation of aquaculture companies in community initiatives that contribute to local sustainable development.
- **Technology and Tax Digitalization:** Implement technological solutions to streamline and simplify tax processes, facilitating compliance with tax obligations by aquaculture companies.

- **Specialized Tax Advice:** Establish specialized tax advice centers for the aquaculture industry to provide personalized guidance to companies and facilitate regulatory compliance.
- **Sustainable Tax Incentives:** Identify tax incentives that encourage sustainable business practices, such as the adoption of clean technologies, efficient resource management, and compliance with environmental standards.

Continuous Evaluation and Improvement of the Model: Establish mechanisms for periodic evaluation of the model, gathering feedback from aquaculture enterprises and adjusting the approach according to the changing needs of the sector.

This model recognizes the importance of education, technology, expert advice and community participation as fundamental elements in achieving a balance between the fiscal, environmental and social needs of aquaculture enterprises. By integrating these components, it seeks not only to strengthen business sustainability, but also to contribute positively to the sustainable development of St. Helena, ensuring harmony between economic growth and respect for the environment and the community.

According to Ugando Peña et al, (2022) the obligatory nature of the tax duties has triggered several problems for the companies that they have not yet been able to overcome or solve completely, since they claim that the conditions for tax payment purposes have not been agreed upon; On the other hand, the reduction of certain benefits and exemptions that they used to enjoy, and finally the severe obligation of the tax administration in the payment of taxes to avoid fines and economic sanctions, mean that nowadays the companies are deprived of their economic resources, generating the absence of liquidity in some cases and insufficient resources for the investment of their equipment and provisioning. The research determined that tax reforms respond to negative changes in the global economy that have an impact on the national economy, and sometimes to plans and projects of governments that seek to finance themselves with the resources they can obtain from tax reforms.

According to Oñate, (2023) financial ratios are an important tool, because they provide timely information about the financial health of companies, through them it is possible to visualize the weaknesses and strengths of the decisions made; in the research it was determined that for the shrimp industry it is very important to have this information, because they represent a considerable percentage in the contribution of sources of employment and in the Latin American economy.

Conclusions

Despite the existence of tax incentives and their viability in the aquaculture industry, only 26% of the MSMEs in the shrimp sector made use of these incentives to reduce their tax liability. While 74% of the MSMEs considered did not take advantage of these incentives; due to the fact that, on many occasions, these decisions are made and evaluated by the company's management, where it would be expected to have the proper advice from

professionals in tax and accounting matters, this can lead to situations of ignorance and communication failures, which hinders a greater use of tax incentives.

The main causes of tax evasion in the shrimp industry in the province of Santa Elena are: lack of knowledge of regulations, 35% due to limited training programs; and deficient tax culture, 19%. It is essential that they understand the importance of applying tax incentives, their impact on annual profitability and the adoption of a solid tax culture, which will benefit MSMEs and contribute to the growth and development of the country.

It is crucial to promote a tax mentality among microentrepreneurs in the shrimp sector, emphasizing that taxes contribute positively to profitability, thus stimulating research and development in this area, seeking to apply existing tax incentives.

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