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Experience of good practices

Corporate environmental management: its current state in the Industrial Fishing Company of La Coloma

La gestión ambiental empresarial: su estado actual en la Empresa Pesquera Industrial de La Coloma

Gestão ambiental corporativa: a situação atual da Empresa Pesquera Industrial de La Coloma

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ABSTRACT

In recent times, corporate environmental management has taken on greater significance due to the impact of this sector on the environment. There are several concepts that are handled in relation to the term, but its essence lies in the set of actions and strategies through which the actions of any organization are guided, in order to achieve an adequate quality of life, preventing or mitigating the environmental problems generated by them. The objective of this research is to diagnose the current state of environmental management in the Industrial Fishing Company of La Coloma in Pinar del Río, constituting an opportunity to incorporate environmental issues into the strategic plans, policies and work objectives related to this matter, which will contribute to guarantee a solid environmental performance and control the impact generated by its activities as part of its corporate social responsibility. The historical-logical method was used to study the historical evolution of

environmental management. Documentary analysis, interviews and surveys were used as techniques to study the environmental problems and the perception of the company's managers and workers on the process of corporate environmental management. The main results are the insufficient management for the proper handling of waste and the insufficient training and awareness of managers and workers regarding the environmental issues.

Keywords: environmental diagnosis; environmental management; environmental management system.

RESUMEN

En los últimos tiempos, la gestión ambiental empresarial cobra mayor significado por la incidencia de este sector sobre el medioambiente. Varios son los conceptos que se manejan en relación con el término, pero su esencia radica en el conjunto de acciones y estrategias a través de las cuales se orientan las acciones de toda organización, con el fin de lograr una adecuada calidad de vida, previendo o mitigando los problemas ambientales generados por estas. La presente investigación tiene como objetivo diagnosticar el estado actual de la gestión ambiental en la Empresa Pesquera Industrial de La Coloma en Pinar del Río, constituyendo una oportunidad para incorporar la temática ambiental a los planes estratégicos, políticas y objetivos de trabajo relacionados con esta materia, lo que contribuirá a garantizar un sólido desempeño ambiental y controlar el impacto que generan sus actividades como parte de su responsabilidad social empresarial. Se empleó el método histórico-lógico para el estudio de la evolución histórica de la gestión ambiental. Fueron utilizadas como técnicas el análisis documental, la entrevista y la encuesta en función de estudiar la problemática ambiental y la percepción de directivos y trabajadores de la empresa sobre el proceso de gestión ambiental empresarial. Resaltan como principales resultados la insuficiente gestión para el manejo adecuado de los desechos y la insuficiente capacitación y conciencia de cuadros y trabajadores con respecto a la temática ambiental.

Palabras clave: diagnóstico ambiental; gestión ambiental; sistema de gestión ambiental.

RESUMO

Nos últimos tempos, a gestão ambiental corporativa adquiriu maior importância devido ao impacto desse setor sobre o meio ambiente. Vários conceitos são utilizados em relação ao termo, mas sua essência está no conjunto de ações e estratégias por meio das quais se orientam as ações de qualquer organização, com o objetivo de alcançar uma qualidade de vida adequada, prevenindo ou mitigando os problemas ambientais gerados por elas. O objetivo desta pesquisa é diagnosticar o estado atual da gestão ambiental na Empresa Pesquera Industrial de La Coloma, em Pinar del Río, o que constitui uma oportunidade para incorporar questões ambientais aos planos estratégicos, políticas e objetivos de trabalho relacionados a esse assunto, o que contribuirá para garantir um desempenho ambiental sólido e controlar o impacto gerado por suas atividades como parte de sua responsabilidade social corporativa. O método histórico-lógico foi utilizado para estudar a evolução histórica da gestão ambiental. Análise documental, entrevistas e pesquisas foram usadas como técnicas para estudar os problemas ambientais e a percepção dos gerentes e funcionários da empresa sobre o processo de gestão ambiental da empresa. Os principais resultados são a gestão insuficiente para o tratamento adequado dos resíduos e o treinamento e a conscientização insuficientes dos gerentes e funcionários com relação às questões ambientais.

Palavras-chave: diagnóstico ambiental; gestão ambiental; sistema de gestão ambiental.

INTRODUCTION

The impact of the business sector on the current state of the global environment is becoming increasingly evident. According to Reyes Hernández et al. (2022), companies are economic entities with legal personality, whose activity is related to production, circulation, exchange and whose objective is to obtain an economic benefit. Therefore, it is up to the company to make decisions regarding production and investment. It is in the company where the union of the productive factors takes place, which means that the company is the protagonist of the productive activity and is responsible for the correct management of the resources used in this process, among which are the natural resources as the basis of any productive process.

According to that author, the responsibility of the business sector worldwide for the impact of its economic and social activities on the deterioration of the environment is notable; however, the

actions developed to mitigate the negative effects of these activities on the natural environment are still insufficient (Reyes Hernández et al., 2022).

Corporate environmental management arises from the incorporation of the environmental variable in the decision-making processes of the business sector due to the changes it has caused to the environment. Bustio Ramos et al. (2021) point out that environmental management constitutes an essential link in the strategic planning of organizations, since it contributes to their permanent commitment to assume an ethical behavior towards the environment, which contributes to economic, social and cultural development and, as a consequence, to the improvement of the quality of life of their workers, the local community and society in general. In line with the authors, environmental management is aimed at developing a set of actions to prevent, reduce and eliminate the negative impacts that could be caused by organizational practices to the environment, ensuring the protection and preservation of natural resources on which the production of goods and services is based.

According to Gil Rodriguez et al. (2020), environmental management should be composed in an integrative work, so that good environmental skills are generalized with the intention of creating seizure on important explanations for the care of the environment, therefore, Educational Institutions increasingly create a significant impact on the environment.

Vidal and Asuaga (2021) defined that environmental management is a process of relevance in organizations, considered as the concept to unite the guidelines of the plans that are supported by the policies dictated by the ministries designated for these functions. It is sought that there is a common theme to be applied, ideas and strategies must be shared with all members of the community in order to be successful in the struggle for the improvement of the ecosystem.

The authors assume the concept expressed by Villanúa et al. (2021), who specified that environmental management is the conglomerate of actions based on policies to improve the environment and care for it, for which they analyze the reality that they have to safeguard and develop plans that are framed within the rules and implement them to achieve improvement and recovery of spaces.

In this sense, the authors consider environmental management as the set of policies, actions and measures that are developed through a multidisciplinary approach with the objective of preventing, reducing and eliminating the negative impacts caused by the development of different activities in companies and communities.

Several steps have been taken worldwide to promote a change in business attitudes towards sustainability, taking into account environmental degradation and protection as another factor of competitiveness, which is why organizations should include in their strategic and operational planning an adequate environmental management that highlights the link between their business objectives and those related to the environment.

García Samper et al. (2017) state that the impact that the environment has on organizational performance is ostensible, requiring the implementation of various strategies based on the prevention and control of pollution. For that reason, it is appropriate to highlight the benefits provided to companies by the implementation of ISO 14001:2015 as an instrument that allows continuous improvement in business environmental performance, their economic results and add value to their products and services. The growing attention to the effects of industry on the environment has made ISO 14001:2015 a voluntary and internationally recognized standard for Environmental Management Systems.

The Environmental Management System according to ISO 14001:2015 is a tool that allows organizations to formulate a policy and objectives, taking into account legal requirements, as well as the application of the standard for information regarding their environmental aspects and impacts (Díaz Domínguez & Silva López, 2021).

In spite of the efforts made at the international level for the development of corporate environmental management systems to achieve business development in harmony with the environment, the implementation of these systems has been affected by, among other causes:

- Insufficient level of knowledge, education and environmental awareness
- Lack of an environmentally-focused corporate management culture
- Limited introduction and application of the results of science and technology
- Insufficient incorporation of the environmental dimension in the socioeconomic development programs and plans of the companies, among others

Industrial fishing companies are not exempt from the aforementioned situation, which, in the fulfillment of their mission, generate a series of environmental situations that must be duly managed by all the actors involved. They are among the organizations that demand environmental management requirements, since in their operations they generate waste that can cause pollution, which obliges them to take regulatory measures and to comply with requirements determined in the

legislation and parameters of international demand. The global trend is towards a new corporate environmental culture, which considers that economic well-being can only be achieved in conjunction with safe environmental management.

In Latin America and the Caribbean, for example, marine and coastal systems are among the most productive in the world, supporting a complex interplay of ecosystems and containing enormous biodiversity. However, fisheries impacts are a central concern as the region's exploitable commercial stocks are at maximum exploitation, overexploitation or depletion. Overexploitation of fisheries is often intersected by the influence of natural processes that influence the abundance of resources, such as the El Niño current. On the other hand, land conversion for agricultural, urban or tourist use, and spills of hazardous substances in incidents involving boats, oil tankers and cargo ships, are causing degradation of coastal habitats, including mangroves, estuaries and coral reefs (Rodríguez Becerra & Espinoza, 2002).

Cuba, as an island country where fishing is an essential link in its economic development, does not escape the aforementioned situation. At the national level, the contribution of the fishing industry to the country's economy has increased considerably in recent years, mainly due to the increase in exports, favored by international nutritional trends that promote a higher fish content in the diet.

Due to its levels of fishing production, tourism development, industrialization index, infrastructure and labor demolition potential, the coastal areas of the South-Western plain of Pinar de Río Province constitute an essential link for the development of the province and the country; however, this region is severely damaged as a result of the incidence of both natural and anthropogenic factors in its natural dynamics. This coastal zone is home to the Industrial Fishing Company of La Coloma (Epicol in Spanish), internationally recognized for its production results and the quality of its products.

Epicol has an Integrated Quality and Safety Management System that meets the requirements of Cuban standards NC ISO 9001:2015 Quality Management System and NC ISO 22000:2018 Food Safety Management Systems. The scope of this certification covers the activities of catching and industrializing lobster, fish and other fishery products in all of the Company's Basic Business Units (UEB in Spanish). Despite this, the Environmental Management System has not yet been fully implemented, which causes serious environmental problems.

In spite of the outstanding economic-productive results achieved, a series of environmental problems have been identified as a result of the complexity of the activities developed for the fulfillment of its

mission, which makes it necessary to design an environmental management system taking into account the relevance of the management stages within the management processes (planning, organization, implementation and control) with a systemic approach.

The main environmental problems on which the company has an impact are as follows:

1. Water pollution due to the discharge of liquid waste inefficiently treated
2. Pollution due to non-reuse of solid waste generated from production activities
3. Impact on biodiversity and natural ecosystems of aquatic species
4. Lack of environmental knowledge and awareness among managers, executives and employees

In this sense, the objective of this article is to diagnose the current state of environmental management in the Industrial Fishing Company of La Coloma in Pinar del Río.

MATERIALS AND METHODS

For the analysis of the current state of corporate environmental management in the Industrial Fishing Company of La Coloma, it was started with an environmental diagnosis, using the historical-logical method for the study of the historical evolution of environmental management, corporate environmental management, particularly of industrial fishing companies and corporate environmental management systems, revealing the essential characteristics of each one, the changes in the logic of their development and their main trends at present.

The analysis and synthesis procedure made it possible to break down into its elements, the different concepts on environmental management, corporate environmental management and in particular industrial fishing companies and environmental management systems for the fishing industry sector, which have been systematized by different authors to establish the essential relationships and general characteristics, as well as the invariants among all of them, which support the theoretical-methodological basis of the object of study of this research.

The documentary analysis used in the research was carried out according to the traditional method, which allows capturing the fundamental ideas of the documents reviewed, establishing the logic on which they are based and how environmental issues are dealt with in each one of them.

The present research corresponds to the mixed research design, allowing a more detailed analysis of the object to be studied. The sample selection process is developed in four observation units that make up the population, the sample is made up of 113 managers, specialists and workers of the Coloma Complex. It was determined using the intentional sampling technique. Of the total sample, 29 managers were interviewed individually and the questionnaire was applied to 84 specialists and workers.

The fundamental criteria taken into account for the selection of the sample were the following:

- That as many of the company's executives as possible were present
- The participation of all specialists directly or indirectly related to corporate environmental management
- The participation of company employees who live in the community where the company is located
- The existence of experts in the areas of corporate environmental management

The following instruments were used to collect and process information during the environmental assessment:

- Individual interviews with managers of the Coloma Complex: This technique made it possible to identify the different representations of the subjects on the topic to be investigated and, in this way, to verify the individual vision of the business managers in relation to the current situation of environmental management for the strengthening of the Corporate Environmental Management System
- Surveys of specialists and workers: This instrument was designed by a team of specialists from different institutions in the territory and validated by experts. The survey was applied to a total of 84 specialists and workers of the Coloma Complex. Microsoft Office software was used to process and tabulate the results, determining the trends for each of the questions asked

Once the main problems had been identified, the Vester matrix was applied as a tool for identifying the problems that have the greatest impact on the proper behavior of the system under study. Its application is conceived from the hierarchy of the problems identified in the diagnosis, analyzing the level of causality of some with respect to others, using the Microsoft Excel processor and resulting in a tree of problems.

RESULTS AND DISCUSSION

The Industrial Fishing Company of La Coloma, which belongs to the Business Group of the Fishing Industry of the Food Industry Ministry, was created on November 30, 2001, and its corporate purpose is defined as follows:

- Harvesting, cultivate, industrialize and commercialize shelf species, aquaculture, as well as those acquired from private commercial fishing
- Harvesting, processing and marketing of land crabs
- To provide maquila services for fishery products

Epicol has a total of 1,418 workers, 61.14 % of whom belong to the Coloma Complex. This Complex, structured by the Head Office, Extractive UEB, Industry UEB and Insurance UEB, has a total of 867 workers, distributed in different categories: executives, specialists, technicians, services, administrative and laborers.

Epicol is the most recognized and economically important fishing company in the province and the country. It has a lobster processing plant, one of the main export lines to the international market.

The climate of the coastal zone of La Coloma is a peculiar tropical coastal climate, with a relatively humid summer. The area under study is frequently hit by sea penetrations, due to the action of meteorological phenomena such as tropical cyclones and strong winds from the south, mainly during the months of June to November and their combination with the occurrence of high tides.

Its coastline is characterized by a low cumulative coast, with shallow waters at the entrance of the Inlet of La Coloma, in the Gulf of Batabanó. It has a dredged channel with a maximum depth of 3.8 meters, used by boats to enter and leave the port. The bottom is grayish sand and biogenic sediments. Several small rivers flow into its coast, among them the Colón estuary, navigable up to 5 km approximately, with an upper width of 400 meters at the entrance of the estuary and an average width of 155 meters and an average depth of 4 meters.

The coastal sector where Epicol is located is an area rich in natural resources, both marine and terrestrial. The protected area is located in the Cays of San Felipe National Park, where exotic birds and marine species of high natural and commercial value can be observed.

In order to carry out the environmental management diagnosis in the Industrial Fishing Company of La Coloma, the methodology of (Linares Guerra et al., 2021) was used, which has the following stages:

Stage 1: Identification of information needs

Stage 2: Definition of the sources of information, methods, procedures and techniques to be employed

Stage 3: Design of the formats for the collection of information according to the defined techniques

Step 4: Determination of sample size

Stage 5: Collection, processing and analysis of information

Stage 6: Conclusion of the environmental diagnosis

Despite the rich and varied flora and fauna in this area, it is seriously threatened by both natural and anthropogenic stressors. The instruments applied during the diagnostic process yielded a group of environmental problems on which Epicol has a direct impact and towards which the environmental management system to be designed should be oriented in order to improve the company's environmental management as part of its corporate social responsibility.

The following results were obtained from the application of the individual interview with the executives, whose objective was to verify the current situation of environmental management for the strengthening of the Corporate Environmental Management System in Epicol and its impact on the coastal sector where it is located:

Seventy-five percent of those interviewed stated that there is a set of environmental problems that affect the company's production results today, among which are the following:

- Climate change
- Decrease in lobster (*panulirus argus*) population due to high temperatures
- Deforestation of mangrove forest, primarily red mangrove (*rhizophora mangle*)
- Negative impact of poaching on the insular platform, affecting environmental balance
- Inappropriate use and management of marine species
- Coastal erosion

- Discharge of solid and liquid waste to the coast line
- Insufficient water supply

However, 85% of the interviewed ones reported that there are environmental problems generated by the company that directly affect the coastal sector, both in the natural and social spheres, including the following:

- Insufficient management of solid wastes generated by industrial production
- Inadequate application of Law 1288 on raw material recovery
- Contamination of marine waters by hydrocarbon spills into the sea, from vessels
- Inadequate utilization of all the waste generated during the production process
- Lack of advanced technological infrastructure for the proper recycling of waste generated during the production process
- Obsolescence of industrial machinery

In spite of the problems detected, 90% of the potentialities that Epicol has today to develop an adequate corporate environmental management that contributes to the sustainable use and management of natural resources as the basis of its economic and productive base include the following:

- Company-University links
- Existence of a certified Integrated Quality and Safety System
- Existence of environmental laws, rules and regulations
- Compliance with environmental licenses and catch quotas
- Adequate preparation of business managers
- Existence of projects with feasibility studies completed and feasible to implement (lobster juice and sauce, animal protein, food supplement)
- Construction and use of fishing gear with a sustainability approach
- Existence of an oyster farm for the recovery of oysters
- Having a corporate environmental strategy
- It has a plan of actions for the fulfillment of the State Plan Tarea Vida
- The company is awarded the Provincial Environmental Award
- Articulation with several national and international projects, such as: International Project Mi Costa, Local Development Project GETCI of the University of Pinar del Río

- To have a Corporate Social Responsibility program
- Outstanding articulation with the community of the coastal sector

The survey of workers and specialists at Epicol's Coloma Complex yielded the following results:

The 61.2% of those surveyed evaluated the level of knowledge on environmental issues as low (Figure 1), highlighting the need for training and advice on these issues in each UEB of the Coloma Complex, aimed not only at executives and technicians in the entity, but also at workers who work directly in the production process.

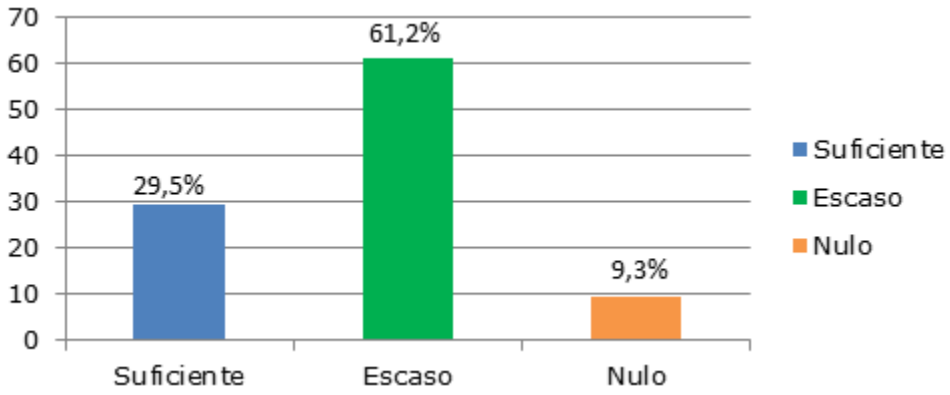

Figure 1. Level of knowledge on environmental issues of specialists and workers of the Coloma Complex

Source: Own elaboration

In relation to the company's negative impact on the environment, 57.4% answered affirmatively, 35.2% denied it and only 7.4% said they did not know, as shown in figure 2.

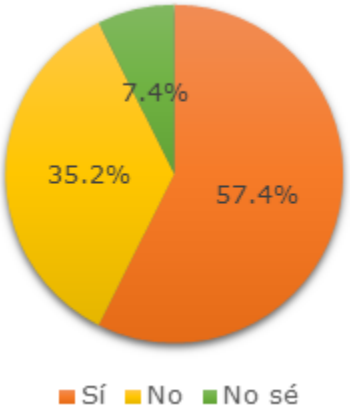

Figure 2. Impact of the Coloma Complex activities on the environment
Source: Own elaboration

When asked about the reasons for the company's negative impact on the environment, they stated that the impacts are due to the accumulation of solid waste and residues from the industrial process that is not properly used and taken to its final destination, in addition to the effects on different species.

As to whether they consider themselves to be polluting agents that could directly impact the environment, 52.7% of those surveyed said yes, 35.2% said no and 12.1% said they did not know. This shows the perception of each worker with respect to their actions in the company and in their arguments, many of those who stated that despite not mastering the subject in depth, they consider that man is always an agent that modifies and pollutes the environment.

Regarding the question on environmental problems, the respondents were offered a series of problems to point out those they considered to be present in the company. Figure 3 shows the results obtained.

As a result, 74.8% of those surveyed reported that the environmental problem most detected by the workers was water pollution from liquid waste dumping, followed by water pollution from solid waste dumping (67.4%), and inadequate management of liquid and solid waste (63.3% and 61.4%, respectively). Coastal erosion was reported by 52.5%, 50.3% of those surveyed reported marked deterioration of the mangrove ecosystem, 29.6% reported noise pollution, 25.9% reported atmospheric pollution, and 22.2% said there was irrational use of natural resources.

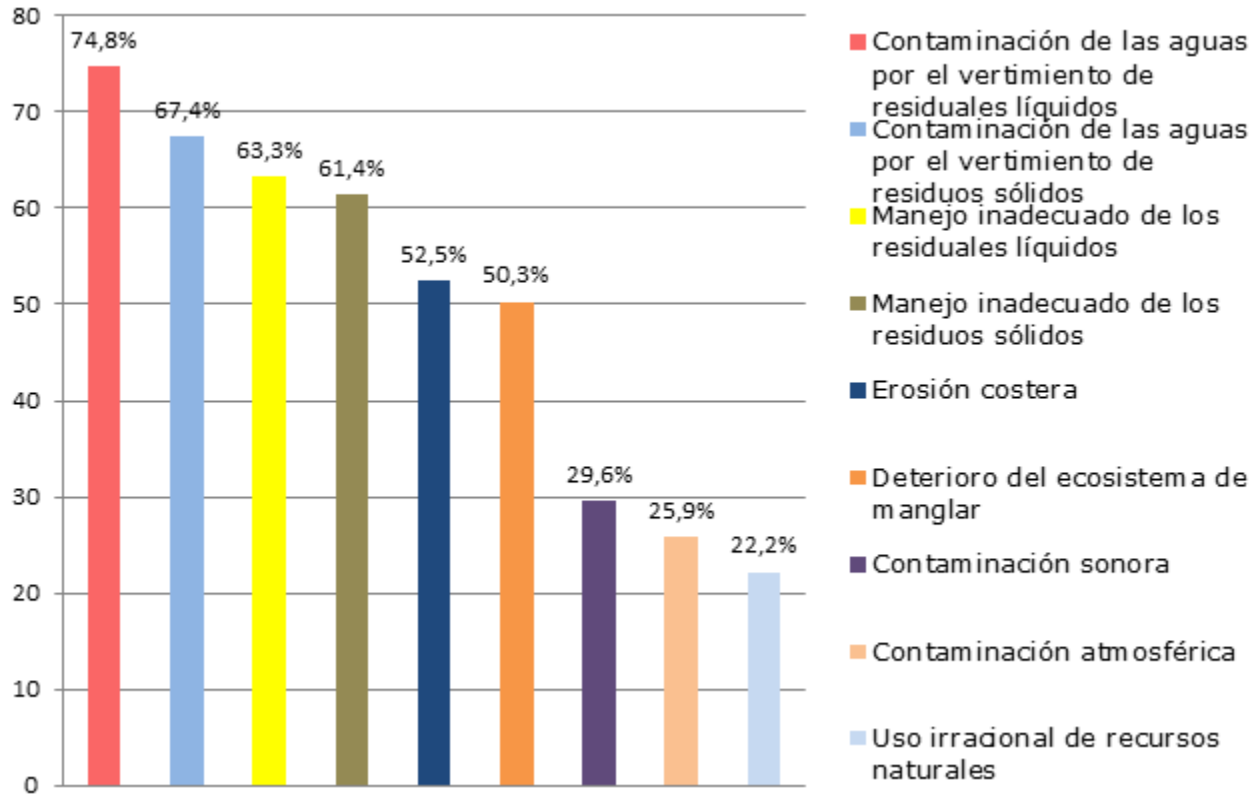

Figure 3. Environmental problems identified by specialists and workers of the Coloma Complex
Source: Own elaboration

The level of impact generated by Epicol's environmental problems on the environment was rated as follows: 59.7% considered it medium, 30.2% considered it low and only 10.1% considered it high.

Regarding the actions carried out in the organization to prevent and/or solve environmental problems, 74.1% of those surveyed stated that cleaning and sanitization work is carried out, 68.51% refered to training actions, 46.3% considered the self-monitoring of outdoor and indoor areas, 44.4% refer to investments, repairs and maintenance, and 33.3% mentioned measurement of consumption, as shown in figure 4.

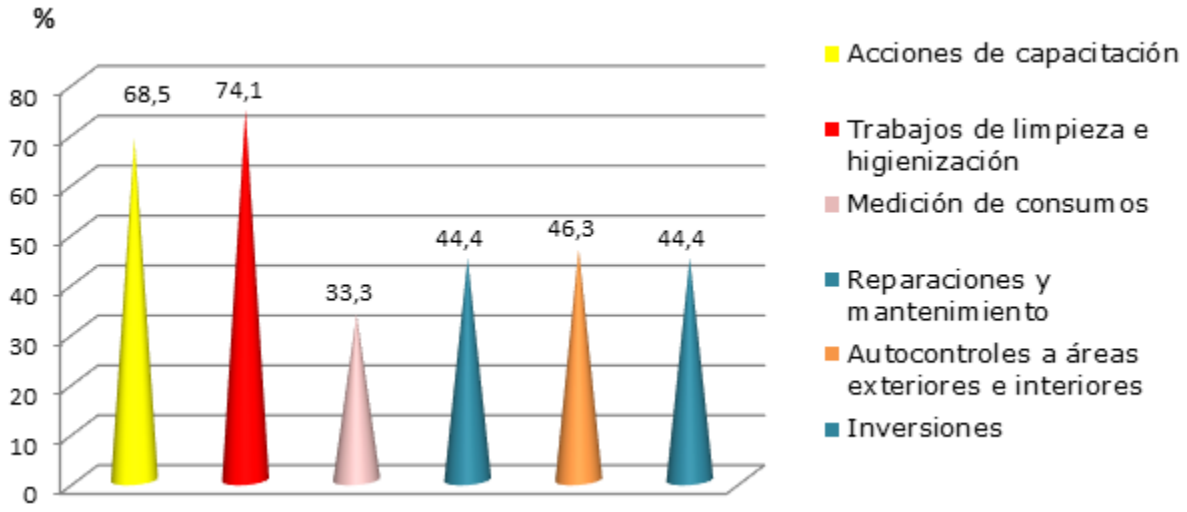

Figure 4. Actions taken in the organization to prevent and/or solve environmental problems
Source: Own elaboration

The 42.6% of the respondents stated that they had had some experience in the search for solutions to the company's environmental problems, while 57.4% stated that they had had none. The experiences are mainly associated with their participation in cleaning and sanitization processes in the company and the coastal area.

In relation to the effectiveness of performance in the search for solutions to environmental problems, 64.9% stated that it was not very effective, 25.9% considered it effective and 9.2% considered it stagnant.

Regarding knowledge of environmental regulations, 58.3 % of the surveyed specialists and workers know some of the environmental regulations, 7.4 % do not know them and only 34.3 % consider that they know all of them.

From the triangulation of the results obtained through the application of the instruments used in the process of environmental diagnosis of Epicol's Coloma Complex, the following problems were identified:

1. Climate change as a limiting factor in the production process
2. Decrease in lobster (*panulirus argus*) population due to high temperatures
3. Deterioration of the mangrove forest, primarily red mangrove *(rhizophora mangle)*

4. Inappropriate use and management of marine species
5. Coastal erosion
6. Marine and terrestrial contamination from liquid and solid waste disposal
7. Insufficient management for the proper handling of solid and liquid waste from industrial production
8. Lack of advanced technological infrastructure for the proper recycling of waste generated during the production process. Dumping of hydrocarbons into the sea
9. Insufficient training, knowledge and awareness of environmental issues among managers, specialists and workers
10. No procedure for liquid and solid waste management

Once the main problems have been identified, the Vester matrix is applied as a tool for identifying the problems that have the greatest impact on the proper behavior of the system under study. Its application is based on the hierarchy of the problems identified in the diagnosis, analyzing the level of causality of some with respect to others, based on a previous scale (Table 1).

Table 1. Matrix of causal relationships between the problems identified

Code	Environmental problems	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total Assets X Axis
P1	Climate change as a limiting factor in the production process	0	3	3	0	3	0	0	0	0	0	9
P2	Decrease in the lobster (*panulirus argus*) population due to high temperatures	0	0	0	0	0	0	0	0	0	0	0
P3	Deterioration of the mangrove forest, primarily red mangrove (*rhizophora mangle*)	3	3	0	0	3	0	0	0	0	0	9
P4	Inappropriate use and management of marine species	3	3	3	0	3	2	0	0	0	0	14
P5	Coastal erosion	3	2	3	3	0	0	0	0	0	0	11
P6	Marine and terrestrial contamination from the	3	3	3	0	3	0	3	0	0	3	18

	discharge of liquid and solid waste											
P7	Insufficient management of solid and liquid waste from industrial production	3	3	3	0	3	3	0	0	3	3	21
P8	Lack of advanced technological infrastructure for the proper recycling of waste generated during the production process. Dumping of hydrocarbons into the sea	3	3	3	0	3	3	0	0	0	0	15
P9	Insufficient training, knowledge and awareness of environmental issues for managers, specialists and workers	3	3	3	3	3	3	3	0	0	3	24
P10	There is no procedure for managing liquid and solid waste	3	3	3	3	3	3	3	3	3	0	27
Total liabilities Y-axis		24	26	24	9	24	14	9	3	6	9	**130**

Source: Own elaboration

Taking into account the result of each problem expressed on the X and Y axes, the matrix is plotted. This graph consists of four variables, which are: critical, passive, indifferent and active problems. Next, the highest value of the assets in the matrix is taken and divided by two, which will allow locating the value on the X axis, from which a straight line parallel to the Y axis will be drawn; the same procedure is carried out with the liabilities. Once these steps have been carried out, all the problems can be located according to their asset and liability values. The results of the matrix were plotted on the rectangular coordinate axis, as shown in figure 5.

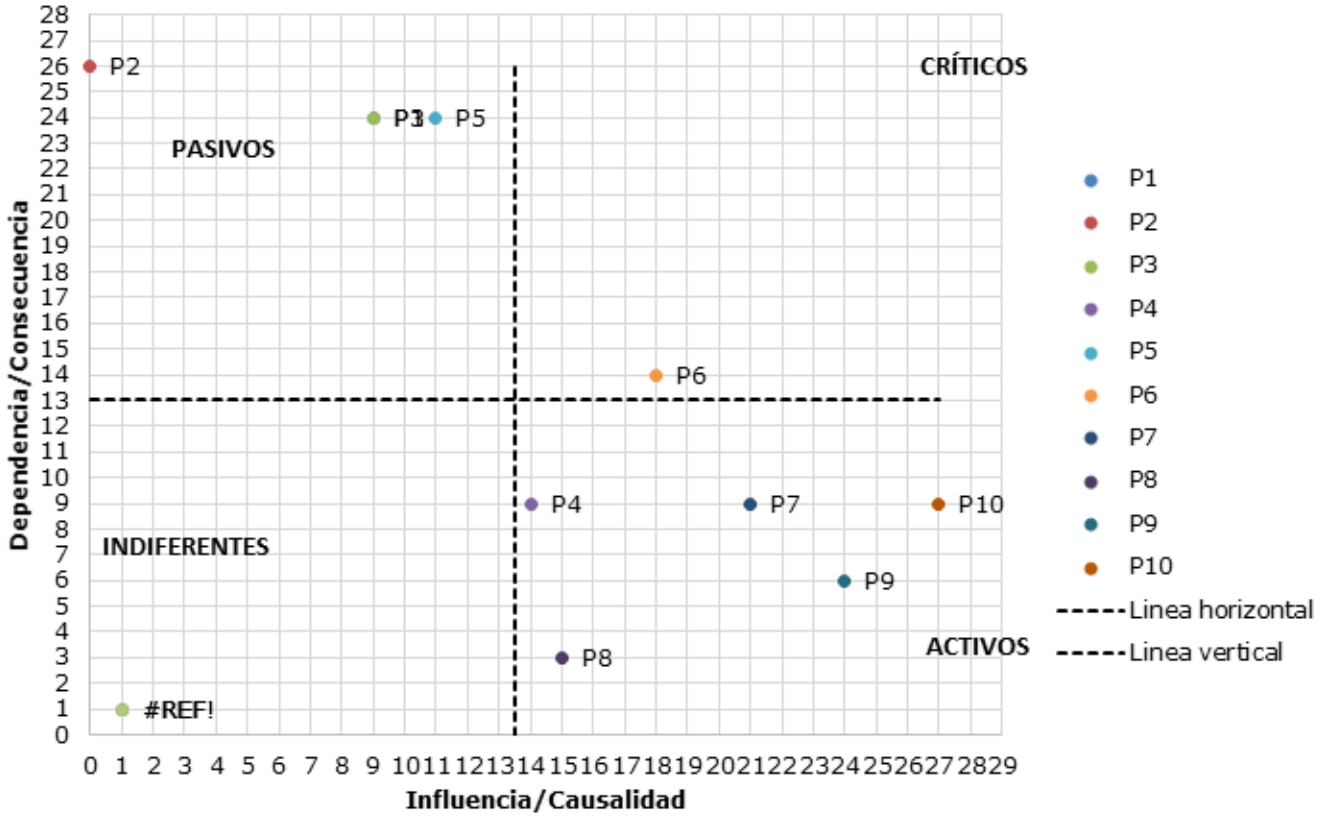

Figure 5. Vester matrix for the analysis of the state of corporate environmental management in Epicol

Source: Own elaboration

Based on these results, the problem tree was constructed according to the procedure established by Rodríguez Restrepo (2020), as shown in figure 6.

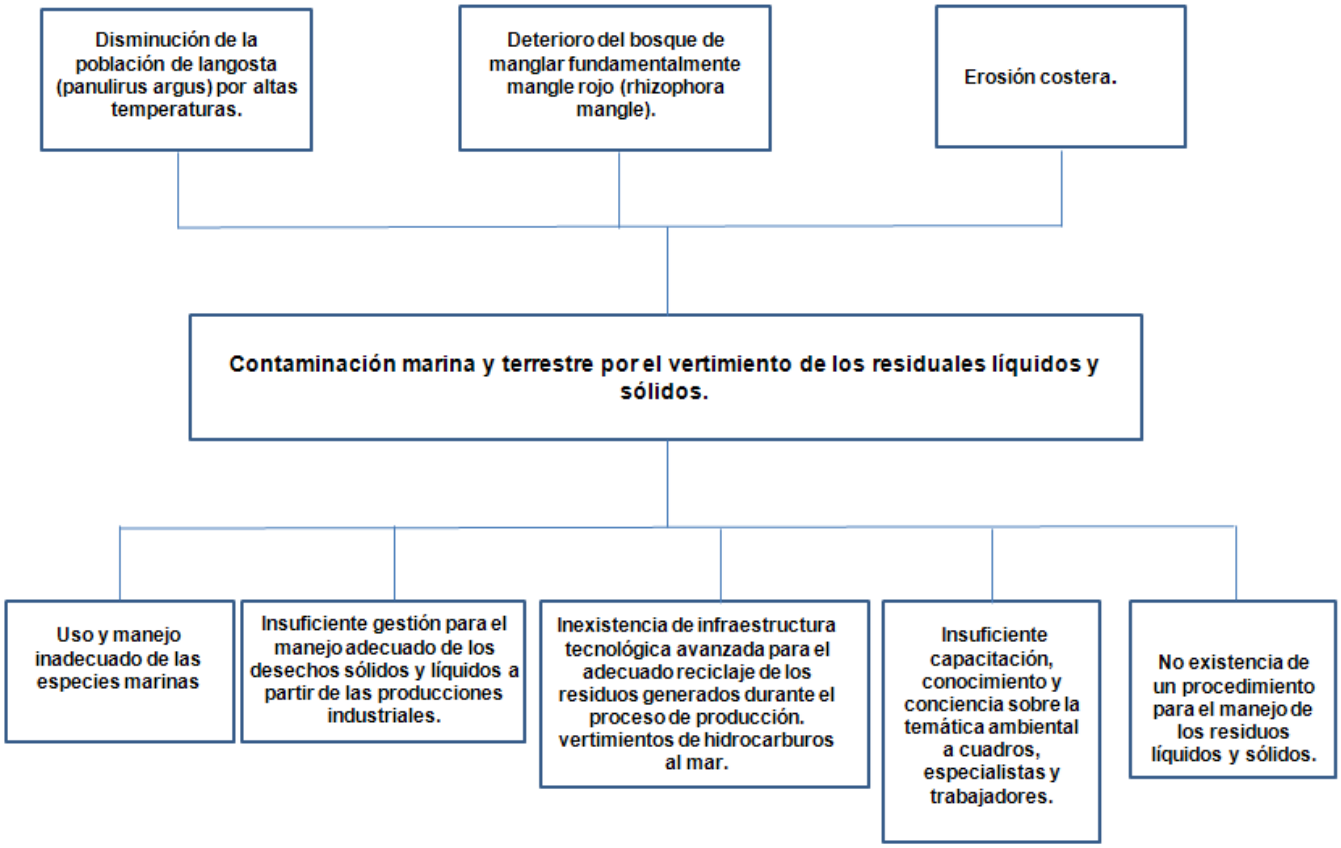

Figure 6. Problem tree derived from the Vester Matrix
Source: Own elaboration

From the application of this methodology, it can be concluded that the problem considered as critical is marine and terrestrial pollution due to the dumping of liquid and solid waste, in addition to other active problems that are the cause of this, on which the fundamental actions to be taken into account for the design of Epicol's Environmental Management System should be focused.

The methodology selected for the execution of the environmental diagnosis in Epicol, with the use of empirical methods of observation and measurement, allowed an assessment of the environmental situation of the company in order to promote the correct identification of the environmental aspects associated with the activities carried out there.

The diagnosis made showed, on the one hand, the existence of a group of environmental problems in the Coloma Complex belonging to the Industrial Fishing Company of La Coloma, which endanger

the productivity and sustainability of the production process by not complying with the established environmental regulations and, on the other hand, the low level of knowledge of the specialists and workers, including the managers, to get involved in their solution.

The diagnosis showed the need to implement environmental actions aimed at improving the entity's environmental conditions and, consequently, strengthening the Integrated Management of the Industrial Fishing Company of La Coloma with an environmental focus.

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Conflict of interest

Authors declare that they have no conflicts of interest.

Authors' contribution

Martalyn Gómez Vento, Ania Bustio Ramos and Tania Vargas Fernández designed the study, analyzed the data and prepared the draft.

Martalyn Gómez Vento and Ania Bustio Ramos were involved in the collection, analysis, and interpretation of the data.

All the authors reviewed the writing of the manuscript and approve the version finally submitted.