

Article

Evaluation of Environmental Management and Conservation of Natural Resources in Tourism Enterprises in Ayacucho, Peru: Workers' Perceptions

Rosario Pariona-Luque ¹, Alex Pacheco ^{2,*} , Faustino Ccama ¹, Rosario Reyes ¹ and Fabian Lema ¹

¹ Professional School of Sustainable Tourism Management and Hotel Management, Universidad Nacional Autónoma de Huanta, Huanta 05121, Peru; rpariona@unah.edu.pe (R.P.-L.); fccama@unah.edu.pe (F.C.); rreyes@unah.edu.pe (R.R.); flema@unah.edu.pe (F.L.)

² Faculty of Engineering, Professional School of Systems Engineering, Universidad Nacional de Cañete, San Vicente de Cañete 15700, Peru

* Correspondence: apacheco@undc.edu.pe; Tel.: +51-993159249

Abstract: Nowadays, it is important to promote environmental management in organisations so that natural resources are subject to a conservation process that allows them to be maintained over time. In addition, this is a good way to increase the environmental awareness of the different actors in society. Therefore, the objective of this study is to evaluate the perceptions of workers concerning the relationship between environmental management and the conservation of natural resources in tourism companies in Ayacucho, located in the Andean region of Peru. The research is of a basic type, with a quantitative approach and a non-experimental, correlational-exploratory design. The survey technique was used and the data-collection instrument was a questionnaire addressed to 600 workers on environmental management, with the dimensions of planning, implementation and operation and verification; and on conservation of natural resources, with the dimensions of biodiversity monitoring and consolidation of the protected area. The results show that 39% of workers disagree with the planning of their company, 47% neither agree nor disagree with the operations of their company and the implementation of its projects and 47% disagree with their company's methods of assessing the success of its operations. These results show that an environmental management model should be proposed to improve the conservation of natural resources and to contribute to the revaluation of resources and the promotion of biodiversity protection in order to create environmental awareness in society.

Keywords: natural resources; conservation; environmental awareness; tourism; biological diversity



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1. Introduction

The relevance of environmental issues today has increased significantly from the point of view of consumers, governments and businesses, so it is necessary to publicise the link between environmental care and the development of competitive advantages in order to encourage environmental protection [1]. In the tourism sector, environmental management is defined as a set of strategies, policies and tools applied in the planning and development of tourism activities with the aim of minimising negative environmental impacts and maximising social and economic benefits in a sustainable manner [2,3]. In other words, it is the comprehensive management of the environmental impacts generated by tourism activities in a given location, including waste management, energy efficiency, appropriate use of water and other natural resources, conservation of biodiversity and cultural heritage [4]. Environmental management in the tourism sector aims to promote sustainable and responsible practices for tourism development and to achieve harmony between economic growth, environmental conservation and the social well-being of local communities [5].

In the social sector, it is essential to promote good environmental management in order to conserve the natural resources of the ecosystem and promote the sustainable development of the population. According to Araujo et al. [6] the conservation of natural resources consists in the elaboration and fulfilment of an action plan designed to directly protect natural resources from threats such as pollution or excessive use. In this regard, Ayuni & Arsil [7] argue that in order to achieve the conservation of natural resources, it is necessary to adapt the approach to work locally, respect the principles of regional autonomy and strengthen law enforcement. In this regard, Wallace et al. [8] mention that the environment has great diversity with respect to natural resources with different characteristics; e.g., there are renewable and non-renewable resources that require special care to promote their conservation. Finally, Swain & Mishra [9] indicate that, with respect to resource conservation, it is important to focus on the need to promote a sustainable environmental management approach to reduce the impact of human activities and ensure sustainability for future generations.

Previous studies have shown that environmental management has a great impact on the conservation of natural resources, as it involves a number of social actors, such as businesses, citizens and public institutions, which allow for the efficient management of resources according to an environmental protection approach [10–14]. However, the tourism literature lacks solid, accurate and up-to-date evidence on the countries of the Americas, so it has not been possible to assess the relationship between environmental management and natural resource conservation. This paper aims to fill this gap by analysing the environmental management of companies in the Ayacucho region of Peru, in order to assess its influence on the conservation of natural resources. It also seeks to answer the following research question: What are the perceptions of workers in tourism enterprises in Ayacucho, Peru, with respect to the relationship between environmental management and conservation of natural resources? In this sense, improving the tourism potential requires sustainable tourism strategies that guarantee the conservation of natural resources and maintain stable economic activity. Improving environmental management requires better communication, education, awareness and participation strategies to reunite the social and environmental dimensions of the country. Therefore, the objective of this research is to evaluate workers' perceptions of the relationship between environmental management and the conservation of natural resources in tourism enterprises in Ayacucho, located in the Andean region of Peru. This research contributes to the revaluation of national resources and the promotion of biodiversity conservation in order to decouple economic growth from environmental degradation, promote the efficient use of resources and raise environmental awareness in society.

2. Background

The planning dimension of the environmental management variable refers to the planning of a series of actions, strategies or procedures that follow a predetermined order in order to achieve one or more specific objectives [15]. Likewise, planning from an environmental approach is considered a fundamental tool for the conservation and preservation of the natural environment, as it proposes the implementation of sustainable environmental practices and promotes a positive change in environmental attitudes [16]. In this context, a study carried out in Mexico showed that the planning of environmental management strategies and the conservation of natural resources are important in increasing the empowerment of the local population, as they reduce the material dependence of communities [17]. The implementation and operation dimension of the same variable is related to planning, as it consists in the fulfilment of what has been established in the first stage. In this regard, Barabash et al. [18] mention that implementation and operation is a process in which all the pre-established actions in an institution's action plan are carried out, taking into account that there may be variations that require immediate decisions to reduce risks and ensure compliance with an objective. Similarly, Maund et al. [19] argue that implementation and operation in companies is one of the most important stages for environmental management

as it requires three fundamental aspects to determine its success, which are financial resources, effective communication and constant control of activities. In this regard, research conducted in Ukraine showed that the successful management of communication between development groups has a significant impact on the implementation and operation of projects, as it ensures that the project is received with minimal risks [20]. It is important to note that the verification dimension of the same variable differs from other dimensions because it is based on the identification and evaluation of results. Concerning this, Romero et al. [21] state that verification is a process that aims to ensure that a certain activity is satisfactorily performed, so four techniques have been developed to accomplish this task: inspection, demonstration, testing and analysis. Furthermore, Sargunan et al. [22] point out that verification is one of the most important stages of a project, as it ensures that the final results are as expected and provides long-term benefits such as the continuous improvement of the processes and strategies applied. Therefore, a study conducted in Argentina showed that companies that do not have a good verification system have problems in determining how effective their processes are, resulting in a waste of time and money [23].

On the other hand, the biodiversity-monitoring dimension of the natural resource conservation variable consists of the process of collecting and assessing natural resources such as flora and fauna in order to determine changes, threats and the current conservation status of an ecosystem [24]. It is also known that one of the main functions of biodiversity monitoring is to assess the impact of human activities on natural resources and to develop preventive measures and strategies to protect biodiversity [25]. For example, research in Kazakhstan has shown that biodiversity monitoring is a joint task between the state and citizens, who must act as agents of social and political change to promote the proper conservation of land and biospecies [26]. It is worth noting that the consolidation dimension of the protected area is related to the biodiversity-monitoring dimension because it aims to improve the conditions of a given site. In this regard, Mujahid et al. [27] point out that the consolidation of the protected area is a process in which the aim is to delimit the area of action that requires professional intervention in order to develop the necessary activities in the management and protection of resources. Similarly, Alfarisy et al. [28] argue that in order to carry out the consolidation of the protected area properly, it is necessary to form alliances with local stakeholders such as local and regional authorities and the local population. Finally, a study conducted in Indonesia on government policies for natural resource conservation found that the consolidation of conservation areas is essential in order to have real data on the availability and carrying capacity of nature [29].

In Thailand, the natural rubber industry was found to be under-utilising natural resources; this needs to be improved through proper environmental management, as this industry plays an important role in the country's economic, environmental and social context [30]. Similarly, in Indonesia, it was found that the behaviour of workers caused more pollution because they did not have active environmental awareness; therefore, it is necessary to implement the ISO 14001 environmental management system to ensure greater commitment in environmental risk management [9]. Furthermore, it was found that there were multiple environmental problems in China caused by lack of funding, inexperience, a weak legal system, flawed management mechanisms and ineffective disaster prediction, which resulted in poor natural resource conservation [31]. In this sense, it has been shown that in Chile, the processes and activities related to economic growth do not follow an environmental protection approach, as a large loss of biodiversity is evident; therefore, it is important to carry out the Environmental Impact Assessment System (SEIA) [32].

Strategies and Tools for Environmental Management

In order to implement effective environmental management at a tourism site, it is essential to have specific strategies and tools in place. First, an environmental assessment should be carried out using tools such as Environmental Impact Assessment (EIA) or Strategic Environmental Assessment (SEA) to identify potential environmental impacts of tourism activities and to develop preventive and mitigating measures [33]. It is important

to implement tools such as green building design, efficient management of resources such as water and energy, and proper waste management using tools such as Strategic Environmental Planning (SEP) or Land Use Planning (LUP) [34]. Sustainable practices need to be promoted among tourists, through environmental education and awareness of the importance of preserving the environment. Waste management is also crucial, using tools such as solid, hazardous and organic waste management [35]. In addition, environmental certifications, such as ISO 14001 or EMAS, are useful tools for environmental management in the tourism sector. Both make it possible to identify environmental impacts, establish objectives and goals, implement improvement actions, comply with environmental legislation, carry out audits and transparently communicate efforts and achievements in environmental sustainability. They also allow certifying that an activity or project complies with environmental standards, and life cycle analysis, using tools such as Life Cycle Assessment (LCA), and evaluates the environmental impact of a product or service throughout its entire life cycle [36]. On the other hand, technology is very important for improving environmental management, as the implementation of technology would improve data management, process automation and informed decision making [37]. Finally, it is essential to foster collaboration between the different stakeholders involved in tourism in the area, such as local authorities, tourism businesses and community organisations, in order to achieve comprehensive and effective environmental management [38]. In summary, proper environmental management at tourism sites can contribute to the sustainability of the site, protect the environment and enhance the tourist experience.

3. Method

3.1. Study Area

The department of Ayacucho is located in the south-central part of the Peruvian Andes, with a total area of 43,821 km² and an elevation of 2761 m above sea level. This department had a total population of 616,176 inhabitants in 2018 [39]. On the other hand, the climate of Ayacucho is cold, with moderate rainfall and low thermal amplitude. In the inter-Andean valleys, the climate is dry, while in the jungle zone it is tropical; in the capital of the department, the average temperature is 17.5 °C. The main economic activities in Ayacucho are agriculture and cattle raising, as well as mining and tourism [40].

Tourism in Ayacucho (Figure 1) is constantly expanding and there are many cultural and historical attractions that motivate travellers to visit the area, such as colonial remains and the religious and traditional customs. Traditional activities include events such as the Agricultural and Food Fair, the Yarcca Aspy, the “Pagapu” at the top of Atinccocha, the Carnival festivities, the Vilcas Raimi Festival, the Huaylillas, the Festival of the Crosses, the celebration of the patron saint of the Virgen del Carmen and the celebration of the Toro Obligado. In addition, the easy accessibility of the place, the involvement of different economic sectors in tourism and the expectation of its recovery have made the demand for tourism in Ayacucho high [41].

It is necessary to establish strategies and policies that promote the sustainable growth of tourism, given its importance as a priority sector that contributes to economic, social, cultural and environmental development, as long as it is properly managed. In terms of national tourism, it was predicted that Ayacucho would receive around 515,000 national visitors by 2021, but this has not been possible due to the pandemic. Nevertheless, it is possible to revive domestic tourism to reach these projected figures in the near future. It is likely that the numbers will increase and that there will be a greater flow of visitors if there is greater interest in promoting travel to tourist areas such as Ayacucho, which has much to offer to domestic tourism. In short, tourism in Ayacucho has great potential that can be harnessed for the benefit of the region and its inhabitants, as long as its sustainable growth is encouraged and responsible and beneficial practices for the community are promoted [34].



Figure 1. Map of Ayacucho region, Perú. Source: Google maps (n.d.).

In Ayacucho, it has been shown that environmental management is limited by the absence of plans and public policies, due to the lack of interest of the authorities, who prioritise economic decisions over improving the environmental quality and sustainable development of the country [19]. As a result, the environmental peace between the different actors is affected, which reduces the capacity to form alliances to carry out an adequate programme for the conservation of natural resources [42]. In this sense, better communication, education, awareness-raising and participation strategies are needed to reconnect the social and environmental dimensions of the country [43]. Therefore, the objective here is to assess workers' perceptions of the relationship between environmental management and conservation of natural resources in tourism enterprises in Ayacucho, Peru.

3.2. Design

The present study corresponds to a basic correlational research study, with a quantitative approach and a nonexperimental design. Consequently, the research is oriented towards a comparison of the variables in order to determine the degree of relationship between the two variables studied [44]. To determine the sample size, the following formula was applied [45], $N = Z^2 \times p \times q / e^2$ with a reliability level of 95% and a sampling error of 4%, which resulted in a sample of 600 workers.

3.3. Inclusion and Exclusion Criteria

Inclusion criteria were as follows: (a) being between 30 and 55 years of age, (b) giving consent to participate in the study, (c) being a resident of Ayacucho and (d) being a permanent employee with at least 24 months of work experience in tourism enterprises in the Ayacucho region. Exclusion criteria were (a) incomplete questionnaires and (b) unwillingness to continue participating in the study (Tables A1–A3).

3.4. Procedure

The research was conducted during the months of September to November 2022, during which participants were continuously recruited using convenience sampling until the desired sample size (600 workers) was reached, taking into account that there were no incomplete questionnaires. The types of tourism enterprises included in the research were tour operators in the areas of sustainable rural tourism, conservation tourism and ecotourism. The data collection technique was the survey, using a structured questionnaire with the Google Forms tool to measure the opinion on the variable environmental management with its dimensions planning, implementation and operation and verification with a total of 15 questions, and the variable conservation of natural resources with its dimensions monitoring biodiversity and consolidation of the protected area with 10 questions, using the Likert scale according to the following values: strongly agree, agree, neither agree nor disagree, disagree and strongly disagree, represented by numbers 1 to 5, where 1 is strongly agree and 5 is strongly disagree [32].

3.5. Data Analysis

To process the information, the data were organised in a tabular matrix and processed using SPSS v25 and Excel software. The Cronbach's Alpha reliability test was used, which gave a result of 0.798 for the environmental management and natural resource conservation variables, which is a high reliability index.

In the first stage, the frequency distribution of the dimensions planning, implementation and operation, verification, biodiversity monitoring and consolidation of the protected area was determined. In the second stage, inferential statistics were used to determine the correlation between the variables environmental management and conservation of natural resources.

4. Results

The following results were obtained on the basis of the 600 valid questionnaires collected.

4.1. Workers' Perception of the Environmental Management Variable

The results for environmental management showed that 39% of employees disagreed with their company's planning for environmental management, 47% neither agreed nor disagreed with their company's implementation and operation, indicating that there is an initiative to improve environmental care, but it needs to be strengthened. Finally, 47% disagreed with their company's review of environmental processes (Figure 2).

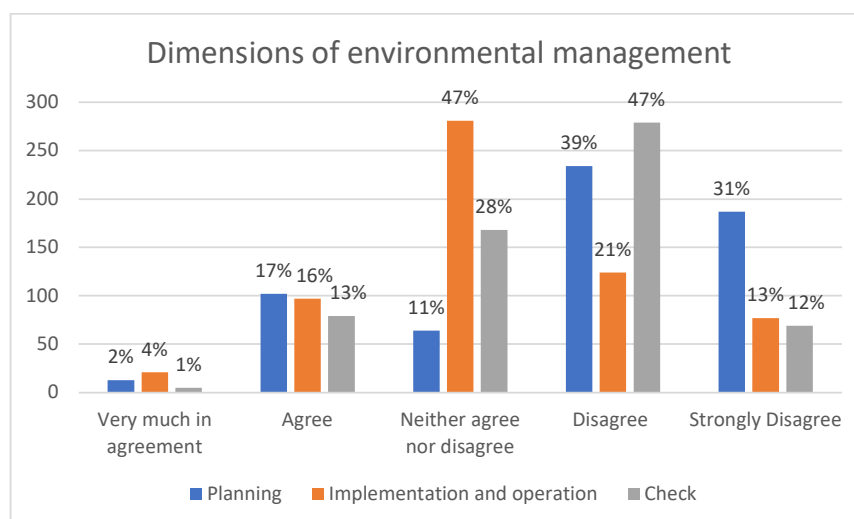


Figure 2. Perceptions of Environmental Management.

4.2. Workers' Perception of the Natural Resource Conservation Variable

The results on the conservation of natural resources show that 47% of the employees disagree with the monitoring of biodiversity carried out by their company, which shows a lack of knowledge about the diversity of fauna, flora and natural areas, which prevents a good conservation strategy. Similarly, 50% disagree with the consolidation of protected areas carried out by their company, indicating a lack of capacity to identify the areas that need care in order to be preserved over time (Figure 3).

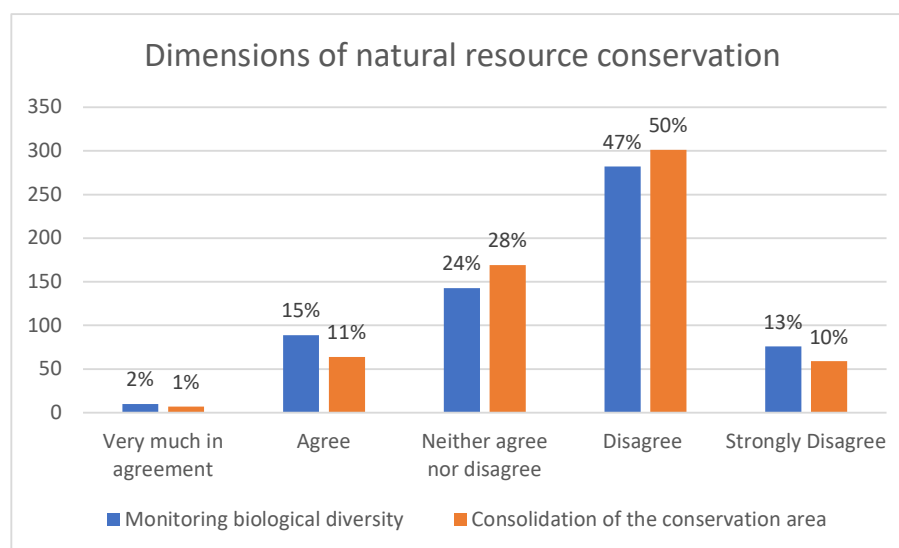


Figure 3. Perceptions of natural resource conservation.

4.3. Correlation Coefficient

As can be seen in Table 1, Pearson correlation results have been obtained that provide information on the relationships between the different dimensions analysed in this study. A statistically significant positive correlation of moderate strength was found between the dimensions planning and biodiversity monitoring ($r = 0.623$, $p < 0.001$). This indicates that as planning levels increased, workers reported a higher level of biodiversity monitoring. Similarly, a strong positive correlation was found between the dimensions implementation and operation, and biodiversity monitoring ($r = 0.889$, $p < 0.001$). This suggests that as implementation and operation improve, so does biodiversity monitoring. Similarly, it was evident that there is a strong positive correlation between the dimensions implementation and operation, and conservation area consolidation ($r = 0.797$, $p < 0.001$). This indicates that as levels of operation and consolidation increase, workers reported greater consolidation of conservation areas in Ayacucho. On the other hand, no statistically significant relationships were found between the dimensions diversity review and monitoring ($r = 0.194$, $p < 0.001$). This means that the behaviour of one dimension has no direct influence on the other.

Table 1. Inter-correlations between the dimensions of the environmental management and natural resource conservation variables.

	<i>M (DE)</i>	1	2	3	4	5
1. Planning	3.69 (1.16)	—	0.610 **	0.204 **	0.623 **	0.514 **
2. Implementation and Operation	3.07 (1.09)	0.610 **	—	−0.092 **	0.889 **	0.797 **
3. Check	2.25 (0.83)	0.204 **	−0.092 **	—	0.194 *	−0.343 **
4. Biodiversity Monitoring	3.25 (1.14)	0.623 **	0.889 **	0.194 *	—	0.731 *
5. Consolidation of the Conservation Area	2.82 (0.95)	0.514 **	0.797 **	−0.343 **	0.731 *	—

Note: * $p < 0.001$, ** $p < 0.01$.

5. Discussion

The majority of employees disagree with the planning in their company (39%), which is evident in Figure 2, showing that the site has a good system for organising the activities to be carried out; however, the objective of the activities lacks an environmental approach to preserve and protect natural resources; therefore, it is necessary to implement the ISO 14001 environmental management system in order to create a structured framework to identify, evaluate and manage the environmental impacts of the company's activities. This will allow the environmental approach to be integrated into planning, setting clear environmental objectives and targets, and developing an action plan for their achievement. This coincides with Barklign & Gashu [15] and Reyes et al. [17] who mention that planning consists of a series of actions, strategies or procedures that follow an established order to achieve one or more specific objectives. Likewise, Guerra & Silva [16] argue that from an environmental approach, planning is an important tool for the conservation and preservation of the natural environment because it manages sustainable environmental practices and promotes a positive change in the environmental attitudes of the population.

Employees neither agree nor disagree with the level of implementation and operation of their company (47%), which is evident in Figure 2, which indicates that the work team is able to follow different instructions for each project, but they are not able to achieve all the objectives because communication within the company is not effective; therefore, it is necessary to create spaces for dialogue aimed at vertical and horizontal communication to unify the objectives. This is in line with Barabash et al. [18] and Khrutba et al. [20] who indicate that implementation and operation is a process by which all the actions defined in advance during the institution's action plan are carried out with sufficient preparation among the groups responsible for development to make immediate decisions in the face of possible variations that may exist, with the aim of reducing risks and ensuring the achievement of objectives. Similarly, Maund et al. [19] state that one of the most important phases for environmental management in companies is implementation and operation, as it involves financial resources, effective communication and constant monitoring of activities to determine the success of the project.

Workers disagree with their company's level of verification (47%), as evidenced in Figure 1, which shows that the organisation has problems with respect to carrying out a correct inspection of the results obtained and promoting continuous improvement based on the data collected from the environmental management strategies, so it is necessary to use the PDCA strategy to promote the creation of improvement plans that have a review system that allows determining the functionality of the strategies in the long term. In that way, Romero et al. [21] and Agüeria et al. [23] indicate that verification has a fundamental role in the success of a project because it is a process that ensures that the activities carried out are carried out efficiently, avoiding a waste of time and money through four techniques: inspection, demonstration, testing and analysis of the results. Similarly, Sargunan et al. [22] point out that verification is an important stage in the management of a project because it ensures that the final results are as expected, and generates long-term benefits such as the continuous improvement of the processes and strategies applied.

Workers disagree with the level of biodiversity monitoring (47%), as evidenced in Figure 3, which demonstrates that there is no proper assessment of the state of biodiversity in the country, putting the integrity and sustainability of species at risk. For this reason, it is essential to promote efforts and initiatives between the public and private sectors, as well as to include a larger budget within the National Biodiversity Strategy. This is in line with Abanina et al. [24] and Dubuisson [26], who mention that biodiversity monitoring is a process of collecting and assessing environmental resources such as flora and fauna to determine changes, threats and the current conservation status of the ecosystem. Furthermore, Abduraimov et al. [25] indicate that the main functions of biodiversity monitoring are to assess the impact of human activities within the ecosystem and to establish preventive measures and strategies to protect the diversity of natural resources.

Workers disagree with the level of consolidation of their company's conservation area (50%), as evidenced in Figure 3, which suggests that the organisation is not able to adequately demarcate which areas need intervention, thus wasting resources, spending more time than necessary and not managing the area correctly. There is, therefore, a need for more funding to employ trained staff who can reduce errors in demarcating protected areas. This is in agreement with Mujahid et al. [27] and Akhmaddhian et al. [29] who argue that the consolidation of protected areas is aimed at delimiting the area of action that requires professional intervention to carry out a series of activities to protect endangered natural resources, in addition to collecting real data on the availability and carrying capacity of nature. In the same way, Alfarisy et al. [28] state that in order to carry out the consolidation of a protected area, it is necessary to form alliances between local stakeholders such as local and regional authorities and the local population.

6. Proposal

Based on the results of the survey, the following environmental management model is proposed to improve the conservation of natural resources, allowing the evaluation of the current state and the proposal of concrete strategies to solve the problems identified in Ayacucho (Figure 4).

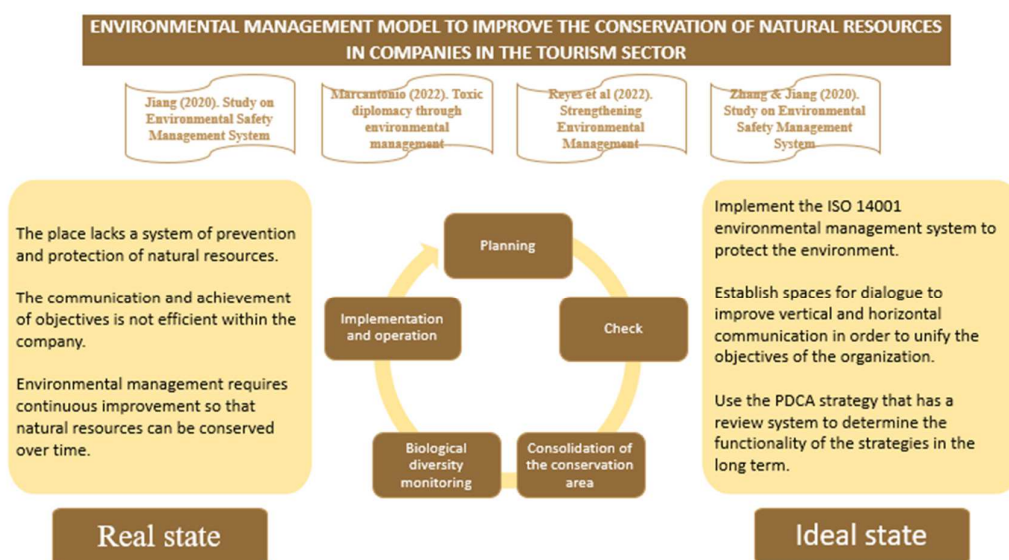


Figure 4. Strategic proposal to improve natural resource conservation [32,34,39].

7. Conclusions

This study examined the relationships between different dimensions of environmental management and natural resource conservation in Ayacucho companies. Pearson's correlation results showed significant relationships between the dimensions of planning, implementation and operation, biodiversity monitoring and consolidation of protected areas.

Environmental management is fundamental to the efficient planning, implementation and monitoring of natural resource conservation processes. Despite progress in the planning and operation of activities, there are challenges in the verification phase, particularly in the evaluation of results and the need for an efficient data analysis system. In addition, more commitment and funding is needed for biodiversity monitoring and consolidation of the protected area. In this sense, it is necessary to implement strategies to improve the training and awareness of the actors involved in environmental management and the conservation of natural resources, with the aim of achieving sustainable and efficient management for the protection of the environment.

Based on the results of this research, we can identify some possible avenues for further research on the issue of environmental management and natural resource conservation. One possible avenue of research could be to analyse government policies and strategies for environmental management and natural resource conservation, and assess their effectiveness and efficiency. Another interesting avenue of research could be to explore the relationship between environmental education and awareness and environmental management and natural resource conservation. We could also look at assessing the environmental impact of development projects and how mitigation and compensation measures are implemented to ensure the conservation of natural resources.

8. Limitations

Research on environmental management and resource conservation has several limitations, such as the possible subjective measurement of variables, which could lead to variability in results and limit the validity of conclusions. In addition, the evaluation of results may not be comprehensive and may not include all relevant variables, making it difficult to identify best practices and solutions for environmental management and natural resource conservation. On the other hand, variability in the selection criteria and characteristics of the sample may affect the internal and external validity of the results. Finally, there may be limitations in generalising the findings to other regions or sectors with different environmental, economic and cultural conditions.

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Data Availability Statement: Data available on request.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Questionnaire measurement scale.

1	2	3	4	5
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree

Table A2. Questionnaire on the variable Environmental Management.

N°	Environmental Management	Scale				
		1	2	3	4	5
Planning						
1	The company has carried out a complete identification of all existing ecosystems within the natural area of Ayacucho.					
2	The company’s technical team periodically assesses the state of restoration of degraded areas within Ayacucho to demonstrate its good environmental management.					

Table A2. *Cont.*

N°	Environmental Management	Scale				
		1	2	3	4	5
3	The population and authorities of the department of Ayacucho comply with the existing legal norms for the good management of the environment related to the management of protected natural areas.					
4	The company issues permanent resolution documents for the regulation, development and exploitation of the use of the natural resources existing within the protected natural area.					
5	The company complies with its objectives and targets set out in its planning and environmental management documents.					
Implementation and operation						
6	The company sets objectives and goals according to the needs identified that lead to the conservation of the environment.					
7	The company incorporates the needs and objectives of the population adjacent to the area that contribute to the conservation of the environment.					
8	The company has the necessary financial resources for environmental management.					
9	The company invests financial resources appropriately for environmental management.					
10	The company is in regular communication with the municipal authorities for good environmental management.					
Check						
11	The company permanently disseminates the activities it carries out with the aim of raising people's awareness of the conservation and benefit of the environment.					
12	The company and its technical team efficiently develop control actions for the protection of the natural resources and conservation objects of the protected natural area.					
13	The municipal authorities have a system or method to assist in the control and monitoring of natural resources within the companies.					
14	The company has mechanisms in place to follow up and monitor the state of environmental protection and conservation.					
15	It is important for the company to carry out environmental impact assessments of all its activities and processes.					

Table A3. Questionnaire on the variable Conservation of Natural Resources.

N°	Conservation of Natural Resources	Scale				
		1	2	3	4	5
Biodiversity monitoring						
1	The amount of degraded areas naturally reclaimed by the company has increased significantly.					
2	The effects of anthropogenic activities on the foothill forest ecosystem forest ecosystem have decreased within Ayacucho.					
3	The % of degraded areas on land with rights acquired prior to the creation of the company has decreased significantly. has decreased significantly.					
4	The allied communities comply with the communal agreements on the use of natural resources from Ayacucho to cover their needs.					
5	The company carries out permanent patrols in order to control and monitor the entry of unauthorised persons and prevent anthropogenic activities within Ayacucho.					

Table A3. Cont.

N°	Conservation of Natural Resources	Scale				
		1	2	3	4	5
Consolidation of the protected area						
6	The company's technical team is developing actions so that the grassroots groups of the community affiliated to the area and its authorities are aware of the importance of preserving the environment in order to help mitigate and adapt to climate change.					
7	The tourism activity promotes and implements functions on the basis of relations between specialised E.I.'s with the participation and for the benefit of the local population.					
8	Natural resources with financial potential have been found within Ayacucho and conditions have been created so that they can be used for the service and benefit of the surrounding communities.					
9	Public and private entities are involved in actions to reforest degraded areas as part of their social responsibility.					
10	The policies implemented by the authorities have so far made it possible to support the protection of the biodiversity that exists within Ayacucho.					

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