Likewise, it was found that, among the assessed PAs, although most of them carry out some kind of biodiversity monitoring activity, these do not have the required frequency and are often insufficient to generate information about the conservation results that have been attained. This situation makes it difficult to identify in a timely fashion the vulnerabilities and risks to biological diversity, which undermines decision making for the protection and conservation of the environment.

Complementary information

Besides the preceding results, other themes related to the object of the audit were analyzed: environmental economic accounts and the World Database on Protected Areas (WDPA).

Regarding environmental economic accounts, considering that it is a relevant and complex theme, it is proposed that future work in research, capacity building, and external control is developed within the scope of COMTEMA.

About the WDPA, some issues identified in the audit limited some of the analyses, such as outdated or missing data, deficiencies in vector files, and inconsistencies with data from national reports to the CBD. Nevertheless, the efforts made for the creation, maintenance, and dissemination of the WDPA, recognized as the most complete global database about protected areas, are recognized.

Recommendations

Taking into account the results from the audit, the following recommendations are made to national governments:

- establish the necessary mechanisms to achieve effective implementation and managements of protected areas, as well as to mitigate the vulnerabilities of these areas, especially with respect to public use and territorial consolidation;
- adopt precise strategies and responsibilities, a clear definition of the legal regime applicable to each protected area, and a greater transparency of official data and information, with the purpose of mitigating the problems of legal uncertainty about land tenure in PAs;
- ensure active and representative mechanisms for public participation in the management of PAs; and
- carry out biodiversity monitoring activities with the required frequency and sufficient intensity to generate information about the conservation results achieved.

Final message

It is hoped that, based on the results of this coordinated audit, national systems of PAs are improved, with the goal of raising the implementation and management levels of PAs, as well as of promoting the coherence between public policies, dealing with the DFOG with negative effects. Finally, it is hoped that the public policies for PAs become more effective, achieving their objectivess of in situ biodiversy conservation and of maintenance of ecosystem services for the present and future generations, toward sustainable development.

Abbreviations: U.S. GAO – U.S. Governmental Accountability Office; WEF – World Economic Forum (The Travel & Tourism Competitiveness Report 2019).

AUDIT'S CREDITS

Comnducted by: OLACEFS/COMTEMA

Coordination: TCU – Brazil

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Office of the Comptroller General of the Republic of Chile
Office of the Comptroller General of the Republic of Colombia
Office of the Comptroller General of the Republic of Costa Rica
Office of the Comptroller General of the Republic of Cuba
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ORGANIZATION OF LATIN AMERICAN AND CARIBBEAN SUPREME AUDIT INSTITUTIONS
COMTEMA
ENVIRONMENT

PROTECTED AREAS
COORDINATED AUDIT

The establishment of **protected areas** (PAs) is the main strategy worldwide for the in situ conservation of biodiversity. The management of this natural heritage depends on the implementation of effective public policies on the part of governments and actors involved. The importance of national systems of protected areas is recognized by the United Nations, in the **Convention on Biological Diversity (CBD)** and in the Sustainable Development Goals of the **2030 Agenda for Sustainable Development**.

The Special Technical Commission on the Environment (COMTEMA) of the Latin American and Caribbean Organization of Superior Audit Institutions (OLACEFS) has conducted the second edition of the Coordinated Audit on Protected Areas. This work was carried out between 2019 and 2020, under the coordination of the Federal Court of Accounts (TCU), the Superior Audit Institution (SAI) of Brazil. This process had the participation of more than 100 auditors from 26 audit teams, making it possible to assess 2,415 protected areas in 17 countries.

Countries participating in the 2019 audit

Source: prepared in-house.

The objective of the audit was to assess the level of implementation and management of the protected areas in the participating countries, as well as their progress in the fulfillment of international targets, such as those from the CBD and from the 2030 Agenda.

Aichi Target 11 – terrestrial and marine coverage

Aichi Target 11 from the CBD requires that, by 2020, at least **17%** of terrestrial and inland water, and **10%** of coastal and marine areas are conserved by means of **systems of protected areas** that are managed in an effective and equitable manner, among other requirements. This target is consistent with SDG targets 15.1 and 14.5.

It was concluded that the contributions of the participating countries were significative considering the required percentages.

In 2019, 13 of the 17 participating countries managed to have at least 17% of their terrestrial and inland water areas included in their systems of PAs. Regarding marine and coastal areas, data were obtained for 14 countries, 8 of which have more than 10% of their marine and coastal areas under protection. This represents a significative progress when compared to 2014, given that on that year the protection of marine and coastal zones was far from reaching the target.

Contributions to Aichi Target 11

Country	Terrestrial	Marine
Argentina	13.1%	7.1%
Bolivia	26.5%	NA
Brazil	18.1%	26.4%
Chile	20.5%	42.3%
Colombia	16.3%	13.8%
Costa Rica	25.5%	2.6%
Cuba	17.2%	25.0%
Dominican Republic	25.0%	10.0%
Ecuador	22.0%	13.0%
El Salvador	24.8%	0.9%
Guatemala	30.9%	0.9%
Honduras	28.4%	No data
Mexico	10.9%	22.1%
Paraguay	15.0%	NA
Peru	17.3%	0.5%
Portugal	25.0%	9.2%*
Spain	32.8%	12.0%

*Considering the extended continental platform, an area pending of confirmation by the United Nations. Source: prepared in-house, based on data compiled by SAIs between 2019 and 2020. The percentages may have changed since then.

Implementation and management of protected areas

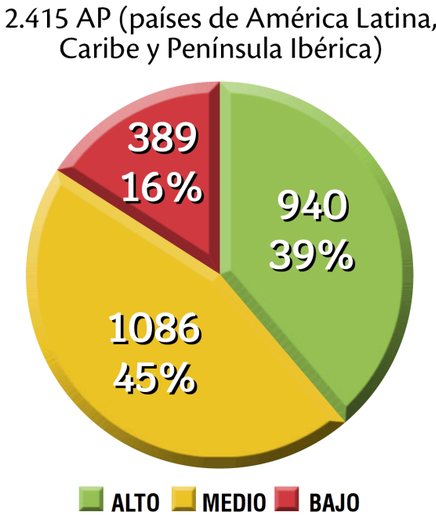
In the audit, use was made of the Index of **Implementation and Management of Protected Areas (Indimapa)**, which allows the assessment of protected areas in three implementation and management ranges (low, medium, and high) by means or 13 indicators, that are assessed according to a scale from 0 to 3. The index for each PA is computed as the average of the indicators which are applicable to it.

Indimapa's 13 indicators

G	Management plan/planning instruments
H	Human resources
$	Financial resources
E	Administrative structure
T	Territorial consolidation
F	Protection
P	Research
B	Biodiversity monitoring
C	Participatory management (management committee)
M	Management by traditional and/or local communities
U	Public use
L	Articulation in the PA
N	Concessions

Source: prepared in-house.

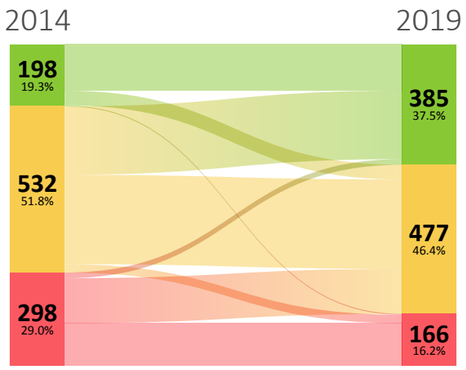
In all, **2,415** areas were assessed.



Source: prepared in-house.

Indimapa also allows the monitoring of the progress in the level of implementation and management with respect to the baseline generated in the previous audit. In the group of **1,028** PAs assessed in both editions of the audit, an improvement was noted in their implementation and management, as suggested by the transitions between the three ranges (low, medium, and high).

Transition of PAs between Indimapa ranges



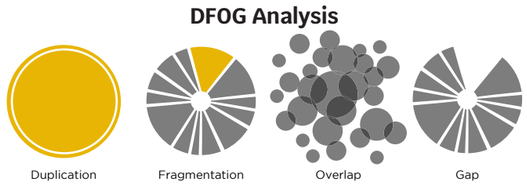
Source: prepared in-house.

Besides, progress was identified in specific aspects, such as management plans (indicator G) and human resources (indicator H), although these processes still require attention on the part of governments and actors involved. On the other hand, weaknesses were identified in important processes in the monitoring of biodiversity (inciator B), in the management of natural resources by traditional and/or local communities (indicator M), in public use (indicator U), in the articulation in the PA (indicator L), and in concessions (indicator N).

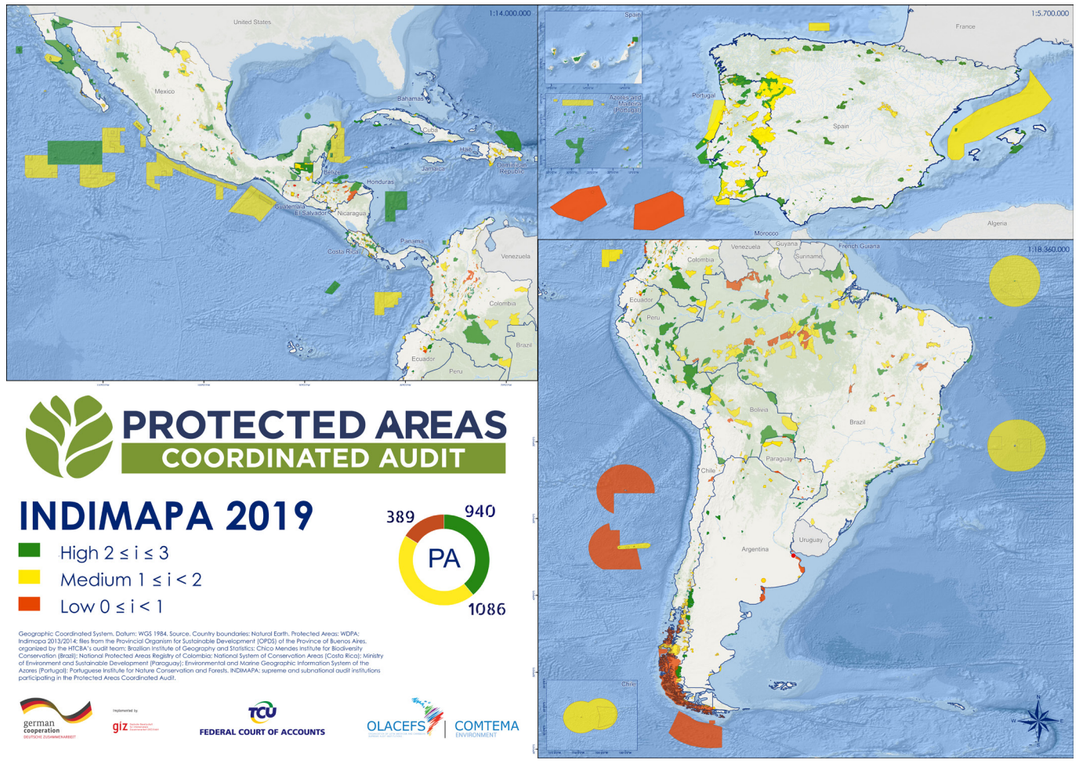
The average of the indices of all PAs assessed in 2019 was **1.73**.

Protected areas policy and other public policies

The interaction between policies and public institutions have been assessed by means of the **Duplication, Fragmentation, Overlap and Gap Analysis (DFOG)** methodology.



Source: DFOG Guide, developed by TCU based on GAO-15-49SP (U.S. GAO).



The interactions between the public policy for PAs and the public policies for public use in PAs and for the territorial consolidation of these territories were analyzed.

Regarding the process of public use in PAs (ecological/natural tourism activities, recreation in natural environments, education, and environmental interpretation), most of the SAIs identified DFOG with negative effects, such as:

- absence of a governmental strategy for ecological/natural tourism in PAs;
- shortage or lack of personnel, resources, and structure to support tourism;
- fragmentation between the responsible ministries and departments, without instruments for coordination.

These misalignments between policies are detrimental to the sustainable public use in PAs, and lead to their socioeconomic potential, which is recognized worldwide, being wasted (WEF, 2019).

Likewise, several Latin American SAIs have identified DFOG in the process of territorial consolidation, which generate legal uncertainty in PAs, and pressure on the use of their natural resources, due to:

- overlap of the PA's territories with other areas having other legal and ownership regimes;
- inconsistencies in the cartographic and land registration information in the official registries; and
- gaps in the regulations related to territorial planning.

Governance mechanisms

The governance mechanisms for **public participation** are relevant to allow for social inclusion in public policies, in accordance with the 2030 Agenda's principle of "leaving no one behind".

It was found that most countries which participated in the audit have legal provisions for mechanisms of public participation in the public policy for PAs. The audit also evaluated the participation mechanisms at the local level of PA management. Although these mechanisms exist in most assessed PAs, many of them are not active and/or are not representative (Indimapa indicator C).

The governance mechanism for monitoring and follow-up of the results of the public policy for PAs (indicator B) was also evaluated. It was found that, in general, participating countries have environmental monitoring systems in operation with focus on deforestation and threatened species, albeit in a partial fashion, and without disaggregating data by PA.