

MAGEPAN: Guide for Natural Heritage Management in Ecuadorian Provinces

Case Study Database

A compilation of good practices and lessons learned to bring innovative subnational solutions to global problems

Introduction

At the international level, natural heritage management is a crucial issue due to the increasing pressure on ecosystems and biodiversity. In many countries, such as Ecuador, subnational governments play a critical role in the management of natural heritage. However, this decentralization can also pose challenges, such as the lack of coordination between different levels of government and the need to strengthen the technical and operational capacities of subnational actors. These issues can result in negative impacts, such as biodiversity loss and environmental degradation, highlighting the importance of addressing natural heritage management in a comprehensive and collaborative manner.

Summary

The Manual of Strategic Management of Natural Heritage (MAGEPAN) developed by CONGOPE in collaboration with the provincial governments of Ecuador, is a tool designed to strengthen the management of natural heritage at the provincial level in Ecuador.

It is the result of a comprehensive study that assessed the capacities of provincial governments in political, technical, administrative, and financial areas.

Its main objective is to identify strategies and good practices to improve the management of natural heritage, promoting wildlife protection and technical capacity building at the subnational level.

Key Information

Localisation:
Provinces of Ecuador

Areas of interest:
Natural heritage management; Conservation; Capacity building.

Founded in:
2022

Investissement:
US \$ 35.000,00

Sustainable Development Goals addressed:
SDG 13 Climate Action;
SDG 15 Life on Land;

Goals addressed in the Kunming-Montreal Global Biodiversity Framework:
GOAL 1: Plan and manage all areas to reduce biodiversity loss;
GOAL 3: Conserve 30% of land, water, and seas.

Author

Consortium of Autonomous Provincial Governments of Ecuador (CONGOPE), Environmental Management Directorate, Henry Guzmán, as the focal point for natural heritage – CONGOPE, Consulting team: Luis Mario Moscoso-Martin Vega.



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BACKGROUND AND CONTEXT

NATURAL HERITAGE MANAGEMENT IN ECUADOR

Ecuador is home to an extraordinary natural wealth. The proper understanding and management of this heritage are crucial for its preservation and for the sustainable development of Ecuadorian regions. However, this task can become abstract or conflictive if it is not approached with the right approach, as has been evidenced in situations of uncoordinated road development that have generated negative impacts on fragile ecosystems and protected areas.

From the central level of the State, a significant part of the natural heritage is managed through the national environmental authority, which has structures, strategies, programs and specific projects for conservation. Much of this heritage is integrated into the National System of Protected Areas, the National Forest Heritage and other forms of management for conservation.

At the subnational level, the Decentralized Autonomous Governments (GAD) have the legal power to participate in environmental management, as established by the Ecuadorian legal framework. However, until 2022, the execution of this competence in the provincial GADs lacked a detailed evaluation. In this context, the Consortium of Provincial Autonomous Governments of Ecuador (CONGOPE) has played a key role in providing technical and legal support to provincial governments, particularly in relation to the management of natural heritage.

THE ROLE OF CONGOPE IN THE MANAGEMENT OF NATURAL HERITAGE

CONGOPE is an institution that promotes the decentralization and autonomy of the provincial governments in Ecuador. Its main objective is to strengthen the capacities of provincial governments to fully exercise their autonomy through specialized territorial management and development programs.

In the environmental field, CONGOPE has been a key player in providing the technical and legal knowledge necessary for provincial governments to exercise their competencies in the management of natural heritage. This implies not only the generation of territorial policies and regulations, but also the integration of the natural heritage component in annual planning, development and land use plans, as well as the establishment of monitoring and evaluation mechanisms.

CHALLENGES AND OPPORTUNITIES IN NATURAL HERITAGE MANAGEMENT

Despite the progress made, challenges still persist in the management of natural heritage in the GADs. Lack of coordination between the different levels of government, insufficient investment in conservation and constant pressure on natural resources are some of the obstacles that must be overcome.

KEY ACTIVITIES AND INNOVATIONS

THE MANUAL OF STRATEGIC MANAGEMENT OF NATURAL HERITAGE (MAGEPAN)

The project for the development of MAGEPAN (Manual of Strategic Management of Natural Heritage) arose from the urgent need to strengthen the management of natural heritage at the provincial level in Ecuador. This project not only represents a significant milestone in the conservation of the country's natural wealth but is also a notable example of inter-institutional collaboration and innovative approaches in the planning and execution of environmental conservation initiatives.

MAGEPAN constitutes an instrument that responds to the socioeconomic and productive reality of the provincial governments framed by local and national development policies, laws and programs. It is a tool that adjusts to the diagnosis and local management guidelines of the provincial governments, as well as to the identification of opportunities for the provincial management of natural heritage and the strategic ways to address the more complex components such as the linkage to wildlife and forest product trafficking control activities.



The main objective of MAGEPAN is to strengthen the management of natural heritage in Ecuador, specifically from the competencies of the Autonomous Decentralized Provincial Governments (GADP). To achieve this purpose, MAGEPAN was designed as a comprehensive guide that includes strategies and practices previously implemented individually in the country. At the same time, it functions as a tool that allows national and subnational authorities to observe the state of natural heritage management at the provincial level, providing inputs for coordinating actions and making technically supported decisions.

Another of MAGEPAN's key objectives is to foster the leadership of GADP officials in the generation of ideas related to natural heritage management. This is done from a perspective of decentralization of public policy, promoting collaboration among actors and institutions interested in the conservation of Ecuador's natural heritage. In addition, it seeks to articulate the debate and contributions of the different GADPs, providing a space for criticism and user participation, with the objective of becoming an essential up-to-date resource over time.

MAGEPAN is aimed at professionals who work in the environmental directorates or equivalents of the GADP of Ecuador, as well as technical public servants and managers responsible for issues related to natural heritage, its conservation and management. In addition, it is expected to be used as a guide and source of consultation, setting users in the reality of the provincial natural heritage, describing ten thematic axes and providing information on strategies and actions for their implementation. Finally, the manual also includes additional resources, such as a virtual library with

links and documents produced by different GADP and other institutions related to the topics covered.

PLANNING AND DEVELOPMENT OF MAGEPAN

The development of MAGEPAN was carried out in three clearly defined phases: 1) Diagnosis, 2) Strategy Development and 3) Participatory Validation of the Strategies. In the first stage, a comprehensive assessment was conducted to evaluate the state of the Natural Heritage Management competency, focusing on the legal, technical, and operational capacities of the 23 provincial GADs. This analysis covered a number of key areas, such as:

- **Administrative:** Evaluation of human, technical and technological resources, as well as the available infrastructure.
- **Technical:** Analysis of the profile and professional experience of the personnel responsible for Natural Heritage Management.
- **Planning:** Review of programs, plans, and projects related to Natural Heritage Management.
- **Financial:** Evaluation of the annual investment of the provincial GADs in the management of natural heritage.
- **Legal framework:** Assessment of the level of understanding of the regulations related to Natural Heritage Management.
- **Governance:** Analysis of the governance management model of natural heritage.
- **Multilevel articulation:** Identification of how Natural Heritage management is represented in each GAD, and how they interact with other actors and institutions at different levels.



“Laguna de Atillo Sangay National Park” from the Ministry of Tourism of Ecuador.

The methodology for collecting information included online and face-to-face interviews with the directors of environment and planning, coordinators and those responsible for the Natural Heritage Management of the 23 Provincial GADs, as well as surveys aimed at the technical teams of the units/directorates/departments of environment. In addition, a search and compilation of information related to the natural heritage of each province, published by official sources, was carried out.

Based on the results of the diagnosis, the Strategic Management Manual for Natural Heritage (MAGEPAN) was developed. This manual is designed as a guide and reference source that covers four cross-cutting axes and ten thematic axes. These axes were classified according to the provisions of five relevant legal frameworks:

- Constitution of the Republic (CNP);
- Organic Environmental Code;
- Regulation of the Organic Environmental Code;
- Organic Code of Territorial Organization, Autonomy and Decentralization;
- Environmental Management Competencies determined by the CNP.

The cross-cutting axes address fundamental aspects that cross all areas of natural heritage management, providing a comprehensive framework for their approach. These aspects are:

- Declaration of conservation systems or areas;
- Development and Territorial Planning Plan (PDOT);
- Citizen participation;
- Environmental education and assertive communication.



On the other hand, the thematic axes represent specific areas of focus within the management of natural heritage, addressing key aspects related to the conservation and protection of the environment:

1. *In situ* biodiversity conservation ;
2. *Ex situ* biodiversity conservation;
3. Wildlife and genetic resources management;
4. Ecosystem services;
5. Forest regime;
6. Management of marine-coastal areas;
7. Watershed, soil and food sovereignty management;
8. Environmental education and research;
9. Environmental funds;
10. Associations and consortia.

Each of these thematic axes is analyzed in detail in MAGEPAN, providing specific strategies and actions for their effective implementation at the provincial level. In addition, relevant information on good practices, links to additional resources and documents prepared by various actors and institutions related to the management of natural heritage are included.

The results of the diagnosis and the proposed strategies were analyzed and validated by the technicians and directors of the Provincial GADs in three regional face-to-face workshops. This participatory validation ensures that MAGEPAN accurately reflects the needs and realities of each province, making it a practical and effective tool for the strategic management of natural heritage at the subnational level.

ENVIRONMENTAL IMPACTS

MAGEPAN has had a significant impact on natural heritage conservation and management initiatives at the provincial level. One of the concrete measures that demonstrate this impact is the declaration of conservation areas by the provincial Decentralized Autonomous Governments (GADs). For example, since the publication of MAGEPAN in 2023, at least two Provincial GADs have declared conservation areas, following the strategies proposed in the manual. This result indicates that MAGEPAN has provided a solid framework for GADs to take concrete measures in the conservation of natural heritage.

In addition, the process of standardization of management of provincial conservation areas, as

well as the socialization of cartographic information related to natural heritage, also demonstrates the impact of MAGEPAN on environmental management at the subnational level. These initiatives show a greater awareness and commitment on the part of the provincial GADs in the sustainable management of the environment.

The strengthening of the Natural Heritage teams in the provinces is another tangible result of MAGEPAN. This indicates a greater technical and operational capacity to address environmental challenges at the local level, which can translate into better management and conservation of natural heritage.

SOCIOECONOMIC IMPACTS

The MAGEPAN project has a remarkable influence both regionally and locally in socio-economic terms. First, the declaration of conservation areas and the implementation of natural heritage management strategies have the potential to promote sustainable development in local communities by protecting natural resources and encouraging economic activities compatible with conservation.

In addition, several of the axes addressed in MAGEPAN have direct and indirect implications for the economic and social development of the provinces:

Environmental services: Effective management of environmental services, such as water regulation and soil conservation, contributes to improving the quality of life of local communities and strengthening their resilience to extreme weather events. In addition, the implementation of payment for environmental services mechanisms, such as Water Funds, can provide economic incentives for the conservation of key ecosystems, which benefits both local communities and the environment.

Watershed, soil and food sovereignty management: The integrated approach to watershed and soil management has significant impacts on food security and job creation

in the agricultural sector. By promoting sustainable agricultural practices and the conservation of natural resources, agricultural productivity can be improved and equitable access to water and food resources can be ensured, contributing to the economic and social development of the provinces.

Environmental funds: The creation of environmental funds can mobilize financial resources for the conservation of natural heritage and the implementation of sustainable development projects. These funds can finance provincial and local initiatives that promote biodiversity conservation, restoration of degraded ecosystems, and adaptation to climate change, benefiting both local communities and the environment at large.

Associations and consortia: Collaboration between different governmental and non-governmental actors through associations and consortia strengthens the capacity of provinces to address environmental challenges and promote sustainable development at the regional level. By working together in the planning and execution of environmental projects, synergies can be generated that promote economic growth and improve the quality of life of local populations.

GENDER IMPACTS

MAGEPAN has considered the gender variable in its analysis by including “climate change and gender” as one of the variables for the systematization and analysis of the information. In addition, a good practice related to rural Andean women in the face of climate change in Cotopaxi has been highlighted.

POLICY IMPACTS

MAGEPAN has had a significant impact on the legal and institutional framework related to the management of natural heritage at the provincial level. The standardization of management plans and management of conservation areas, as well as the socialization of cartographic information generated by the Provincial GADs, have contributed to the formulation of more coherent and effective policies in this area.

In addition, the strengthening of Natural Heritage teams in the provinces has improved the capacity to implement policies related to the conservation of natural heritage. This is reflected in the greater coordination and cooperation between the different levels of government in the planning and management of the territory in environmental matters.

SUSTAINABILITY

The modular structure of MAGEPAN allows for easy navigation and consultation, facilitating quick access to relevant information. Its design is dynamic and adaptable, allowing for continuous updates and improvements to respond to new needs and challenges in natural heritage management.

Financially, US\$ 35,000 was invested in the implementation of the project, covering the development of the manual and the holding of workshops and training events. The Directorate of Environmental Management of CONGOPE fully financed this investment within its annual operational planning for 2022-2023, focused on strengthening the capacities of the Decentralized Autonomous Governments in the management of natural heritage.

To ensure the continuity and usefulness of the MAGEPAN project, and with the aim of making it an operational instrument for the management of natural heritage from 202 on, the Directorate of Environmental Management of CONGOPE signed an inter-institutional cooperation agreement with WWF in 2023. Thanks to this collaboration, a grant of approximately \$100,000 was obtained. With this support, a new process of accompaniment and generation of instruments that facilitate the local management of natural heritage by the Environmental Management Directorates of the Provincial Autonomous Governments is being developed. The instruments under development include the following four local tools:

1. Manual for the generation and/or updating of management plans for provincial conservation areas;
2. Model of the functional organizational structure suitable for fulfilling natural heritage competencies;
3. Ordinance model for the generation, use, and distribution of geoinformation;
4. Proposal for a geographic information model.



MAGEPAN also includes in its library a collection of good practices generated by the GAD in the management of natural heritage, through various initiatives, plans, programs and projects.

One of the biggest challenges for GADs is to implement effective environmental governance models. To help GADs overcome environmental governance challenges, consortia and associations have been created. Some prominent examples are:

- The Consortium of the Coastal Marine Mountain Range, which is made up of 3 Provincial Governments (Santa Elena, Manabí and Guayas), 4 Municipal Governments and 13 Parish Governments.
- The consortium for planting and water harvesting - CASCA, which is made up of the Provincial Governments of: Cotopaxi, Pichincha, Carchi, Tungurahua, Chimborazo.

In addition, the project has been presented at events and conferences at national and international level, which has increased its visibility and promoted its adoption by other actors interested in natural heritage management at the provincial level. This active dissemination contributes to the sustainability of the project by generating interest and continuous support from various stakeholders.

ASSOCIATIONS

Partnerships play a crucial role in the context of the MAGEPAN project. CONGOPE acts as an articulating agent between the Decentralized Autonomous Governments (GAD) and state entities. On the other hand, CONGOPE seeks collaboration with a variety of actors, including NGOs and international organizations and agencies. Some examples are WWF, GIZ, UNDP, the Ministry of the Environment, Water and Ecological Transition (MAATE), as well as universities at the local level. Internationally, they participate in networks such as Regions4 and ICLEI.

In the planning process, the Environmental Management Directorate of CONGOPE, in conjunction with the Environmental Directorates of the Provincial Governments, identified the need to understand local demands. This need gave rise to MAGEPAN, an instrument that reflects both local needs and the challenges faced by GADs in environmental and natural heritage management.

During the development phase, the partnership between CONGOPE and the Provincial Decentralized Autonomous Governments (GADP) was instrumental in ensuring the relevance and adequacy of MAGEPAN to the specific needs and realities of each province. The participation of the GADP in this process ensured local ownership of the project and its alignment with provincial priorities and agendas.

In addition, the role of CONGOPE has been fundamental since the process of decentralization of competences in 2014. The generation of tools such as MAGEPAN at the local level makes it possible to establish a roadmap to implement guidelines from the National Environmental Authority, facilitating the accompaniment of the Autonomous Governments in their implementation.



REPLICATION AND APPLICABILITY

Although the MAGEPAN project was designed specifically for the Ecuadorian context, many of its principles and approaches can be transferred to other geographical regions. For example, the manual's modular structure and inclusion of good practices can be adapted to different cultural and environmental contexts with minimal adjustments. However, the success of the MAGEPAN project is due to a combination of factors that must be considered in the replication of similar initiatives in other regions. Some of these key elements are highlighted below:

Enabling legal and political context: The Ecuadorian legal framework, which grants competences to the Decentralized Autonomous Governments (GAD) in environmental management, provided a favorable environment for the development and implementation of MAGEPAN. The existence of clear laws and regulations facilitates the articulation of strategies and the execution of actions for the conservation of natural heritage.

Detailed diagnosis: It was essential to carry out a thorough assessment of the current state of natural heritage management in the target region, addressing aspects such as human resources, infrastructure, technical and financial capacity, legal framework, governance and citizen participation. This assessment provides a clear understanding of the specific challenges and opportunities facing the region in terms of natural heritage conservation. This effort includes the following actions:

- **Data collection and participatory analysis:** It is important to collect relevant data through participatory methods that involve diverse stakeholders, including government officials, civil society organizations, local communities, and conservation experts. This will ensure that the diagnosis reflects a wide range of perspectives and experiences, making it easier to identify effective and culturally appropriate solutions.
- **Identification of gaps and priority areas:** It is also necessary to identify significant gaps in natural heritage management and determine priority areas for action. This may involve identifying critical ecosystems at risk, endangered species, emerging threats, and conservation and sustainable development opportunities that require immediate attention.
- **Identify lessons learned and applicable good practices:** It is recommended to identify and integrate good practices, which can cover aspects such as the declaration of conservation areas, the management of ecosystem services, the strengthening of natural heritage teams, among others. These practices serve as inspiring and motivating examples to implement solutions in the different axes.

Provincial participation and ownership: The active participation of the Provincial GADs in all stages of the project ensured the relevance and adequacy of MAGEPAN to the specific realities of each region. This subnational ownership was crucial to ensure the effective implementation of the strategies proposed in the manual and to ensure the long-term sustainability of natural heritage conservation actions.

Comprehensive approach and adaptability: MAGEPAN's comprehensive approach, which addresses both technical and legal, social and economic aspects of natural heritage management, makes it adaptable to different contexts and realities. In addition, the manual's modular structure makes it easy to navigate and consult, allowing users to quickly access relevant information and tailor strategies to their specific needs.

Adequate financial investment: Although the MAGEPAN project required an initial investment, this was relatively modest (US\$ 35,000.00) and was mainly used for the development of the manual and the conduct of workshops and training events. However, this investment was essential to generate the knowledge and capacities necessary for the effective management of natural heritage at the provincial level.

Training and capacity building: Capacity building of environmental management teams was critical to ensure the successful implementation of the project.

In addition, it should be noted that currently the experience of MAGEPAN at the provincial level is being applied to the reality of the Municipal GADs, and CONGOPE is articulating the integration of spatial data for the joint management of Natural Heritage. On the other hand, MAGEPAN is being used by various actors at the national level. Beyond being a consultation tool, it is serving as the basis for a variety of initiatives and projects led by both the National Environmental Authority and local actors.



FOR MORE INFORMATION

To obtain more information about this project, visit <https://www.congope.gob.ec/wp-content/uploads/2024/09/MAGEPAN-170723.pdf-version-final-6.pdf>

You can also contact us via email at info@regions4.org to schedule an informational meeting, address your questions, and receive support for the implementation of



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RegionsWithNature

ABOUT REGIONS4

Regions4 (formerly known as nrg4SD) is a global network that exclusively represents regional governments (states, regions, and provinces) in UN processes, European Union initiatives, and global discussions on climate change, biodiversity, and sustainable development. Regions4 was established in 2002 at the World Summit in Johannesburg and currently represents over 40 members from 20 countries across 4 continents. Through advocacy, cooperation, and capacity building, Regions4 empowers regional governments to accelerate global action.

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Chaussée d'Alsemberg 999 - B-1180, Brussels, Belgium

www.regions4.org

info@regions4.org

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