

ENVIRONMENT
OUTLOOK IN
AMAZONIA

GEO

AMAZONIA



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FOREWORD:

After a two-year process involving around 150 scientists and experts from all Amazonian countries, it is a great pleasure for the United Nations Environment Programme (UNEP) and the Amazon Cooperation Treaty Organization (ACTO) to present the *Environment Outlook in Amazonia – GEO Amazonia*.

Using the Global Environment Outlook (GEO) methodology, this unique report provides a complete and integrated assessment of the globally significant ecosystem of the Amazon Basin, shared by Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

Amazonia is home to an enormous variety of species of flora and fauna and is an important area of endemism, constituting a genetic reservoir of worldwide importance. The water generated in the Amazon Basin represents around one-fifth of the world's runoff. Its forests are a crucial carbon sink, absorbing hundreds of millions of tonnes of greenhouse gases every year.

The region has a long and rich history of human settlement and culture – it currently has 38 million inhabitants: over 60 per cent in cities. Monoculture and livestock farming have been rapidly expanding along with transportation and energy mega-infrastructures linked with regional economic growth but also with globalization and international markets.

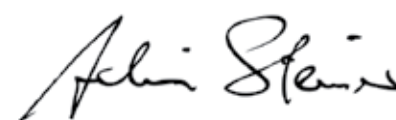
Countries sharing this rich yet fragile ecosystem have recently developed strategies for conservation and sustainable development, but they have yet to develop a unified Amazonian environmental vision.

The limitation of scientific information and consistent statistical data across areas makes it difficult to compare or aggregate environmental issues, and the local data has not been analyzed and organized in a way that can contribute to a solid and integrated environmental vision.

The GEO Amazonia aims to provide a sound basis for policy makers at the national, sub-national and local levels of the Amazonian countries in their efforts to ensure the long-term sustainability of development initiatives.

We wish to thank the Ministries and National Environmental Authorities, line ministries and associated experts, as well as the scientists, researchers and institutes in the Amazonian countries for the valuable collaboration that made the production of this report possible. We particularly wish to emphasize the contribution of the Universidad del Pacífico, in Peru, towards the coordination of the complex assessment process.

While Amazonia has suffered many environmental hazards, we remain convinced that the region's leaders will take the right decisions to halt environmental degradation and promote sustainable development for the good of the region's inhabitants and for all of humanity. Our hope is that this report will contribute to this process.



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INTRODUCTION:

Amazonia is an extremely valuable ecosystem because of its natural and cultural wealth. Populations from a wide variety of origins have occupied this territory since time immemorial. Furthermore, Amazonia is globally recognised for the variety of ecosystem services it provides, not only for its local population, but also to the entire world.

Amazonia is going through a process of environmental degradation that is expressed in growing deforestation, loss of biodiversity, water pollution, deterioration of the indigenous populations and cultural values and degradation of environmental quality in urban areas. This environmental situation is the result of a set of processes and driving forces that adversely affect this complex ecosystem and its ecosystem services, which is translated into the loss of quality in the lives of the local, national and entire regional population.

The knowledge of how this complex Amazonian ecosystem that transcends national borders of the countries it comprises, works, is as yet very limited. In spite of the many studies that have been conducted on the region, "Amazonia without myths" (Inter-American Development Bank, United Nations Development Programme, and the Pro Tempore Secretariat for the Amazon Cooperation Treaty, 1992) is the document that has most faithfully demonstrated the preconceptions or demythologisation of Amazonia. This work was an important contribution toward promoting a regional vision of Amazonia. Among the myths singled out in that publication were: **(i) the homogeneity of Amazonia; (ii) the emptiness or virginity of Amazonia; (iii) the wealth, and alongside the poverty of Amazonia; (iv) Amazonia as the "lung of the Earth"; (v) the indigenous "brake on development"; (vi) Amazonia as a solution or panacea for national problems; and, finally (vii) the internationalisation of Amazonia.**

GEO Amazonia is intended to present a vision of Amazonia from the perspective of the Amazonian countries and with the participation of Amazonian stakeholders; as well as to explain, based on scientific evidence, that Amazonia is a heterogeneous region, of striking contrasts, both in physico-geographic aspects and those of natural wealth as well as in the socio-cultural, economic and politico-institutional characteristics. The differences become evident, even in such basic aspects of its study, as the very denomination of Amazonia (while some of the region's countries use the accent "Amazonía" others call it Amazonia) or in the area it comprises.

There have been many years of memorable events and international summit meetings, where commitments were assumed in favour of sustainable development. It has been 22 years since the launch of Our Common

Future, where the concept of sustainable development was defined; seven years have passed since the World Summit on Sustainable Development, where the Johannesburg Implementation Plan for Agenda 21 was adopted. Among the related initiatives there is the "Millennium Development Goals", which represents a summation of efforts to achieve sustainable and just development.

In spite of all this, evidence shows that Amazonia, one of the most valuable ecosystems on the planet, is deteriorating in an accelerated manner, mainly due to the unsustainable way activities are operating and the predominance of the criterion of seeking short-term benefits, without considering the externalities of the economic decisions. The differences, far from daunting or distancing us, constitute an important challenge for managing Amazonia's environmental problems, on both the national and regional levels, and offer the opportunity of continuing to strengthen the efforts of collaboration among the Amazonian countries. In respect of those countries, their concern for environmental problems in Amazonia is evident, and has translated into plans, programmes and projects for attending to them. However, the responses and actions are as yet limited in relation to the magnitude of the environmental problems that must be faced.

In this context, the objective of GEO Amazonia is to develop an integral environmental evaluation of the Amazonian ecosystem in order to contribute to the formulation of policies and decision-making processes for sustainable development in Amazonia. This integrated environmental assessment was conducted using the methodological proposal, suggested by the United Nations Environment Programme (UNEP) GEO (Global Environment Outlook) project, which has been adapted to realise an ecosystem analysis. It should be pointed out that GEO

Amazonia, like other GEO processes, is characterised by a participatory, multi-disciplinary, multi-sectorial and multi-product approach.

The methodological proposal for integral environmental evaluation consists of analysing pressures and driving forces that explain the environmental situation, explaining the situation of the principal environmental components, analysing the impacts generated by environmental degradation in the ecosystems and in human well-being, and explaining the principal actions and responses attempted by the diverse stakeholders to reverse the process of environmental degradation. Finally, after concluding the diagnosis, the future environmental perspectives for Amazonia are presented, based on the analysis of scenarios and emergent issues.

In synthesis, an integral environmental evaluation answers the following questions:

1. What is happening to the Amazonian environment and why?

2. What are the impacts of the environmental situation on the Amazonian ecosystem and on human well-being?

3. What is being done to respond to this environmental situation?

4. What are the future environmental perspectives for Amazonia?

5. What are the proposals for action that would allow for future sustainable development?

Amazonia and the historical background, in order to establish an adequate context and framework for the study. The second chapter explains the different processes affecting the environmental situation, such as socio-demographic and economic trends, processes of change in land usage and climate change, among others. Chapter three explains the status and trends in biodiversity, the forest, hydrological resources and aquatic ecosystems, of agro-productive systems and of human settlements. In the fourth chapter, the impact of environmental degradation in Amazonia on its natural ecosystems and human well-being is analysed. Chapter five explains the principal responses that have been given to halt the process of environmental degradation and its respective impacts. The sixth chapter suggests four probable scenarios that explain the environmental situation that could describe life in a future Amazonia, considering the assumptions of each scenario. Emergent issues requiring attention are also identified. Finally, chapter seven presents the principal conclusions from the study and suggests a set of guidelines for action for the purpose of contributing to the reduction of degradation in Amazonia.

GEO Amazonia includes a set of valuable data and sources of information that is intended to serve as a base line for the continuous process of evaluation and monitoring. It was also attempted to support and broaden the spaces for dialogue and exchange of information in order to establish a platform for the systematisation and coordination of the information that is available.

The results of GEO Amazonia bear witness to the fact that the clarion call in "Amazonia without myths" is still pertinent. It is possible to think of an Amazonia where progress is ensured toward sustainable development and human well-being for the current and future generations in the region; but this requires a committed willingness to achieve those objectives and coordinated actions leading to those ends.

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