

The GAP analysis on the Protected Areas of Mexico: A cooperative effort .

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Background

Since the COP7 meeting at Kuala Lumpur in February 2004, and after the singing of the NISP¹ agreement among the Government of Mexico (GOM) and the World Wildlife Fund (WWF), Conservation International (CI) and The Nature Conservancy (TNC), the National Commission of Mexico for Protected Areas (CONANP²) promoted and activated in March 17th, 2004 an important joint effort between several agencies of the GOM and the international and local NGOs focused on conservation of biodiversity in order to accomplish the commitments acquired by Mexico in three major guidelines: 1) To develop a GAP analysis of the Protected Areas (PA), 2) To assess the requirements and needs for training and capacity building for the management of PA and 3) To design and implement financial mechanisms for the sustainability of PAs in the country.

In order to consolidate the resources that could be focused to accomplish this goals, CONANP seek and found the support of additional GOM agencies like the National Commission on Biodiversity of Mexico (CONABIO³), the National Institute of Ecology (INE⁴) and the Geographical and Statistics National Institute (INEGI⁵), as well as the support from other major national NGOs like PRONATURA and DUMAC (Ducks Unlimited of Mexico). CONANP delegate to CONABIO the responsibility to lead and organize the joint process to perform the GAP analysis under strict science-based standards and procedures and using the best information and data available on the biodiversity of Mexico.

¹ NISP, National Implementation Support Program.

² CONANP, Comisión Nacional de Áreas Naturales Protegidas, Secretaría de Medio Ambiente y Recursos Naturales.

³ CONABIO, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad.

⁴ INE, Instituto Nacional de Ecología.

⁵ INEGI, Instituto Nacional de Estadística, Geografía e Informática.

The partnership

Since the beginning, CONANP and CONABIO as leaders and promoters of the GAP Analysis in Mexico clearly understand the need of getting the best resources available in-country in terms of experts within the academy and research centers, as well as the best and updated data on the biodiversity of Mexico, much of which had been generated by research projects supported by CONABIO, and also by prioritization and conservation planning efforts performed by the NGOs including action plans developed by specialists groups focused on threatened and endangered species and in ecosystems.

In September 30th. 2004, during a first workshop all the participants of this partnership understand the importance of join efforts, skills and resources in order to contribute to develop a solid GAP analysis that Mexico could present in the COP8 meeting in 2006. A spirit of cooperation domain from the beginning of the process between the GOM agencies and the NGOs, and the first agreements on the procedures, approaches and quality and scales of data to be used were taken.

Considering the size and complexity of the territory of Mexico as well as the relative dispersion of information and data on its biodiversity, it was clear that this joint approach was the only way to accomplish a GAP analysis with the restrained time available.

Report of progress

a) Sharing information, technical tools and resources.

All the participants for the Gap Analysis of PA in Mexico agreed in sharing all the available information and data that could be used as input; every partner explain to the others on the available information, technical tools and resources to be provided in order to support this effort, including biodiversity data, geographical databases at different scales, regional conservation action plans, prioritization exercises for conservation of species and ecosystems and other outputs generated in the last years.

Clearly, CONABIO datasets constitutes the major axis of information for this analysis considering the 4.3 million of geo-referenced records on flora and fauna, the results of dozens of studies on biodiversity carried out throughout all the country - regarding a variety of taxa of flora and fauna - and the extensive geographical databases at different scales for the country. Although, it was also recognized that the NGOs had also extensive datasets that could provide very valuable information on specific taxa, regions and ecosystems that will be considered.

Fortunately, CONABIO had been promoting and developing several prioritization exercises in order to determine the terrestrial, freshwater and marine priority regions for the conservation of the mexican biodiversity. These are considered as a first approximation to the areas and sites of the highest importance for biodiversity conservation in Mexico. Several essential information sources such as the new geographical datasets on the vegetation and land use in Mexico at National level developed by INEGI had been identified as major inputs to be used in the GAP analysis. Conservation International will be providing important geographical datasets used to identify Key Biodiversity Areas (KBA) for northern Mesoamerica and the Gulf of California and The Nature Conservancy had been supported eco-regional planning efforts that produced important inputs.

b) Developing a ecological framework as reference: A new map of the ecoregions of Mexico.

As framework, the CONABIO and the INEGI supported a experts workshop that generated an updated map of the eco-regions of Mexico from former maps produced by The World Wildlife Fund and the CONABIO, as well as from maps published by the Comission for Environmental Cooperation of North America.

c) Defining scopes of work and methods.

Up to date, several types of information analysis, from procedures to technical tools had been discussed to be used within the GAP analysis and right now are under consideration by the participants. Probably a first general analysis to perform will be on the current protected areas distribution and coverage in the context of the ecosystems of every eco-region, in order to define the representativeness of the actual PA network in Mexico. A similar analysis developed for Colombia⁶ had been of inspiration to design this first approach.

d) Identification of conservation targets.

A preliminary set of conservation targets for terrestrial, freshwater and marine ecosystems had been defined in consideration to the criteria suggested in the COP7, including irreplaceability, connectivity and ecological services. Soon a list of selected targets in terms of species, critical habitat and ecosystems will be build as a guide to perform several activities related with the identification of high priority areas and sites.

e) Next steps and challenges.

In order to make this effort more inclusive, it has been considered to involve other participants including the Mesoamerican Biological Corridor Initiative – (Mexico Chapter), dozens of other local conservation NGOs spread throughout the whole country, universities and research centers who had been worked intensively in different regions of Mexico, and experts on the conservation of species and ecosystems which are actively defining sites and areas to conserve. As a first step to perform this task, a national survey of the critically endangered sites, ecosystems and threatened flora and

⁶ Arango, N., D. Armenteras, M. Castro, T. Gottsmann, O.L. Hernández, C.L. Matallana, M. Morales, L.G. Naranjo, L.M. Renjifo, A.F. Trujillo y H.F. Villareal. 2003. *Vacíos de Conservación del Sistema de Parques Nacionales Naturales de Colombia desde una Perspectiva Ecorregional.* WWF Colombia (Fondo Mundial para la Naturaleza) - Instituto de Investigaciones de Recursos Biológicos Alexander von Humboldt. Colombia. 64 pp.

fauna populations in the different states of Mexico will be performed through a efficient consultation that will cover all the nation.

To incorporate migratory species in the analysis will be a major challenge considering must of the information on the stopovers and routes are still not well known for must of the species like the migratory bats; Although a solid effort will be performed in order to include the must important sites and areas for migratory birds, bats and other groups (e.g. butterflies).

f) Lessons learned

- 1. Considering the increasing difficulty to establish new protected areas in Mexico, is clear that all the available additional conservation tools to cover as much as the conservation portfolio resulted from the GAP analysis will had to be considered. These includes conservation easements, land use planning processes (Ordenamientos Ecológicos Territoriales), conservation aof private and community lands, new policies and legislation, ecological restoration programs, ecological services payments and conservation economic incentives.
- 2. Many of the prioritization exercises and eco-regional conservation plans developed by the NGOs had been generated throughout solid and sciencebased procedures that includes the participation of the major stakeholders involved in the conservation of biodiversity of a region; thus, these inputs should be considered of the utmost importance for the GAP analysis.