

The Mexico Gap Analysis – A cooperative effort

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Background: After the COP7 meeting at Kuala Lumpur in February 2004, a National Implementation Strategy Program (NISP) agreement was signed by the Government of Mexico (GOM) and the World Wildlife Fund (WWF), Conservation International (CI) and The Nature Conservancy (TNC). Following this, the National Commission of Mexico for Protected Areas (CONANP¹) was developed, and on March 17th, 2004 established an important joint effort between several agencies of the GOM and international and local NGOs, focused on conservation of biodiversity to meet the commitments agreed to by Mexico. The partnerships' objectives were threefold: 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.

To consolidate the resources that could be focused to accomplish this goals, CONANP sought and found the support of additional GOM agencies such as the National Commission on Biodiversity of Mexico (CONABIO²), the National Institute of Ecology (INE³) and the Geographical and Statistics National Institute (INEGI⁴), as well as the support from other major national NGOs like PRONATURA and DUMAC (Ducks Unlimited of Mexico). CONANP delegated 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.

The partnership: CONANP and CONABIO, as leaders and promoters of the gap analysis in Mexico, clearly understand the need for getting the best experts and data available in-country through partnerships with professionals from the NGOs, and from academia. Much of the data had been generated by research projects supported by CONABIO, and also by prioritization and conservation planning efforts performed by NGOs, including action plans developed by specialists groups focused on threatened and endangered species and in ecosystems.

During an initial workshop on September 30th 2004, all members of the partnership explored the potential for combining their skills and resources to contribute to developing a rigorous gap analysis that Mexico could present at the CBD COP8 meeting in 2006. A spirit of cooperation between the GOM agencies and the NGOs has pervaded this process since its initiation and at that workshop the first agreements on the procedures, approaches and quality and scales of data to be used were taken. Given the size and complexity of the territory of Mexico, as well as the relative dispersal of information and data on its biodiversity, it was clear that this joint approach was the only way to accomplish a gap analysis with short amount of time available.

¹ CONANP, Comisión Nacional de Areas Naturales Protegidas, Secretaría de Medio Ambiente y Recursos Naturales.

² CONABIO, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad.

³ INE, Instituto Nacional de Ecología.

⁴ INEGI, Instituto Nacional de Estadística, Geografía e Informática.

Report of progress

Sharing information, technical tools and resources: All the participants in the Mexican protected area gap analysis agreed to share all available information and data, 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 few years. Clearly, CONABIO datasets constitute the major source of information for this analysis, considering its 4.3 million geo-referenced records about flora and fauna, its dozens of studies on biodiversity throughout the country and its extensive multi-scale geographical databases. Complementing these data were those of the local and international NGOs who also had extensive datasets that could provide very valuable information on specific taxa, regions and ecosystems that will be considered.

Fortunately, CONABIO had previously developed several prioritization exercises to determine the terrestrial, freshwater and marine priority regions for the conservation of Mexican biodiversity. These were 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 vegetation and land use in Mexico at a country-wide scale, were 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 has supported eco-regional planning efforts that produced important inputs in ecoregions across vast swaths of the country.

Defining scopes of work and methods: To date, several types of information analysis, ranging from procedures to technical tools, have been discussed as possible inputs to the gap analysis and these are currently 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 for every eco-region, in order to define the representativeness of the existing PA network in Mexico. A similar analysis developed for Colombia⁵ has been of inspiration in designing this first approach.

Identification of focal biodiversity: A preliminary set of focal biodiversity for the gap analysis, which included terrestrial, freshwater and marine ecosystems, was defined, given the criteria suggested in the language of the CBD *Programme of Work on Protected Areas*. Using criteria such as **irreplaceability**, **connectivity** and **ecological services**, a list of selected biodiversity was generated for the analysis that included species, critical habitat and ecosystems to assist in identification of high priority areas and sites.

Next steps and challenges: Two primary challenges remain:

1. To make the gap analysis for Mexico more inclusive, we are considering involvement of other participants including staff from the Mesoamerican Biological Corridor Initiative – (Mexico Chapter), dozens of other local conservation NGOs spread throughout the Mexico, universities and research centres where staff have worked intensively in different regions

⁵ 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. *Vacios 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.

of Mexico, and experts on the conservation of particular species and ecosystems, who are actively defining sites and areas to conserve.

2. There will be a major challenge in incorporating migratory species into the analysis considering that much of the information on stopover sites and migratory routes is still not well known for many species such as migratory bats.

Lessons learned

- ✓ It is increasingly difficult to establish new protected areas in Mexico. Given this fact, it is clear that additional conservation tools will be necessary to conserve as much as the biodiversity conservation portfolio identified in the gap analysis as possible. These tools will likely include conservation easements, land use planning processes (*Ordenamientos Ecológicos Territoriales*), conservation of private and community lands, new policies and legislation, ecological restoration programs, ecological services payments and conservation economic incentives.

- ✓ Many of the prioritization exercises and eco-regional conservation plans developed by NGOs had been generated throughout solid and science-based procedures that included the participation of the major stakeholders involved in the conservation of biodiversity of a region. These inputs should be considered of the utmost importance for the gap analysis.