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**HARMONIZING REPORTS ON INTERNATIONAL BIODIVERSITY RELATED
CONVENTIONS: PILOT PROJECT, PANAMA**

**HARMONIZING REPORTS ON INTERNATIONAL
BIODIVERSITY RELATED CONVENTIONS**



REPUBLIC OF PANAMA

**UNITED NATIONS ENVIRONMENT
PROGRAMME (UNEP)**

NATIONAL ENVIRONMENTAL AUTHORITY (ANAM)

PANAMA

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ACRONYMS

ANAM	National Environmental Authority
CBD	Convention on Biological Diversity
CBM	Mesoamerican Biological Corridor
CCAD	Central American Commission on Environment and Development
CEM	Convention on Conservation of Migratory Animal Species
CITES	Convention on International Trade of Endangered Species
CMS	Convention on Conservation of Migratory Wildlife Species
UN	United Nations
ROLAC	UNEP's Regional Office for Latin America and the Caribbean
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
RAMSAR	Convention on Internationally Important Wetlands, Especially as Aquatic Bird Habitat
SINIA	National System of Environmental Information
SPAW	Protocol on Specially Protected Areas and Wildlife
STRI	Smithsonian Tropical Research Institute
ICT	Communication and Information Technologies
IUCN	International Union for Conservation of Nature (IUCN)
IUCN/ORMA	IUCN Regional Office for Central America
UNEP/CEP	UNEP/Caribbean Environmental Programme
UNESCO	UN Education, Science and Culture Organization
WCMC	World Conservation Monitoring Centre
WHC	World Heritage Convention

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“The program approved by the XIX Special Session of the UN General Assembly, held on June 17 1997 to foster implementation of Agenda 21, gives special priority to collaboration between related agreements and to strengthening information capacity as requirements for sustainable development. Agreements on Biodiversity and Agenda 21 and/or related to these two themes share the same concern for many issues regarding the environment and sustainable development and have numerous similarities in terms of obligations stemming from their compromises, such as research, reports, training, public education, and awareness. Even though each instrument has its own mandate, objective and compromises defined, there is currently growing recognition of the links and relations between them since they all operate in the same ecosystems. If they are implemented in the same fashion, progress could be achieved in all fronts and results will be larger than the sum of its parts.”

UN Gen. Sec.

CONTEXT

The Republic of Panama has a geographically and strategically privileged position in the region. It is a 75,517 km² Isthmus located at 7°12'07" and 9°38'46" N latitude north and between 77°09'24" - 83°03'07" longitude west; it has coasts on both the Pacific and the Atlantic oceans and shares borders with Costa Rica and Colombia. According to the 2000 population survey, Panama has 2,815,644 inhabitants.

Panama has 9 provinces and 5 indigenous regions (locally known as "*comarcas*") divided into 67 municipalities or districts. The Panama Canal, an 80km inland waterway connecting the Pacific and the Atlantic oceans through the continent's narrowest part, is a major international marine route.

It has a rainy tropical climate on its shores and lowlands with an average 27 °C temperature and rainy temperate climate in the highlands with an average 18°C. Annual rainfall ranges between 1,770 mm - 3,255 mm.

Panama has a rich cultural heritage based upon the diverse ethnic groups living in the country, descendants from the indigenous groups together with several other immigrant groups who came in different at different times in history, giving birth to several ethnic communities, especially during the construction of the Panama Canal. There are 14 fairly representative ethnic groups and several smaller communities.

Regarding the economy, Panama's development has historically depended on the services sector (trade, capital and service personnel) that generates 75% of GNP.

The country has excellent land, air and maritime transportation infrastructure. There is a banking center with more than 120 banks and an insurance center with sophisticated international communications systems.

In 1999, the Panamanian economy grew 3.2%, a slower pace than in 1998 (4.1%).

High level of inequality in wealth distribution is a common feature of Panamanian society, placing the country among the first regionally.

There have been growing government and non-governmental efforts to face environmental and natural resource degradation. The pace has slowed down yet it is still a worrisome situation as the agricultural frontier keeps expanding through the destruction of natural habitat and loss of biodiversity. Coupled with unsustainable agriculture and largely unplanned urban growth and sprawl, the country faces negative environmental impacts from soil and water pollution, loss of fertile topsoil and silting.

Panama City, the capital, has one of the highest levels of air pollution in Central America, due mainly to the rapid growth of automobile stock that generates pollutants, such as

carbon monoxide, sulfur and nitrogen oxides, as a result of their internal combustion systems.

The country has adopted several commitments pertaining Sustainable Development and the Environment. Among them there are several agreements established within the framework of the Central American Alliance for Sustainable Development (ALIDES), approved in 1994, where the Central American nations committed themselves to implementing a series of actions geared to attain economic, social and environmental sustainability. One of these agreements is the creation of the Central American Commission for Environment and Development (CCAD), where Panama is represented by the National Environmental Authority (ANAM).

Panama has signed and ratified a fairly large number of international agreements on the environment and biodiversity; for the purposes of this study, the following would deserve mentioning: Convention on Biological Diversity (CBD), Agreement on Natural and Cultural Heritage, Agreement on Migratory Species, RAMSAR, CITES and the SPAW Protocol from the Cartagena Agreement.

The government of Panama and the National Environmental Authority believe there is a need to harmonize and effectively coordinate reporting mechanisms to each secretariat as means to achieve better implementations of these agreements and fully support this project as well as related initiatives at a regional level.

METHODOLOGY

This work began with a workshop with all focal points of agreements on biodiversity that are being used in this and other pilot projects simultaneously developing in other countries.

The workshop consisted mainly on the presentation of each agreement's reporting mechanisms in order to analyze them and attempt to harmonize and coordinate reporting to each agreement's secretariat, such as: Convention on Biological Diversity, Convention on International Trade of Endangered Species, Convention on Migratory Species, Convention on Wetlands, World Heritage Convention, Protocol on Specially Protected Areas and Wildlife.

Later, individual consultations were conducted with each staff person in charge of reporting at their respective secretariat in order to incorporate their comments and suggestions regarding the best way to harmonize and efficiently coordinate the process for presentation of reports.

Initially visits to several countries of the region were planned to make consultations to the focal points of the agreements under analysis. In the end the only country visited was Mexico, where it was possible to make consultations with the focal points of the agreements, as outlined in the country visit report (see Annex VI).

Unfortunately, such visit could not be done in other countries as coordination with all local focal points has not been possible, either because we have not received any answers to our e-mailed requests or we could not agree on the dates to have all parties participate. Further to this effort, we think future contact could be achieved through a Latin American Workshop, one of the initiatives proposed in this document.

BRIEF OVERVIEW OF THE CONVENTIONS

Convention on Biological Diversity (CBD)

“Biological diversity is a resource families, communities and whole nations depend on, as well as future generations. It is the link between living organisms that integrates them into an inter-dependent community or ecosystem, where all living creatures have a niche and have a function. Biological diversity is the true web of life.”

Hamdallah Zedan
Executive Secretary
CDB

CBD’s main goals are:

- Conservation of biodiversity.
- Sustainable use of biodiversity components.
- Equal and just sharing the benefits from the commercial use of genetic resources.

The Earth Summit or Rio Summit was held in Rio de Janeiro, Brazil, in 1992. Several agreements important for humankind were signed by the participating countries. Among them, there are two binding agreements: the Convention on Climate Change and the Convention on Biological Diversity.

Taking into consideration that biodiversity resources are basic to begin a true sustainable development for humankind and there are great challenges to their survival, the need to “have an international agreement on biological diversity” began to take shape in 1988 when UNEP held a panel of experts on Biodiversity to analyze this issue.

A year after this first experience, a working groups was established in order to draft “an international legally binding instrument for conservation and sustainable use of biological diversity.”

By 1991, this group became the Inter-Governmental Negotiating Committee, whose work ended in 1992 when the text of the Convention on Biological Diversity was approved in Nairobi. This document became available for authorized country representatives to sign at the Rio Summit until June 1993. This agreement became active in December 1993 and the first meeting of the Conference of the Parts, its main directive body, took place in the Bahamas in 1994.

The Conference of the Parts has celebrated six ordinary sessions and an extraordinary one to approve the Protocol on Bio-safety.

CBD is an agreement that for the first time recognizes the fact that “the conservation of biological diversity is a common concern for humankind and is part of the development process”; it covers all ecosystems, species and genetic resources.

CBD is a legally binding document; that is all signatories must put into practice.

One recent commitment from the Conference of the Parts has to do with supporting the third joint work plan CBD – RAMSAR. Another is the continuing support to the joint work plan CBD – Convention on Migratory Species; as well as support coordinated activities with the CITES Secretariat. A significant portion of joint work plans and programs deal with coordination and harmonization of reports, required by each secretariat’s focal point.

Convention on Wetlands of International Importance, Especially as Habitat for Aquatic Birds (RAMSAR)

"The convention's mission is to preserve and make adequate use of wetlands through national actions and international cooperation as means to reach sustainable development in the world"

RAMSAR's Mission, (Brisbane, 1996)

In 1962, a first international call was made to remark on the need to establish a convention on wetlands, as a result of growing concerns for the destruction of large tracts of wetland, particularly in Europe.

As a consequence, a text began to be developed for a prospective convention. In 1971, a final text was agreed at Ramsar, Iran. More than 18 country delegates signed the convention immediately giving birth to the only international convention on a specific ecosystem.

The convention came into existence in December 1975 and has been modified twice ever since: by a protocol in December 1982 and two amendments in 1987.

The UN Organization for Education, Science and Culture (UNESCO) is the convention's trustee. The convention is an important international effort to conserve and sustainable use wetlands and their resources.

Currently there are 131 signatory countries, harboring 1148 wetlands incorporated into RAMSAR's list.

Up to now, there have been seven conferences of the parts and there will be an eight one in Valencia, Spain.

In January 1996, the RAMSAR and CBD Secretariat's signed a cooperation agreement; annually joint work plans have been developed to increase synergies between both conventions.

In the same light, the Secretariats of RAMSAR and CEM (Convention on Conservation of Migratory Animal Species) signed an agreement to secure cooperation between both secretariats in order to jointly promote both conventions, joint conservation activities, joint management of data, etc.

RAMSAR keeps cooperation agreements with the Convention for the protection of World Heritage. The memorandum of understanding between these conventions was signed in May 1999 with several objectives such as a common definition of wetlands within their respective framework, promote the establishment of joint national committees and review the formats for reports on sites where both have a common interest.

RAMSAR keeps a strong level of collaboration with CITES and currently prepares a Memorandum of Understanding with the Cartagena Protocol

Convention on International Trade on Endangered Flora and Fauna Species (CITES)

“CITES goal is to establish necessary controls to international trade on certain species. Such controls mean that all import, export, re-export or introduction of species protected by the convention can only be authorized through a system of concession licenses.”

The CITES Convention was drafted as a result of a resolution from the International Union for Conservation of Nature (IUCN) in 1963 remarking the growing trade of flora and fauna species throughout the world, often threatening the survival of many of them.

The final text of the Convention was approved in 1973 in Washington D.C., USA, and became active in July 1975.

This convention is legally binding. Currently, more than 150 states have signed CITES and *“no species under the CITES umbrella has become extinct as a result of its trade”*.

Currently CITES *“offers diverse levels of protection to more than 30,000 animal and plant species, either traded as live specimens, furs or dried herbs.”*

Through the implementation of CITES, all import, export, re-export or introduction of any flora or fauna species under the convention can only be authorized through a system of license concessions established according to internationally recognized procedure.

CITES keeps close coordination with several secretariats regarding biodiversity to make a more efficient labor.

The CITES convention was ratified by Panama and became Law No. 14 of 28 October of 1977. Since 1999 the National Environmental Authority (ANAM) is the local administrative authority and the University of Panama is the scientific authority.

CITES organizes its Conference of the Parts every two or three years. Its 12th meeting will be held in Santiago de Chile next November.

Convention on conservation of migratory wildlife species (CMS)

“Contribute to conservation of land, marine and avian migratory species along their distribution area”

During the 1970's, concerns were raised on the need to count with an international convention to address the treats facing numerous migratory species around the world.

A specific recommendation came from the 1972 UN Conference on Human Environment that later on gave origin to the Convention on Migratory Species, also known as Convention of Bonn, drafted in 1979 and activating in November 1983.

CMS membership has considerably increased and currently has 79 signatories, with significant growth expected in the future.

CMS member states establish coordination mechanisms amongst themselves as means to conserve migratory species and their habitat through strict regulations on protection of migratory species and multilateral agreements, as well as the promotion of joint research projects.

The organism responsible for decision making on CMS is the Conference of the Parts that had its sixth meeting at Cape Town, South Africa in 1999. The seventh Conference of the Parts will take place in Bonn next September.

Convention on protection of World Cultural and Natural Heritage. (WHC)

“Protect and conserve world re-known natural and scenic wonders and historical landmarks for present and future generations.”

WHC came into being from the union of two separate movements where the first focused on the threats to culturally valuable sites and the other related with nature conservation.

After World War I, an international movement in order to protect sites of cultural and natural value began to take shape.

In 1965, an international conference held in Washington D.C. called for the creation of a “World Heritage Foundation” to promote international cooperation to protect “world re-known natural and scenic wonders and historical landmarks for present and future generations.”

By 1968, the International Union for Conservation of Nature (IUCN) drafted a series of proposals to be presented at the UN Conference on Human Environment held in Stockholm, Sweden, in 1972. In November 1972, UNESCO's General Conference approved the Convention on Protection of World and Natural Heritage. “Considering human heritage from the natural and cultural standpoint, the Convention reminds us the

ways humankind relates with nature and simultaneously of the fundamental need to preserve a balance between the two.”

According to WHC “cultural heritage means monuments, buildings and landmarks of historical, aesthetic, archeological, scientific, ethnological or anthropological value; while natural heritage means exceptional physical, biological and geological formations, threatened animal and plant species and areas of scientific value, either for conservation of aesthetics.”

The main bodies of the convention are the General Assembly of Member States, the World Heritage Committee and the Bureau of the World Heritage Committee. The General Assembly meets during UNESCO’s General Conferences while the Committee and the Bureau meet annually.

Protocol on specially protected areas and wildlife (SPAW)

“Protect rare and fragile habitats and ecosystems, thus protecting threatened and endangered species living there.”

The Agreement for the Protection and Development of Marine Habitats in the Caribbean Basin (Cartagena Convention) is the only legally binding environmental agreement in the Caribbean region. “The Agreement and its Protocols are a legal commitment of member countries in protecting, developing and administrating common waters either by oneself or in a coordinate fashion”.

This agreement has several protocols: on Cooperation to Avoid Fuel Leaks in the Caribbean Basin, on Specially Protected Areas and Wildlife, on Pollution from Land Sources and Activities.

The Protocol on Specially Protected Areas and Wildlife (SPAW) was adopted in January 1990 in Kingston, Jamaica by member governments of the Caribbean Environmental Program.

The SPAW Protocol “is a mechanism to support the regional implementation of the larger and more demanding Convention on Biological Diversity.”

SPAW’s goal is to “protect rare and fragile habitats and ecosystems, thus protecting the threatened species living there. The Regional Coordination Unit for the Caribbean seeks to accomplish this goal by supporting the establishment and adequate management of protected areas, promoting the administration and sustainable use of species, preventing them from becoming endangered and supporting the region’s governments in the conservation of coastal ecosystems.”

SPAW seeks to protect, preserve and sustainably manage areas and ecosystems that require protection as well as threatened and endangered species and their habitats and other species to prevent them from becoming threatened or endangered. SPAW reaffirms the importance of protecting habitats as an effective method of protecting fragile species and their habitat. Protection actions focus mainly on fragile and vulnerable ecosystems rather than on single species.

REPORTING MECHANISMS OF EACH CONVENTION

The National Environmental Authority (ANAM) is Panama's focal point (Annex IV) for CBD, CMS, RAMSAR and CITES while the Ministry of Education is WHC's. As of today, there is no designated focal point though it is likely ANAM will be designated while Panama's Maritime Authority will play a coordinating role.

CBD

CBD has a detailed report format based on a series of questions related to the articles and decisions of the convention. In general, it has a limited space to answer each questions and there is space for comments at the end of each group of questions.

Up to now, Panama has presented the CBD Secretariat its National Biodiversity Strategy; its first national report consisted on the first report on the Wealth and Status of Biodiversity of Panama, the Report on Exotic and invasive species, the Report on distribution of benefits and the Report on Forest Ecosystems.

These reports are available at ANAM's Natural Heritage Bureau (Annex V) and in electronic format in CBD's website.

The last Conference of the Parts passed a new format for reports. However some recommendations were made regarding the questions as they could be misinterpreted and provide for subjective answers.

There are some gaps in information still, mainly due to the lack of a multidisciplinary team that can spend time on various specific topics required by the Convention.

There have been national inquiries in order to validate the reports by means of interviews following the WCMC format. There is not enough personnel to conduct the interviews required to fully comply with the reporting format.

The next national report to CBD's Secretariat is due in 2004.

RAMSAR

In the case of RAMSAR, reports are submitted to the Secretariat every three years; they describe the activities undertaken during the reporting period. The reports must use the Strategic Plan and current Work Plan (2000 – 2002) as guide. After the next Conference of the Parts to be held in November, a new format will be adopted as it is already being put into practice.

During past sub-regional meetings such as the one for Central America and the Caribbean area, held in San Pedro Sula, Honduras, and the 2nd Panamerican Regional Meeting on the Ramsar Convention held in July 2002 in Guayaquil, Ecuador, there were long discussions on the format for submission of national reports. Consensus was reached on the need to re-draft the format since several inquiring processes from several entities are necessary. Thus the process is too long and demands resources, both institutional and personnel.

Participants agreed that the format can be confusing in some cases and there is difficulty to answer some questions the way they are formulated.

Due to the lack of personnel and resources at the institutions in charge, the reports often reflect what the focal point has done on the convention's behalf, leaving out some activities done by other institutions and of interest to the convention.

In Panama there is no formal committee for the RAMSAR Convention. However, there is a Working Group on Wetlands formed by experienced biologists and ecologists.

Panama's latest report to the RAMSAR Secretariat was submitted in 2002. Though the report lacked a great deal of information, these information gaps are based upon the lack of trained personnel with enough time assigned to collect the information required.

CITES

There are two types of report sent to the CITES Secretariat:

- a) An annual report containing summary information on registered trade of specimens from species included in Appendix I, II and III.*
- b) A bi-annual report on legislative, normative and administrative measures adopted in order to comply with CITES regulations.*

Up to now, annual reports are submitted regularly and they provided detailed information on exports imports and re-exports of fauna and flora species included in the convention. ANAM is the convention's administrative authority and the University of Panama the scientific one. The reports are submitted by October with information from the previous year. The 2001 report was almost ready for submission by the time this document was drafted.

Just as other reports, the CITES report has gaps of information as there is no staff fully dedicated to gathering the information required.

The Smithsonian Tropical Research Institute and ANAM are currently working on the creation of a database based upon permits from CITES and other sources. The database will include information on permits, wildlife rearing, tree nurseries, inventories on flora and fauna, as well as people and/or enterprises connected with the illegal commerce on wildlife.

CMS

The XXIII meeting of the CMS Permanent Committee, held in Bonn in 2001, agreed on using a trial period for a new national reports format, with the end purpose of counting with a common report format and detailed information on actions on behalf of species of interest for CMS that “will facilitate the periodic examination of conservation for executive action”.

Regarding country reports to the CMS Secretariat, many countries fail to present their reports while others provide scant or un-related information for the convention’s purposes.

The new format contains specific questions such as on matters about five taxonomic groups (birds, marine mammals, sea turtles, terrestrial mammals and bats).

It is expected that the new format will encourage the Parts to prepare more complete reports. Moreover, exchange of information will be easier while implementation of the Strategic Plan and the Convention will be strongly facilitated.

The next conference of the parts, to be held in Bonn next September, will include a complete analysis on the results, advantages and disadvantages of the new report format.

Panama’s last report to the CMS Secretariat dates back to 1999 and was presented at the VI meeting of the Conference of the Parts in Cape Town, South Africa.

WHC

The report process to WHC on the protection of world cultural and natural heritage seeks to comply with four basic purposes:

- *Provide information on the application of the Convention by the country or Part.*
- *Provide information as to whether or not the areas/sites inscribed in the convention are being adequately maintained.*
- *Provide up-to-date information on possible changes on the state of conservation of inscribed areas/sites.*

- *Provide a mechanism for regional cooperation and exchange of information and experience between the member states, regarding the implementation of the Convention.*

Reports to the convention are submitted every six years using a format established for such purpose.

The convention has established a chronogram to appraise the reports sent from different regions of the world. The reports from Latin America and the Caribbean will be examined in 2003.

Period reports consist on two sections: section I outline legislative and administrative measures adopted by the member state in order to implement the Convention, and section II regarding the state of conservation of areas/sites located in the territory of the member state.

The member state will provide information on available human and financial resources for adequate administration of the area/site as well as needs for capacity building. In addition, the report shall include information on scientific studies, educational activities, outreach, and others, being done in designated areas.

In addition to information from regular report, the member state sends annually statistical information on revenue, number of visitors, personnel at sites and other topics of interest.

For the specific case of Panama, the reports focus on natural heritage for the following sites: La Amistad Binational Park (shared with Costa Rica) and the Darien National Park (near the Colombian border).

Panama submitted a report draft in May and expects to complete and submit a final document in December.

The convention's designated focal point is the Ministry of Education through its Technical Cooperation Bureau. Since the convention includes culturally important landmark as well as naturally valuable areas, the bureau keeps close coordination with ANAM's Protected Area Service, a section within the National Bureau for Natural Heritage.

There is a National Committee, coordinated by the Ministry of Education that attends matters related with UNESCO.

There are several gaps of information in the national report to the Secretariat. There is too much information dispersed and there is not enough staff to collect and submit the information.

SPAW

At the time this report was completed, no member country had submitted a report on the SPAW Protocol. The protocol activated in 2000 and there is no common format, even though several ideas were presented at the first meeting of the Parts in 2001.

The 2001 meeting served as a venue to discuss the importance of conducting the harmonization and effective coordination of reporting procedures on implementation of conventions pertaining biodiversity and to inform participants that PNUMA is supporting this effort that will benefit several conventions including SPAW.

SPAW requires reports to contain information on the status of protected areas, including recently created ones, buffer zones, protected species and other topics. They should include also information on any change on territorial integrity or status of these protected areas.

In order to effectively implement the SPAW Protocol, national reports should include information on national policy, legal frameworks, administrative systems and advances on the implementation of the Protocol's conditions.

SPAW has recommended that reports be submitted to the secretariat every two years.

Reports submitted to the SPAW Secretariat are likely to be placed in the CEP-UNEP Website, including all information regarding processes and reporting format. Availability of these reports in Internet will help facilitate organization of reports and their management by the Secretariat.

INFORMATION SYSTEMS

There are numerous studies and reports addressing information gathering and processing from recent years. Analysis of information has been a topic under study during thirty years. However the topic has gathered more momentum with the recent explosion of information and communication technology (ICT), bringing the existence of Internet.

Currently, large amounts of information can be stored and be available via internet or by electronic copies in diskettes and compact disks.

As new software applications as web as processing capacity and speed have developed (hardware), the possibilities for information availability, production and exchange have increased.

Databases, geographic information systems, image files and statistical data are only a few components of information systems.

The availability of Internet and new information and communication technology have had a strong impact on the presentation of reports, the level of execution and other data regarding international treaties and, of course, those pertaining biodiversity.

In Chapter 40 of Agenda 21, “INFORMATION FOR DECISION MAKING”, points towards the need of “reducing the differences regarding data and...improve access to information.” (Annex I).

The same chapter indicates there are major differences in the capacity developing nations have to adequately gather and process data for later communication for “informed decisions making.”

In the specific case of Latin America and the Caribbean, much needs to be done in order to maximize the use of new information and communication technology regarding agreements pertaining biodiversity. Some countries lack equipment, reliable and stable access and speed to allow efficient use of these technologies as an effective tool for presentation of reports.

Scarcity or absence of technically trained personnel also hinders an efficient use of available equipment and technology.

Processing and data management will increase its importance as agreements pertaining biodiversity increasingly require larger amounts of information. CIT availability has meant more storing capacity, more access and exchange of information both national and international.

Several countries plan to develop “National Information Systems of Biodiversity.” If efficiently organized and updated, they can develop an important role in providing the required information for reports pertaining biodiversity. For these systems to operate

adequately, they should be accompanied by an institutional strengthening process, including strengthening of scientific research capacity, gathering and management of quality data.

The growing amount of information make counting with common information patterns a demanding concern. Adequate information exchange can be secured by achieving reliable common data among conventions.

Such need could be satisfied by providing adequate and periodically updated telecommunications infrastructure, computer equipment, efficient information programs and qualified personnel.

The cost of licenses to use operative systems and other computer programs is a limiting factor to implement information management, storing and distribution systems. There are other alternatives that would have a lower cost and have the same functions of traditional software and, in some cases, have a higher level of security and flexibility. These systems are known as “open source code” that are freely distributed and reproduced and are easily feasible to comply with the user’s needs.

Though there are commercial versions of these systems, they are sold at a much lower price than the “close source code” found in the market.

Numerous academic and research entities around the world are increasingly using this type of operative systems to manage and distribute their information. There are also an increasing number of businesses in the information technology and communications sector.

Regarding reports and information management about international agreements on biodiversity, there are several networks, information systems and databases in place that use open source code systems. Such is the case for the CARINET Biosystematics Information Network, the Database for Processing Information on Marine Biodiversity, the “Tree of Life Web” project, and others.

ENVIRONMENTAL INFORMATION SYSTEMS IN PANAMA

In Panama, the National Environmental Authority is currently implementing an information office known as National System for Environmental Information (SINIA) in charge of storing all the country's environmental information and support ANAM's environmental management and administration responsibilities.

The vision of SINIA defines the following key issues:

- *SINIA will be the official national storage system of environmental data and/or information. The system will manage and facilitate the exchange of environmental information generated by several sources and may be accessed to interested groups within and outside Panama, through protocols, clear and precise rules.*
- *SINIA is a tool that will facilitate ANAM's administrative functions as institution responsible, leader and facilitator for compliance with environmental norms.*
- *SINIA is a key tool in supporting the decision making process related with the design of policies, strategies, plans, programs, projects, monitoring and evaluation pertaining established environmental norms and procedures.*
- *SINIA will play a key role in drafting the State of the Environment report ANAM must prepare as mandated by Law 41.*

The proposal for the technical composition of SINIA indicates:

- *Centralized architecture client/server, adaptable and with simultaneous users, capable of managing large amounts of data and many users at the same time.*
- *Centralized security models regarding databases, providing access to authorized users to information about several topic areas within the system. The security system will be ruled according to norms and processes previously agreed upon, with precise definitions on the permissible levels of interaction for each group of users, according to functions and roles.*
- *Internet interfaces to allow remote access to and contributions of information.*
- *Spatial data structures incorporated directly into the data management system.*
- *Flexible interfaces, well known and easy to use, based upon Windows technology.*
- *System with adequately referenced information that can be checked by the on-line user.*

SINIA will have an organizational design based upon an Administrative Group, an Inter-Institutional Committee and an Operations Group.

Once the Administrative Group and the Inter-institutional Committee and the “hardware and software” has been established as well as the infrastructure of communications, SINIA will undergo an initial phase consisting on establishing a “national environmental information basis” in order to support primarily the production of reports on the state of the environment and environmental indicators. In later phases, SINIA’s functions will increase, including its administrative components.

Currently SINIA is undergoing an assessment of its needs that should be completed in early 2003 when setup of the system starts.

ANAM is currently increasing its digital networks including the incorporation of regional offices in the whole country. Most regional offices have conducted trials already.

RECOMMENDATIONS

After conducting consultations and meetings with several focal points as well as offices and staff related with the process of presenting national reports to biodiversity related agreements, several recommendations are made in order to advance towards the harmonization of these reports.

1. COORDINATING UNIT FOR NATIONAL BIODIVERSITY RELATED TREATIES REPORTS

This type of unit could be ascribed to the National Biodiversity Commission (Annex II) as a “Technical Sub-commission” as indicated in the resolution creating the commission or under a name more convenient for its task.

This unit would coordinate all tasks related with the presentation of the reports and contribute to the effective harmonization and coordination of individual national reports submitted to the different Secretariats.

By unifying the reception of reports, the unit will facilitate the detection of gaps in information, duplications and contrasts between the data submitted; in addition, it will be possible to provide feedback to units responsible for each report on deficiencies found in reports sent.

Eventually this unit could coordinate agreements related with biodiversity related agreements and others related with other broader environmental themes as well.

2. ON-LINE REPORTS

Reports sent to convention secretariats should be made available via the Internet. In that way focal points and secretariats will easily consult each other as well as other interested parties within and outside the country.

Many of the national reports submitted are already “on-line” in each convention’s website. Thus, a link should be made between each secretariat’s website.

In the case of those reports unavailable in Internet, they could be placed in the ANAM server in a site especially set for reports on biodiversity related agreements and, later on, for all environment related agreements. Each convention’s secretariat could establish a link to access the report.

The webpage on national reports should also include a “search” configuration for users to quickly access any topic or concept.

As a security measure and to guarantee uninterrupted access to reports, it would be convenient to coordinate with convention secretariats or with other institution, such as UNEP/ROLAC, with the capacity to establish “mirror sites” in case connection with the national reports site is interrupted.

3. CONSOLIDATED MANUAL

All staff responsible of national reports we had meetings and talks with coincided on the need to count with a “manual” as a guide to adequately draft the national reports.

The manual should be available on-line. Nevertheless, it could be made available through a CD for those assigned offices that do not have Internet access.

The manual will guide the staff in charge of drafting national reports and ensure the reports actually respond to information requested. As long as the manual has clear and detailed instructions to guide the staff assigned as well as the pertaining links and contacts, there will be lesser need of training new assigned personnel.

Once the use of the manual becomes a common practice, a feedback mechanism should be established so that users (staff in charge of drafting the reports) can evaluate it and make suggestions and provide comments on any necessary changes. Moreover the level of use of the manual should be monitored in order to appraise whether or not it is a useful tool.

The “manual” could be started as *a simple compilation of guiding documents that exist already, either on paper or as links in the Internet.... until becoming a guide for submission of virtual reports.*

It would be convenient to start a trial process of a basic version of the manual, establishing a certain period of time, and then evaluate the results and their contribution to harmonizing and coordinating the drafting of national reports. Panama could coordinate with other Latin American countries to organize such trial process.

4. CENTRAL DATABASE

Setting up a central database to gather all information related with national reports to conventions pertaining biodiversity and, later on, other environmental agreements, would be significantly useful in the harmonization and coordination process we are seeking.

Currently ANAM and the Smithsonian Tropical Research Institute are developing activities geared to counting with a database on several species. This collaboration should continue and, if possible, expanded to include as an increasing number of species.

In addition to holding information on requirements for presentation of national reports, the database should have a “history” of past reports, case studies or “lessons learned” from local and international experiences. Scientific information on flora and fauna species of interest to biodiversity related conventions should be part of the database. Thus, feeding the database would require coordination between scientific, administrative and technical authorities.

To increase the use of the database by national and foreign users, including the secretariats, it should be accessible via Internet and updated data be periodically distributed in CDs.

5. EXPANSION OF THE HARMONIZATION PROCESS TOWARDS OTHER AGREEMENTS

As proposed in feasibility studies conducted before the development of pilot projects, the harmonization and coordination process should be expanded towards other agreements on more general environmental concerns.

The task should foster the creation of a coordinating unit for reports on environmental concerns, including those related to biodiversity.

In Panama, such responsibility should continue in ANAM’s hands given its institutional role as focal point of most environmental agreements including those related to biodiversity.

6. REGIONAL REPORTING MECHANISM

The creation of a regional reporting mechanism should be of great use to achieve harmonization of reports.

The first steps to advance in this direction should be the use of an “on-line manual” in Latin America or in a few selected countries, at least.

In order to conducting this task, an effort should be made to obtain support and collaboration from regional offices such as UNEP’s Regional Office for Latin America and the Caribbean (ROLAC) and the Latin American Office of the Council of the Earth, as well as sub-regional ones such as the UICN Regional Office for Meso America (ORMA) and the Central American Commission for Environment and Development (CCAD).

A Latin American Workshop, with active participation from UNEP and representatives from convention secretariats, should be held in order to define specific characteristics for a regional reporting mechanism and the implementation of a manual.

7. JOINT TECHNICAL COMMITTEE

In addition to information regarding the format for presentation of reports for the several conventions, scientific information should be of significant use and, thus, systematization; updating and generation of new information (e.g. description, classification of new species of flora and fauna) should be fostered.

There are some scientific committees and specialized advisory groups that support units responsible of the presentation of reports that could be incorporated into a joint advisory scientific committee. This committee should foster thematic scientific sub-committees to strengthen work on specific areas.

The existence of a joint scientific committee would allow a clearer vision of research and staff needs that will fill the information gaps regarding description, identification and classification of species and habitats.

Establishing international networks with scientific committees, including specialized scientific groups, should be an important supporting arrangement. The establishment of these networks and associations could be one of the topics at a regional workshop.

Panama hosts the headquarters of the Smithsonian Tropical Research Institute (STRI). STRI has a long experience creating national and international scientific committees.

8. OPERATIVE SYSTEM

The cost of software licenses might be a major factor affecting the adequate implementation of information systems for biodiversity and other environmental issues.

The use of operative systems and programs based upon “open source codes” that can be acquired at low or no cost. These systems usually cost significantly less than those in the market and, in some cases, they prove more efficient than commercial programs.

Currently there are several academic and research institutions that successfully use “open source code” systems such as the CARINET Biosystematics Information Network, the Los Angeles Natural History Museum’s Database for Processing Information on Marine Biodiversity, the “Tree of Life Web” project for implementation of an open source code database to share fito-genetic and biological information through the Web.

Several agencies of the UN system, such as UNESCO and UNDP have already adopted open source code systems in their programs and projects.

9. QUALITY OF DATA

In elaborating the reports, it is important to establish a mechanism to secure quality and reliability of data.

In general, data from current reports are reliable. Nevertheless, it would be convenient to establish an arrangement for secretariats and local reporting offices to certify and validate data and/or correct any inconsistency.

CONCLUSION

Adherence to international biodiversity related agreements represent a serious commitment for the signatory countries.

The agreements have legal and administrative instruments that, if applied efficiently, will ensure positive outcomes for protection, conservation and sustainable use of the country's natural resources.

Periodical updates to local authorities and international counterparts on the level of compliance with the treaties will allow for "informed" decision making on deficiencies and difficulties regarding implementation of the agreements in the country as well as objective needs in terms of administrative arrangements that should be made for effective protection of natural resources.

Harmonization and effective coordination in reporting, both for biodiversity related agreements and other environmental issues, is a need that, in the words of the UN Secretary General "*could save millions of US dollars a year; these resources could become available for work on conservation of wildlife around the world.*"

Panama is in good condition to conduct the implementation of several of the arrangements suggested such as the use of a "manual" to guide the drafting of reports for convention secretariats. Moreover, UNEP/ROLAC, IUCN/ORMA, the Earth Council and CCAD could foster a Latin American workshop to establish a common regional reporting arrangement for environmental agreements.

REFERENCES

ANAM, 2000, Annual Report 2000, CITES, ANAM, Panama, Republic of Panama, 13 p

ANAM, UNEP. 2000, First Report on the Wealth and State of Biodiversity of Panama, ANAM-UNEP, Panama, Republic de Panama, 174 p

CBD, Convention of Biodiversity, Texts y Annexes, CBD, Geneva, Switzerland, 41 p

CITES, 2001, CITES Manual, CITES, Geneva, Switzerland, 313 p

CMS, UNEP, 1999, Convention on conservation of migratory wildlife species, Volume II, National Reports of the Parts on implementation of the Convention, Sixth Conference of the Parts, CMS-UNEP, Cape Town, South Africa, 608 p

EARTH COUNCIL, UNDP. 2001, NCS D Report 2001, Localizing Global Environmental Conventions, Earth Council-UNDP, San José, Costa Rica, 118 p

UNEP, 2000, Agreement on Protection and Development of the Marine Environment of the Grand Caribbean and its Protocols, UNEP-CEP, Kingston, Jamaica, 106 p

ELECTRONIC REFERENCES

National Environmental Authority
<http://www.anam.gob.pa>

CITES Convention
<http://www.cites.org/esp/disc/text.shtml>

Ramsar Convention
http://www.ramsar.org/key_conv_s.htm

Convention on the Conservation of Migratory Wildlife Species
http://www.wcmc.org.uk/cms/conv_sp.htm

Convention on Protection of World Cultural and Natural Heritage
http://whc.unesco.org/world_es.htm#debut

Format for periodic reports on the application of the Convention on World Cultural and Natural Heritage.
<http://whc.unesco.org/reporting/mon-intr.htm>

Model and Periodicity of National Reports to the Conference of the Parts (CBD)
<http://www.biodiv.org/decisions/default.asp?m=cop-02&d=17&lg=1>

Ramsar Reports Format

http://www.ramsar.org/cop8_nr_natl_rpt_intro_s.htm

Format for reports on the SPAW protocol (Draft)

<http://www.cep.unep.org/pubs/meetingreports/SPAW%20STAC/English%20Docs/WG23-5en.doc>

Note to the Parts, CITES Annual Reports

<http://www.cites.org/eng/notifs/2002/022.shtml>

Guidelines for preparation and submission of annual reports to the CITES convention

<http://www.cites.org/eng/notifs/2002/022A.pdf>

IUCN/ORMA

<http://www.iucn.org/places/orma/>

Earth Council

<http://www.ecouncil.ac.cr/>

Central American Commission on Environment and Development

<http://ccad.sgsica.org/>

UNEP's Regional Office for Latin America and the Caribbean

<http://www.rolac.unep.mx/>

UNESCO Free Software Portal

http://www.unesco.org/webworld/portal_freesoft/index.shtml

Open Source, Networking and Information Technology Observatory, Issues for Developing Countries, Sustainable Development Networking Programme

<http://www.sdn.unep.org/perl/news/articles.pl?do=browse&categories=10>

ANNEXES

ANNEX I

Agenda 21: Chapter 40

INFORMATION FOR DECISION-MAKING

40.1. In sustainable development, everyone is a user and provider of information considered in the broad sense. That includes data, information, appropriately packaged experience and knowledge. The need for information arises at all levels, from that of senior decision makers at the national and international levels to the grass-roots and individual levels. The following two programme areas need to be implemented to ensure that decisions are based increasingly on sound information:

- a. Bridging the data gap;
- b. Improving information availability.

PROGRAMME AREAS

A. Bridging the data gap

Basis for action

40.2. While considerable data already exist, as the various sectoral chapters of Agenda 21 indicate, more and different types of data need to be collected, at the local, provincial, national and international levels, indicating the status and trends of the planet's ecosystem, natural resource, pollution and socio-economic variables. The gap in the availability, quality, coherence, standardization and accessibility of data between the developed and the developing world has been increasing, seriously impairing the capacities of countries to make informed decisions concerning environment and development.

40.3. There is a general lack of capacity, particularly in developing countries, and in many areas at the international level, for the collection and assessment of data, for their transformation into useful information and for their dissemination. There is also need for improved coordination among environmental, demographic, social and developmental data and information activities.

40.4. Commonly used indicators such as the gross national product (GNP) and measurements of individual resource or pollution flows do not provide adequate indications of sustainability. Methods for assessing interactions between different sectoral environmental, demographic, social and developmental parameters are not sufficiently developed or applied. Indicators of sustainable development need to be developed to provide solid bases for decision-making at all levels and to contribute to a self-regulating sustainability of integrated environment and development systems.

Objectives

40.5. The following objectives are important:

- a. To achieve more cost-effective and relevant data collection and assessment by better identification of users, in both the public and private sectors, and of their information needs at the local, provincial, national and international levels;
- b. To strengthen local, provincial, national and international capacity to collect and use multisectoral information in decision-making processes and to enhance capacities to collect and analyze data and information for decision-making, particularly in developing countries;
- c. To develop or strengthen local, provincial, national and international means of ensuring that planning for sustainable development in all sectors is based on timely, reliable and usable information;
- d. To make relevant information accessible in the form and at the time required to facilitate its use. Activities
 - a. Development of indicators of sustainable development

40.6. Countries at the national level and international governmental and non-governmental organizations at the international level should develop the concept of indicators of sustainable development in order to identify such indicators. In order to promote the increasing use of some of those indicators in satellite accounts, and eventually in national accounts, the development of indicators needs to be pursued by the Statistical Office of the United Nations Secretariat, as it draws upon evolving experience in this regard.

- b. Promotion of global use of indicators of sustainable development

40.7. Relevant organs and organizations of the United Nations system, in cooperation with other international governmental, intergovernmental and non-governmental organizations, should use a suitable set of sustainable development indicators and indicators related to areas outside of national jurisdiction, such as the high seas, the upper atmosphere and outer space. The organs and organizations of the United Nations system, in coordination with other relevant international organizations, could provide recommendations for harmonized development of indicators at the national, regional and global levels, and for incorporation of a suitable set of these indicators in common, regularly updated, and widely accessible reports and databases, for use at the international level, subject to national sovereignty considerations.

- c. Improvement of data collection and use

40.8. Countries and, upon request, international organizations should carry out inventories of environmental, resource and developmental data, based on

national/global priorities for the management of sustainable development. They should determine the gaps and organize activities to fill those gaps. Within the organs and organizations of the United Nations system and relevant international organizations, data-collection activities, including those of Earthwatch and World Weather Watch, need to be strengthened, especially in the areas of urban air, freshwater, land resources (including forests and rangelands), desertification, other habitats, soil degradation, biodiversity, the high seas and the upper atmosphere. Countries and international organizations should make use of new techniques of data collection, including satellite-based remote sensing. In addition to the strengthening of existing development-related data collection, special attention needs to be paid to such areas as demographic factors, urbanization, poverty, health and rights of access to resources, as well as special groups, including women, indigenous peoples, youth, children and the disabled, and their relationships with environment issues.

d. Improvement of methods of data assessment and analysis

40.9. Relevant international organizations should develop practical recommendations for coordinated, harmonized collection and assessment of data at the national and international levels. National and international data and information centres should set up continuous and accurate data-collection systems and make use of geographic information systems, expert systems, models and a variety of other techniques for the assessment and analysis of data. These steps will be particularly relevant, as large quantities of data from satellite sources will need to be processed in the future. Developed countries and international organizations, as well as the private sector, should cooperate, in particular with developing countries, upon request, to facilitate their acquiring these technologies and this know-how.

e. Establishment of a comprehensive information framework

40.10. Governments should consider undertaking the necessary institutional changes at the national level to achieve the integration of environmental and developmental information. At the international level, environmental assessment activities need to be strengthened and coordinated with efforts to assess development trends.

f. Strengthening of the capacity for traditional information

40.11. Countries, with the cooperation of international organizations, should establish supporting mechanisms to provide local communities and resource users with the information and know-how they need to manage their environment and resources sustainably, applying traditional and indigenous knowledge and approaches when appropriate. This is particularly relevant for rural and urban populations and indigenous, women's and youth groups.

Means of implementation

a. Financing and cost evaluation

40.12. The secretariat of the Conference has estimated the average total annual cost (1993-2000) of implementing the activities of this programme to be about \$1.9 billion from the international community on grant or concessional terms. These are indicative and order-of-magnitude estimates only and have not been reviewed by Governments. Actual costs and financial terms, including any that are non-concessional, will depend upon, inter alia, the specific strategies and programmes Governments decide upon for implementation.

b. (b) Institutional means

40.13. Institutional capacity to integrate environment and development and to develop relevant indicators is lacking at both the national and international levels. Existing institutions and programmes such as the Global Environmental Monitoring System (GEMS) and the Global Resource Information Database (GRID) within UNEP and different entities within the system wide Earthwatch will need to be considerably strengthened. Earthwatch has been an essential element for environment-related data. While programmes related to development data exist in a number of agencies, there is insufficient coordination between them. The activities related to development data of agencies and institutions of the United Nations system should be more effectively coordinated, perhaps through an equivalent and complementary "Development Watch", which with the existing Earthwatch should be coordinated through an appropriate office within the United Nations to ensure the full integration of environment and development concerns.

c. Scientific and technological means

d. 40.14. Regarding transfer of technology, with the rapid evolution of data-collection and information technologies it is necessary to develop guidelines and mechanisms for the rapid and continuous transfer of those technologies, particularly to developing countries, in conformity with chapter 34 (Transfer of environmentally sound technology, cooperation and capacity-building), and for the training of personnel in their utilization.

e. Human resource development

40.15. International cooperation for training in all areas and at all levels will be required, particularly in developing countries. That training will have to include technical training of those involved in data collection, assessment and transformation, as well as assistance to decision makers concerning how to use such information.

f. Capacity-building

40.16. All countries, particularly developing countries, with the support of international cooperation, should strengthen their capacity to collect, store, organize, assess and use data in decision-making more effectively.

B. Improving availability of information

Basis for action

40.17. There already exists a wealth of data and information that could be used for the management of sustainable development. Finding the appropriate information at the required time and at the relevant scale of aggregation is a difficult task.

40.18. Information within many countries is not adequately managed, because of shortages of financial resources and trained manpower, lack of awareness of the value and availability of such information and other immediate or pressing problems, especially in developing countries. Even where information is available, it may not be easily accessible, either because of the lack of technology for effective access or because of associated costs, especially for information held outside the country and available commercially.

Objectives

40.19. Existing national and international mechanisms of information processing and exchange, and of related technical assistance, should be strengthened to ensure effective and equitable availability of information generated at the local, provincial, national and international levels, subject to national sovereignty and relevant intellectual property rights.

40.20. National capacities should be strengthened, as should capacities within Governments, non-governmental organizations and the private sector, in information handling and communication, particularly within developing countries.

40.21. Full participation of, in particular, developing countries should be ensured in any international scheme under the organs and organizations of the United Nations system for the collection, analysis and use of data and information.

Activities

a. Production of information usable for decision-making

40.22. Countries and international organizations should review and strengthen information systems and services in sectors related to sustainable development, at the local, provincial, national and international levels. Special emphasis should be placed on the transformation of existing information into forms more useful for decision-making and on targeting information at different user groups. Mechanisms should be strengthened or established for transforming scientific and socio-economic assessments into information suitable for both planning and public information. Electronic and non-electronic formats should be used.

b. Establishment of standards and methods for handling information

40.23. Governments should consider supporting the efforts of governmental as well as non-governmental organizations to develop mechanisms for efficient and harmonized exchange of information at the local, national, provincial and international levels, including revision and establishment of data, access and dissemination formats, and communication interfaces.

c. Development of documentation about information

40.24. The organs and organizations of the United Nations system, as well as other governmental and non-governmental organizations, should document and share information about the sources of available information in their respective organizations. Existing programmes, such as those of the Advisory Committee for the Coordination of Information Systems (ACCIS) and the International Environmental Information System (INFOTERRA), should be reviewed and strengthened as required. Networking and coordinating mechanisms should be encouraged between the wide variety of other actors, including arrangements with non-governmental organizations for information sharing and donor activities for sharing information on sustainable development projects. The private sector should be encouraged to strengthen the mechanisms of sharing its experience and information on sustainable development.

d. Establishment and strengthening of electronic networking capabilities

40.25. Countries, international organizations, including organs and organizations of the United Nations system, and non-governmental organizations should exploit various initiatives for electronic links to support information sharing, to provide access to databases and other information sources, to facilitate communication for meeting broader objectives, such as the implementation of Agenda 21, to facilitate intergovernmental negotiations, to monitor conventions and efforts for sustainable development to transmit environmental alerts, and to transfer technical data. These organizations should also facilitate the linkage of different electronic networks and the use of appropriate standards and communication protocols for the transparent interchange of electronic communications. Where necessary, new technology should be developed and its use encouraged permitting participation of those not served at present by existing infrastructure and methods. Mechanisms should also be established to carry out the necessary transfer of information to and from non-electronic systems to ensure the involvement of those not able to participate in this way.

e. Making use of commercial information sources

40.26. Countries and international organizations should consider undertaking surveys of information available in the private sector on sustainable development and of present dissemination arrangements to determine gaps and how those gaps could be filled by commercial or quasi-commercial activity, particularly activities in and/or involving developing countries where feasible. Whenever economic or other constraints on supplying and accessing information arise, particularly in

developing countries, innovative schemes for subsidizing such information-related access or removing the non-economic constraints should be considered.

Means of implementation

a. Financing and cost evaluation

40.27. The secretariat of the Conference has estimated the average total annual cost (1993-2000) of implementing the activities of this programme to be about \$165 million from the international community on grant or concessional terms. These are indicative and order-of-magnitude estimates only and have not been reviewed by Governments. Actual costs and financial terms, including any that are non-concessional, will depend upon, inter alia, the specific strategies and programmes Governments decide upon for implementation.

b. Institutional means

40.28. The institutional implications of this programme concern mostly the strengthening of already existing institutions, as well as the strengthening of cooperation with non-governmental organizations, and need to be consistent with the overall decisions on institutions made by the United Nations Conference on Environment and Development.

c. Capacity-building

40.29. Developed countries and relevant international organizations should cooperate, in particular with developing countries, to expand their capacity to receive, store and retrieve, contribute, disseminate, use and provide appropriate public access to relevant environmental and developmental information, by providing technology and training to establish local information services and by supporting partnership and cooperative arrangements between countries and on the regional or subregional level.

d. Scientific and technological means

40.30. Developed countries and relevant international organizations should support research and development in hardware, software and other aspects of information technology, in particular in developing countries, appropriate to their operations, national needs and environmental contexts.

ANNEX II

National Commission on Biodiversity

Resolution No. AG-0164-2002
(April 22nd 2002)

”By which the NATIONAL COMISIÓN ON BIODIVERSITY is created”

The General Manager of the National Environmental Authority (ANAM), in use of its legal authority, and:

TAKING INTO CONSIDERATION THAT

Article 116 of the Constitution of the Republic of Panama states that “the State will norm, monitor and apply all necessary measures to guarantee that use of terrestrial, riverine and marine fauna, as well as forests, lands and waters, is rationally conducted, in order to avoid their degradation and secure their preservation, renovation and survival (sic).

Law No. 9 of October 27 1977, the Republic of Panama approved the Convention on Protection of World Cultural and Natural Heritage, and that based upon that Convention the Man and Biosphere Program was born. (MAB).

The Board of Directors of the MAB International Council of Coordination, with the purpose of advising decision making for the development of Biosphere Reserves, certified the Bocas del Toro and Chiriqui National Park on June 30 1983 and in the year 2000 as part of the International Network of Biosphere Reserves.

Law No. 14 of October 28 1977, the Republic of Panama approved “...*the convention on International Trade of Endangered Fauna and Flora*”.

Article No. 9 of the above mentioned law states that each part will appoint “...*one or more competent Administrative Authorities to deliver concessions or certificates on behalf of the part;...and one or more Scientific Authorities*” (sic).

Law No. 13 of June 30 1986, the Republic of Panama approved the Convention for the Protection and Development of the Marine Environment in the Caribbean Region.

Regarding technical and scientific cooperation, Article 13 of the above mentioned law states that “the Contracting Parts agree to directly cooperate,...in scientific research, protection, exchange of data and other scientific information related with the goals of the present Agreement (sic).

Law No. 5 of January 3rd 1989, the Republic of Panama approved “...*the Convention on Conservation of Migratory Wildlife Species.*”

Article 8 of the above mentioned law, states that “*any Part can appoint a qualified scientific expert as a Member of the Scientific Council*”, that will have other functions, recommending the Conference Parts “...*the solution of problems relative to scientific issues regarding the implementation of the Present Convention especially on issues pertaining to migratory wildlife species*”(sic).

Law No. 6 of January 1989, the Republic of Panama approved “...*the Convention relative to world important wetlands, especially as a Protocol in order to modify it.*”

Numeral No. 1 of Article No. 7 of the before mentioned law states “to include personnel expert on wetlands and aquatic birds, because of their knowledge and experience acquired in scientific, administrative or other kind of functions” (sic).

Law No. 2 of January 12 1995, the Republic of Panama approved the “---*agreement on Biological Diversity signed in Rio de Janeiro on June 5 1992.*”

Article 1 of the above mentioned Law has objectives such as “...*the conservation of biological diversity, the sustainable use of its components and the just and egalitarian distribution of benefits emanating from the use of genetic resources...*”; in addition, Article 25 established a subsidiary body for scientific, technical and technological advise. (sic)

Article No. 6 of Law 24 of June 7 1995 that “Establishes the legislation on Wildlife in the Republic of Panama”, created the National Commission on Wildlife that has the responsibility of recommending and providing answers to consultations on matters related to wildlife presented to ANAM’s National Natural Heritage Bureau, other institutions and natural and juridical persons.

That Law No. 42 of July 5 1996, the Republic of Panama approved the Protocol on Especially Protected Flora and Fauna and the Agreement on Protection and Development of the Marine Environment in the Grand Caribbean Region.

Article No. 20 of the above mentioned Law established and Advisory Scientific Committee and, in addition, states that each Part will appoint an expert scientist to provide guidance on scientific and technical matters pertaining the Protocol.

Article No. 1 of Law 41 of July 1st. 1998 states that “environmental management must be implemented and integrated into the country’s social and economic goals, in order to achieve the sustainable human development of the country.”

Article 66 of the above mentioned Law creates the National System of Protected Areas, known as “SINAP”, stating that protected areas can be subject to concessions as “...administrative concessions and services concessions to municipalities, provincial

governments, especially created boards of directors, foundations and private businesses, according to previous technical appraisals.

HEREBY DECREES:

FIRST: The NATIONAL COMMISSION ON BIODIVERSITY is created with the goal of providing scientific, technical and technological advise to the National Environmental Authority (ANAM) and to other public and academic institutions, in compliance with and follow-up of agreements the Republic of Panama is part of and those it could become part of in the future, regarding conservation, research, sustainable use, recuperation and preservation of biodiversity.

SECOND: The NATIONAL COMMISSION FOR BIODIVERSITY will have the following members:

The General Manager of the National Environmental Authority, or whoever he authorizes, who will be the chairman.

The Director of the National Natural Heritage Bureau of the National Environmental Authority.

The Chief of the Biodiversity Conservation Department of the National Environmental Authority.

A representative of the Ministry of Public Health.

A representative of the Ministry of Agriculture and Animal Husbandry.

A representative of the Ministry of Commerce and Industry.

A representative of the Ministry of Education.

A representative of the Maritime Authority of Panama.

A representative of the Ministry of Foreign Relations.

A representative of the National Coordinating Committee for Indigenous Panamanian Peoples.

A representative of the University of Panama.

The members of the COMISSION shall be individuals with recognized experience in their field. The frequency of ordinary and extraordinary meetings, and the way they are called, will be established through the commission's Internal Procedure Rules.

THIRD: The NATIONAL COMMISSION ON BIODIVERSITY will have its headquarters at the offices of the National Natural Heritage Bureau of the National Environmental Authority and will have the following functions:

Advise and serve as consulting body for the National Environmental Authority as well as for other institutions, natural or legal persons on matters pertaining biodiversity.

Define research projects and technology transfer on biodiversity that are a national priority as well as finding the expert human resource to address matter related with conservation, research, sustainable use, recuperation and preservation of biodiversity.

Deliver technical opinions on topics regarding conservation, research, sustainable use, recuperation and preservation of biodiversity as a result of requests from the National Environmental Authority and other academic institutions.

Have knowledge of legal norms pertaining biodiversity.

Recommend the creation of specialized scientific and technical sub-commissions on biodiversity, integrated by experts in their field who will be appointed ad-hoc.

Give follow-up to coordination on matters pertaining biodiversity among public offices in charge of this issue.

Based upon a proposal presented by the Commission's President, approve or reject the internal organization of the commission and its modifications.

Establish and approve the Internal Procedure Rules.

FOURTH: member public institutions shall appoint or change its representative through a note to the General Administrator of the National Environmental Authority (ANAM). NGO representatives participating in the specialized scientific technical subcommissions will be selected from a list of three candidates by the National Environmental Authority, who will choose them using their experience, knowledge and career history as criteria.

FIFTH: The COMMISSION will have:

A President, held by the General Administrator of the National Environmental Authority.

An Executive Secretary held by the Director of ANAM's National Natural Heritage Bureau.

Eleven (11) experts on biodiversity.

Specialized technical scientific subcommissions on biodiversity.

SIXTH: The President of the NATIONAL COMMISSION ON BIODIVERSITY shall develop the following functions:

Be Chairman of the Commission's meetings and, if absent, designate a member of the Commission to replace him temporarily.

Comply with and make parties comply with the Commission's agreements and instructions, and conduct events and functions the commission empowers him to.

Request information and background data to public institutions the Commission might deem necessary and have relation with its fields of interest.

Propose the COMISION an annual program of activities and a budget, as well as an internal organization and its modifications.

SEVENTH: The Executive Secretary shall conduct the following duties:

Organize and coordinate the meetings of the NATIONAL COMISIÓN ON BIODIVERSITY.

Coordinate the drafting of the Internal Procedure Rules of the NATIONAL COMMISSION ON BIODIVERSITY.

Draft the record of proceedings of each meeting held by the NATIONAL COMMISSION ON BIODIVERSITY; the record of proceedings from the previous meeting will be read during the following one in order to make any modifications the members might feel convenient.

EIGHT: Eleven (11) experts and the task sub-commissions shall have the duty of advising the COMMISSION, thus complying with Article One of the present Resolution.

NINETH: The NATIONAL COMMISSION ON BIODIVERSITY will have a budget for it to function; this budget will be channeled through the National Natural Heritage Bureau of the National Environmental Authority and/or through support from projects pertaining biodiversity that shall be conducted by that bureau.

TENTH: The National Natural Heritage Bureau will contribute to the logistics for development of activities conducted by the NATIONAL COMMISSION ON BIODIVERSITY. In addition, institutions and organizations that are part of the commission, depending on their capacity, shall contribute with such endeavor.

ELEVENTH: The NATIONAL COMMISSION ON BIODIVERSITY shall draft its own Internal Procedure Rules and may create Operations Commissions in order to conduct its tasks.

TWELFTH: The NATIONAL COMMISSION ON BIODIVERSITY may accept contributions, legacies or heritage from natural or legal persons, and in due compliance with Article 697 of the Tax Code shall be tax exempt expenses in favor of the taxpayer.

THIRTEENTH: This resolution will begin its mandate after its publication in the official press (Gaceta Oficial).

LEGAL BASIS: Constitution of the Republic of Panama, Law No. 9 of October 27 1977, Law No. 14 of October 28 1977, Law No. 13 of June 30 1986, Law No. 5 of January 3 1989, Law No. 6 of January 1989, Law No. 2 of January 12 1995, Law No. 24 of June 7 1995, Law No. 42 of June 5 1996, Law No. 41 of July 1st. 1998.

Passed in the City of Panama on _____ of the month of _____ of the year two thousand two (2002).

TO BE PUBLISHED and EXECUTED
Ricardo R. Anguizola M.
General Administrator of the National Environmental Authority

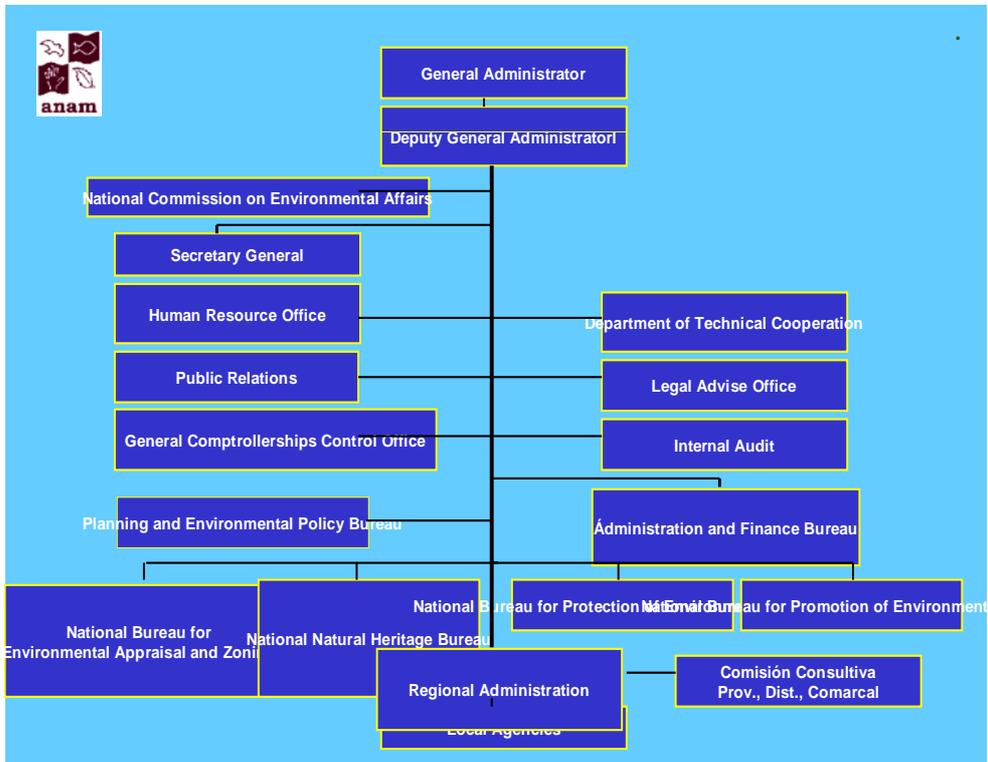
ANNEX III

Panama's Focal Points for Biodiversity Related Agreements

Agreement →	CBD	Ramsar	WHC*	CITES	CMS
National Focal Point	ANAM	ANAM	MEDUC	ANAM	ANAM
National Committee or Working Group	National Biodiversity Commission	Working Group on Wetlands	Not established	CITES Committee (per area of concern)	Not established
Unit responsible for reports	Biodiversity Conservation Office/National Natural Heritage Bureau	Servicio Nac. de Administración de Áreas Protegidas y Vida Silvestre/Dir. Patrimonio Natural	National Service for Protected Areas and Wildlife/National Natural Heritage Bureau	National Service for Protected Areas and Wildlife/National Natural Heritage Bureau	Biodiversity Conservation Office/National Natural Heritage Bureau
Advisory Committee	-Univ. of Panama -Environmental Information Office, ANAM	-Univ. of Panama -Depto. Inf. Ambiental, ANAM	-National Committee UNESCO -University of Panama -Environmental Information Office, ANAM	-Univ. of Panama -STRI -Environmental Information Office, ANAM	-Univ. of Panama -Environmental Information Office, ANAM
Potential Collaborators	-STRI -ANCON -UNACHI -Private Reserves Network	-STRI -ANCON -AMP -ACP -Private Reserves Network	-STRI -ANCON -Private Reserves Network	-ANCON -MINGOB (Customs, Police, National Maritime Service) -Private Reserves Network	-STRI -ANCON -Private Reserves Network -Universities

ANNEX IV

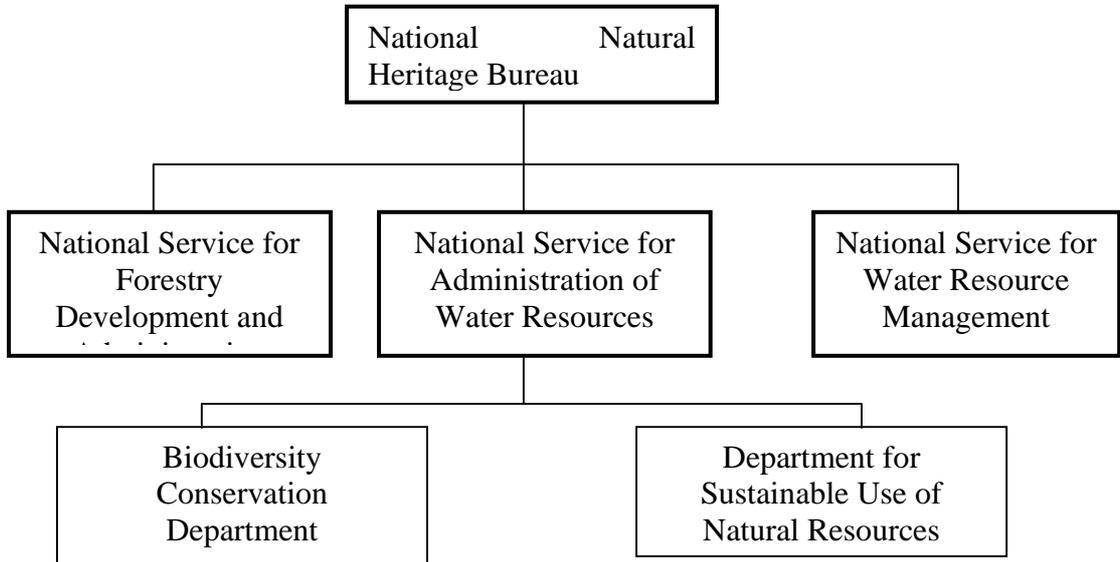
ANAM Organizational Chart



Source: ANAM Website

ANNEX V

ANAM's National Natural Heritage Bureau



Source: ANAM Webpage

ANNEX VI

Report on a Visit to Mexico

Harmonization of Biodiversity Related Agreements

As part of consultations to countries in the region regarding the harmonization and coordination of national biodiversity related reports, a visit to México City was conducted in order to interview several local offices. The visits were coordinated by UNEP's Regional Office for Latin America and the Caribbean. We visited the following offices:

- Environment and Natural Resources Secretary's General Bureau on Wildlife
- Environment and Natural Resources Secretary's National Commission for Protected Areas (CONANP)
- National Commission for Use and Knowledge of Biodiversity (CONABIO)
- UNEP's Regional Office for Latin America and the Caribbean.

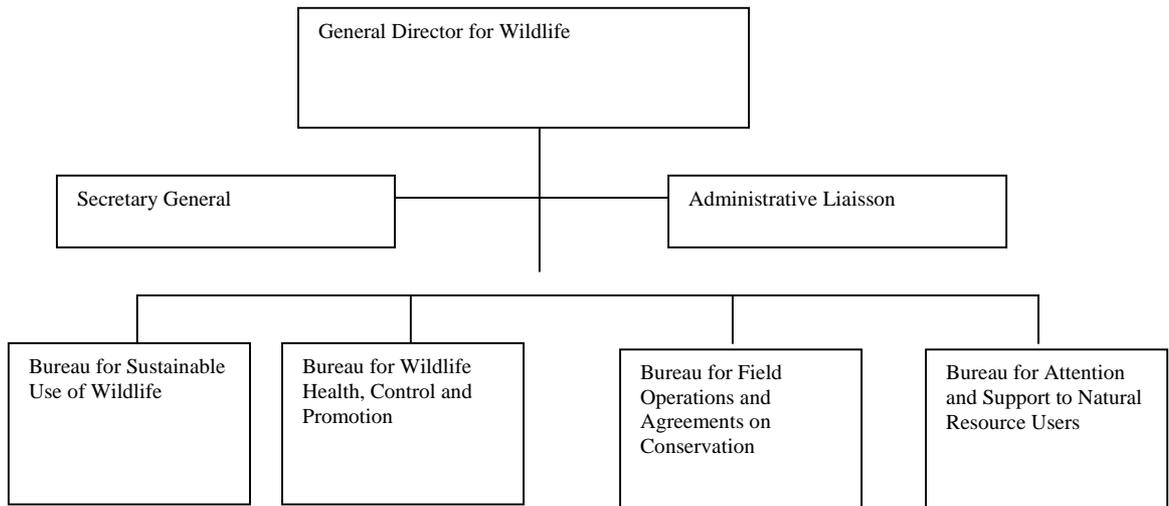
General Bureau on Wildlife

We interviewed Mr. Fernando Clemente and Mr. José María Reyes, Director and Field Operations Director & Conservation Agreements respectively at the Environment and Natural Resources Secretary's General Bureau on Wildlife.

The Bureau is currently generating a database, fed on-line for access via the Internet, with information on several wildlife species, inventory of species and types of classification and habitats.

México is not a signatory of the Convention on Migratory Species (CMS). In such case, the bureau would be the Convention's local Focal Point. However Mexico signed the Convention Mexico-USA for Protection of Migratory Birds and Mammal of Cinegetic Interest. A lot of the information and methodology used through this convention can be used for reporting purposes to other conventions.

Structure of the General Bureau on Wildlife



Environment and Natural Resources Secretary's

National Commission for Protected Areas (CONANP)

We visited CONANP and had the chance of interviewing Ms. María Pía Gallina Tessaro, Director of Capital Raising and Cooperation at the Institutional Development and Promotion Bureau.

CONANP is in charge of managing Mexico's natural protected areas, of implementing sustainable development programs in both protected areas and those areas of interest for conservation and that have not been designated under a protection category.

CONANP is the office in charge of matters related with the World Heritage Convention (WHC) and Ramsar.

Regarding WHC, CONANP works in close coordination with the Mexican Commission for UNESCO (CONALMEX) and the Secretary for Public Education.

Currently there are 21 sites under WHC, 2 of them are natural areas. The next WHC summit will be held in Budapest where another natural area is expected to be incorporated.

Currently CONANP is preparing a report per region within Mexico. As part of this initiative, it is training the different regional offices to draft the reports.

Ms. Tessaro informed us there are some gaps in information requested to draft the reports; "the format asks for information yet to be obtained for many areas and monuments", she said.

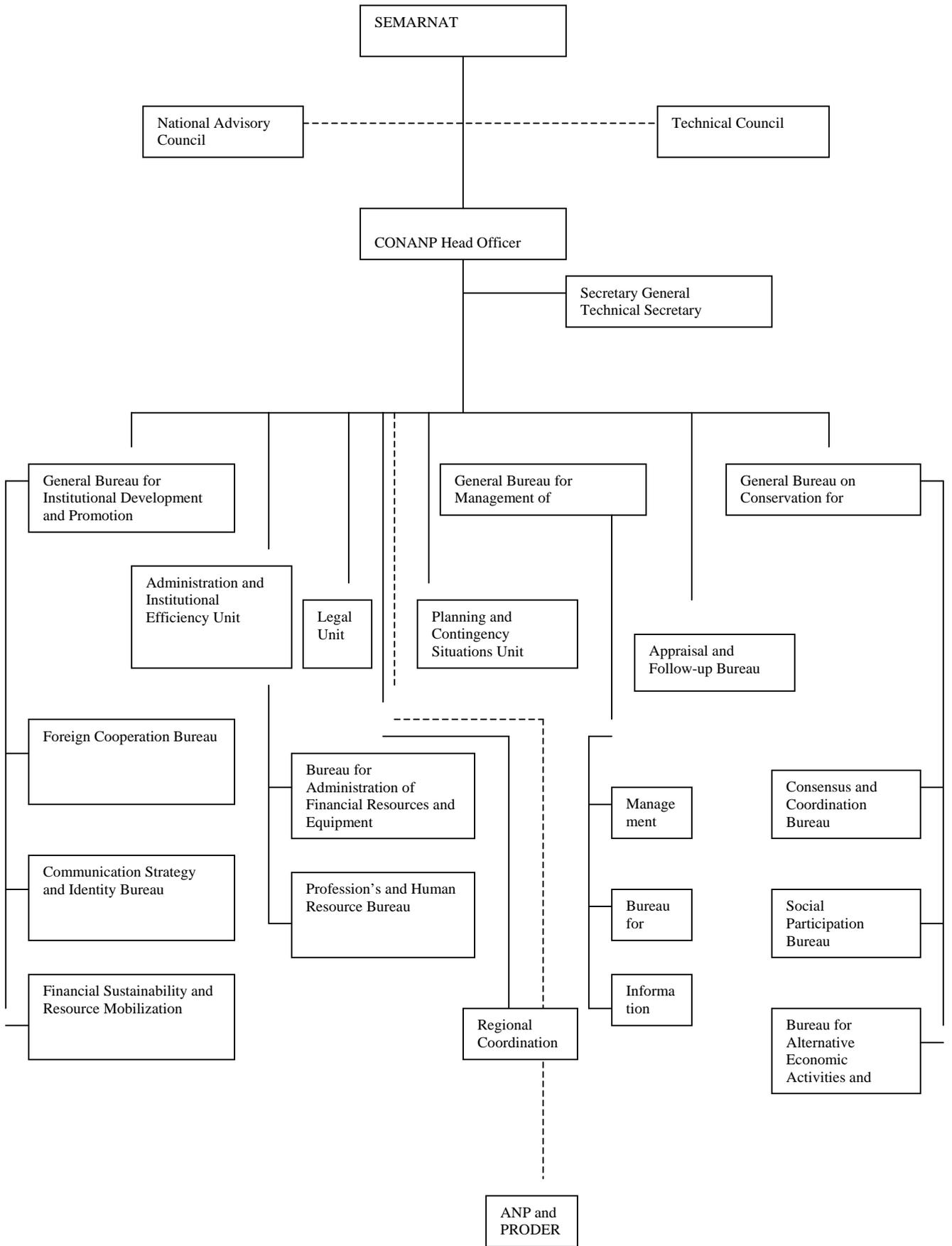
Sometimes, it is difficult for respondents to understand the question in the form.

The task of completing the report takes a lot of time and, in order to do a better job, more resources are necessary.

Regarding Ramsar, CONANP coordinates the presentation of reports and other activities related with the convention, the Wildlife Bureau, the National Institute of Ecology, and CONABIO. This last one is in charge of managing the list of species.

Ms. Tessaro agrees management of a single database for the five conventions pertaining biodiversity would make the reporting process a more efficient one and help avoid duplication in information provided.

CONANP's Structure



National Commission for Use and Knowledge of Biodiversity (CONABIO)

At CONABIO, we interviewed Dr. Jorge Soberón, Executive Secretary of CONABIO, and Hesiquio Benítez, biologist and Director for Outreach and Foreign Affairs.

CONABIO is an interministerial commission, chaired by the President of México and integrated by several secretaries (ministries): Foreign Affairs, Treasury and Public Credit, Energy, Economy, Agriculture, Public Education, Health, Tourism, Social Development, and Environment and Natural Resources.

CONABIO is the focal point for CITES and CBD. Regarding CITES, CONABIO is the Scientific Authority while the Wildlife Bureau and the Federal Procuraduría for the Environment are the Administrative Authorities.

In general, CONABIO has had no difficulties in presenting reports to the CITES Secretariat.

Regarding CBD, CONABIO supports several institutions throughout the country, particularly in the development of Information Systems on Biodiversity.

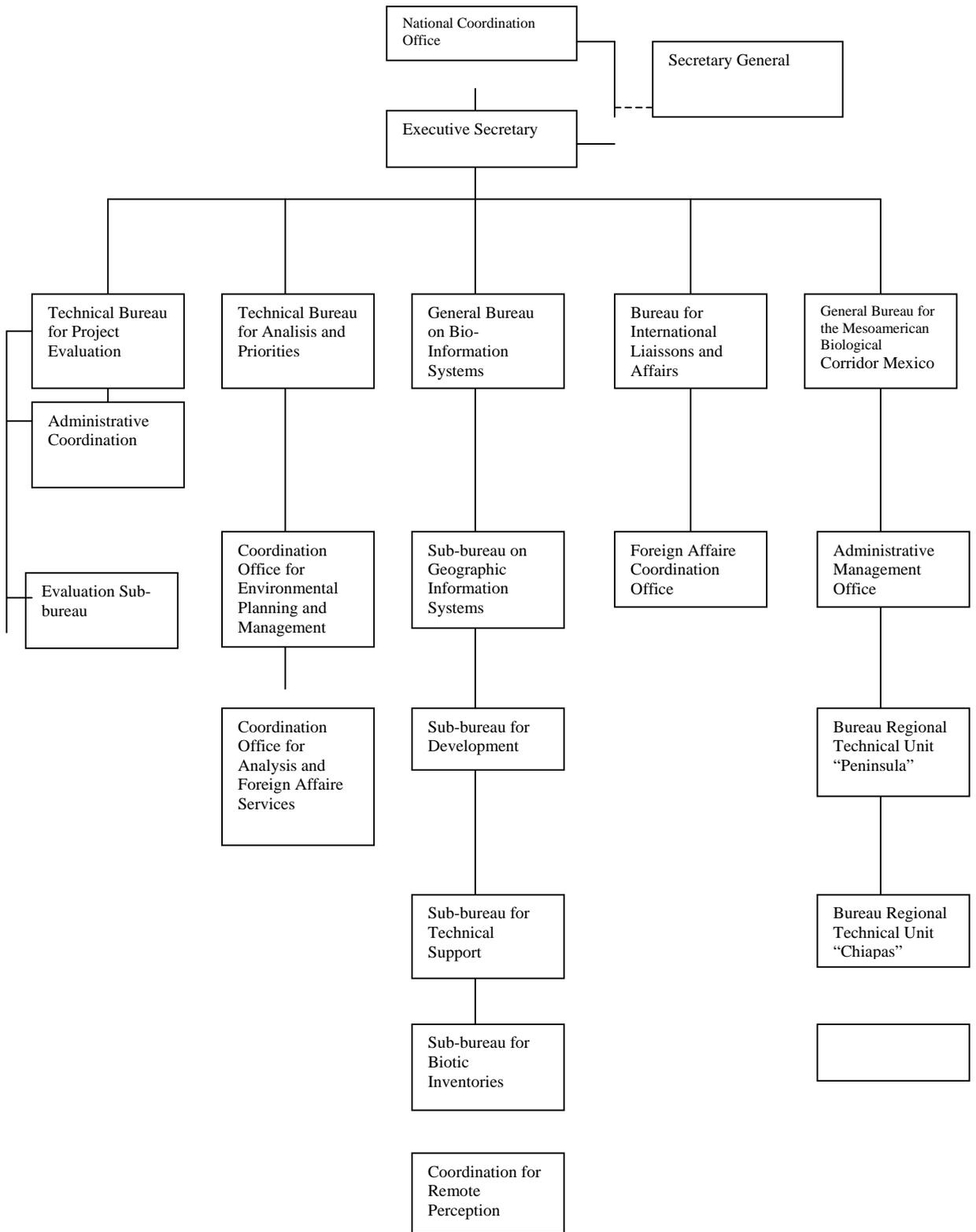
Up to now, Mexico has presented two country reports and submitted all national and sector reports requested.

Regarding CBD, we were told it is difficult to give adequate follow-up to CBD since there is limited capacity to conduct the task. In addition, CBD's agenda undergoes increasing modifications.

Regarding formats for reporting, they are seen as lacking objectivity; it would be desirable to have a manual of procedures to complete the reports.

CONABIO has a unit for the World Information Network on Biodiversity (REMIB), a network of focal research centres that have scientific collections. REMIB could play an important role in Latin America by storing information valuable for the five conventions.

CONABIO's Organizational Chart



UNEP's Regional Office for Latin America and the Caribbean (ROLAC)

UNEP/ROLAC helped coordinate all our interviews to Mexican institutions that have responsibilities regarding international agreements on biodiversity.

Several staff members at ROLAC indicated their interest on supporting an harmonization process for the entire Latin American region and on supporting a Latin American workshop to address these matters on reporting to agreements pertaining biodiversity.

References

- General Bureau on Wildlife
<http://www.semarnat.gob.mx/vs/>
- National Commission for Protected Natural Areas (CONANP)
<http://www.conanp.gob.mx/>
- National Commission for Use and Knowledge of Biodiversity (CONABIO)
<http://www.conabio.gob.mx>
- World Network of Information on Biodiversity (REMIB)
http://www.conabio.gob.mx/remib/doctos/remib_esp.html