

*Please provide the following details on the origin of this report.*

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*Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.*

Questionnaires were sent from the Ministry of the Environment and Natural Resources of El Salvador to national taxonomic institutions by e-mail. Then, we (the Ministry of Environment and Natural Resources) held a meeting and re-explained the GTI work program as well as completed the questionnaire jointly. The participants institutions were: the Natural History Museum, the Biology School at Universidad de El Salvador, and a Botanical Garden (Jardín Botánico La Laguna).

**REPORT ON IMPLEMENTATION OF PROGRAMME OF WORK FOR THE  
GLOBAL TAXONOMY INITIATIVE**

**Programme of Work for the Global Taxonomy Initiative  
Annex to Decision VI/8**

**Operational Objective 1. Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention**

1. Has your country undertaken any taxonomic needs assessments and identified priorities in this regard?	
a) no (please specify the reasons)	
b) no, but assessment is under way	
c) yes, some needs assessments made (please provide details)	X
d) yes, comprehensive assessments made (please provide details)	
Further comments on country-based taxonomic needs assessments and identification of priorities	
Please see below.	
2. Has your country worked with other countries in the region to undertake regional taxonomic needs assessments and identify priorities in this regard?	
a) no (please specify the reasons)	
b) no, but some collaborative projects are being considered or planned	
c) yes, some activities undertaken (please provide details)	X
d) yes, many activities undertaken (please provide details)	
Further comments on regional taxonomic needs assessment and identification of priorities	
Mesoamerican assessment on taxonomic needs and capacities. February 2001 (NBIO, Costa Rica)	
Also, there's a program on capacity building for centralamerican herbaria.	
3. Is your country involved in any activities as part of a global taxonomic needs assessment?	
a) no	
b) yes (please provide details)	x
Further comments on the involvement in the activities for the global taxonomic needs assessment	
RED MESOMAERICANA DE RECURSOS BIOTICOS	
RED DE HERBARIOS DE MESOAMERICA Y EL CARIBE	
BIONET INTERNATIONAL	
Funding from the London Natural History Museum for supporting GTI activities. Products were: national inventory on coffee plantation associated trees, ferns, wasps, and also, scientific exchanges.	

4. Is your country undertaking any activities of public education and awareness to promote the implementation of the programme of work for the GTI?	
a) no	
b) yes, some programmes developed and some activities undertaken (please provide details)	x
c) yes, comprehensive programmes developed and many activities undertaken (please provide details)	
Further comments on public education and awareness programmes and activities	
Please see below.	

**Operational objective 2. Provide focus to help build and maintain the systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge**

5. Is your country working to strengthen global and regional capacity building to support access to and generation of taxonomic information <sup>1</sup> ?	
a) no (please specify the reasons)	
b) no, but some programmes under development	
c) yes, limited capacity building (please provide details)	X
d) yes, significant capacity building (please provide details)	
Further comments on global and regional capacity building to support access to and generation of taxonomic information	
Please see below.	
6. Is your country working with other countries to create and/or strengthen the networks for regional cooperation in taxonomy?	
a) no	
b) no, but consultation is under way	
c) no, but some plans and programmes are under development	
d) yes, some activities undertaken for this purpose (please provide details)	X
e) yes, comprehensive activities undertaken for this purpose (please provide details)	
Further comments on strengthening of existing networks for regional cooperation in taxonomy	
<p>El Salvador supports MESOAMERINET.</p> <p>Also, other related networks are:</p> <p>Herbaria network (The Natural History Museum),</p> <p>Mesoamerican network on biotic resources (Biology School, University of El Salvador)</p> <p>London Natural History Museum</p> <p>Agreement for the creation of the Mesoamerican Museum network (Natural History Museum)</p>	

<sup>1</sup> Responses to question 5 are expected to focus on, but not limited to (a) human capacity building; (b) infrastructure capacity building.

**Operational objective 3. Facilitate an improved and effective infrastructure/system for access to taxonomic information, with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity**

7. Is your country involved in the development of a coordinated global taxonomy information system, in particular the infrastructure to access digitized data/information?	
a) no	
b) no, but some plans are being considered	X
c) yes, to a limited extent (please provide details)	
d) yes, to a significant extent (please provide details)	
Further comments on involvement in the development of a coordinated global taxonomy information system	
Please see below.	

**Operational objective 4. Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components**

8. Has your country made any taxonomic studies and inventories at the national level, which provide a basic assessment of forest biological diversity, in particular in areas under current threat for habitat conversion, or of high conservation value?	
a) no (please provide the reasons)	
b) no, but some programmes are under development	
c) yes, some studies and inventories made (please provide details)	X
d) yes, comprehensive studies and inventories made (please provide details)	
Further comments on taxonomic studies and inventories made for a basic assessment of forest biological diversity	
Regarding the Programme on Forest Biological Diversity: Nowadays there's a national forest inventory going on. Also, there are some inventories on flora and fauna for the protected areas and unprotected forested areas.	
9. Has your country undertaken any taxonomy-related activities relating to marine and coastal biodiversity, in particular taxonomic work related to identification of ballast water organisms and monitoring health of mangrove systems through their invertebrate fauna?	
a) no	
b) not applicable	
c) no, but some programmes are under development	
d) yes, some activities undertaken (please provide details)	X
e) yes, many measures undertaken (please provide details)	
Further comments on taxonomy-related activities identified in the programme of work on marine and coastal biodiversity	
Please see below.	

10.Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on dry and sub-humid lands biodiversity, in particular identification of key indicator taxa like lichens?	
a) no (please provide reasons and plans for improvement)	
b) not applicable	
c) no, but some programmes are under development	
d) yes, some activities undertaken(please provide details)	X
e) yes, many activities undertaken (please provide details)	
Further comments on taxonomic support for implementing the programme of work on dry and sub-humid lands biodiversity	
Regarding the Programme on dry and sub-humid lands biodiversity: The private botanical garden "La Laguna" has been performing research on lichens in 3 different dry tropical forests of El Salvador.	
11.Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on inland waters biodiversity, in particular regional guides to freshwater fish and invertebrates as an input to ecosystem monitoring for river and lake health?	
a) no	
b) no, but some programmes are under development	
c) yes, some activities undertaken(please provide details)	X
d) yes, many activities undertaken (please provide details)	
Further comments on taxonomic support for the implementation of the programme of work on inland waters biodiversity	
Please see below.	
12.Has your country undertaken any taxonomy-related activities identified in the programme of work on agricultural biodiversity as well as relevant activities identified in the International Pollinator Initiative and the International Soil Biodiversity Initiative?	
a) no	
b) no, but some activities are being planned	
c) yes, some activities undertaken (please provide details)	X
d) yes, comprehensive activities undertaken (please provide details)	
Further comments on taxonomy-related activities for the implementation of the programme of work on agricultural biodiversity	
Please see below.	
13.Is your country developing any taxonomic support for the implementation of the programme of work on mountain biodiversity, in particular identification of biodiversity components unique to mountain ecosystems?	
a) no	
b) no, but some programmes are under development	
c) yes, limited support (please provide details)	X
d) yes, significant support (please provide details)	

Further comments on taxonomic support for the implementation of the programme of work on mountain biodiversity	
MARN has supported research in coleoptera, lepidoptera, hymenoptera, vertebrate and plant taxonomy in different mountain ecosystems established as national protected areas.	
Also, a national inventory strategy has been promoted by MARN in El Salvador.	
14. Has your country developed taxonomic support for the implementation of the programme of work on protected areas?	
a) no	
b) no, but some programmes are under development	
c) yes, some programmes in place and are being implemented (please provide details)	X
d) yes, comprehensive programmes are being implemented (please provide details)	
Further comments on taxonomic support provided to the implementation of the programme of work on protected areas	
Please see below.	

**Operational objective 5. Within the work on cross-cutting issues of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components**

15. Has your country taken any measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing?	
a) no	
b) no, but some programmes are under development	
c) yes, some measures taken (please provide details)	X
d) yes, comprehensive measures taken (please provide details)	
Further comments on the measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing	
Database for the Natural History Museum Herbarium in association with MARN. Other databases will be created later.	
The National Biodiversity Inventory and Monitoring Strategy.	
National capacity building strategy on access and benefit sharing.	
16. Has your country developed taxonomic support to address the issues of invasive alien species?	
a) no	
b) no, but relevant policy and programme under development	
c) yes, some policies and programmes in place (please provide details)	X
d) yes, comprehensive policies and programmes in place (please provide details)	
Further comments on taxonomic support to address the issues of invasive alien species	

Please see below.	
17. Has your country developed taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities in accordance with Article 8(j) and related provisions?	
a) no	X
b) not applicable	
c) no, but some programmes are under development	
d) yes, some activities undertaken but a system is not in place yet (please provide details)	
e) yes, a taxonomic information system in place (please provide details)	
Further comments on the taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities	
Please see below.	
18. Has your country undertaken any taxonomy-related activities that support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators?	
a) no	
b) no, but some programmes are under development	
c) yes, some programmes in place (please provide details)	x
d) yes, comprehensive programmes in place (please provide details)	
Further comments on programmes and activities to support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators	
MARN published a national biodiversity inventory strategy which includes the ecosystem approach.	
Also, there's a biodiversity inventory manual, and includes indicators and monitoring. Currently it's been implemented.	

***If your country wishes to provide additional information on implementation of this programme of work, please do so in the following space***

<p>El Salvador needs support on the implementation of Biodiversity Inventory and Monitoring Strategy, including strengthening of institutional capacities and human resources.</p> <p><b>RE 1 c)</b></p> <p>Through Biodiversity Enabling Activities (UNDP/GEF), MARN produced a national assessment on taxonomy. As well as a National Strategy for Inventories and Biodiversity Monitoring.</p> <p>There are assessments on Mesoamerican flora, including El Salvador. The assessments are associated to lichens, fungi, mosses, herbarium state and areas where studies have been conducted.</p> <p>Also, a salvadoran assessment on national taxonomic needs and capacities is included in the Mesoamerican diagnosis.</p>
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**RE 4 b)**

Speeches on the matter as requested by different society sectors. The Ministry of the Environment and Natural Resources (MARN) coordinates these activities with NGO, Museum of Natural History, Ministry of Education. Other institutions also are involved. MARN produced an Inventory Manual, included in the National Strategy for Inventories and Biodiversity Monitoring. Also, MANR gave courses on how to apply the Inventory Manual.

**RE 5 c)**

MARN has information on biodiversity matters within its web. Some up dating is given to the information and associated personnel. MARN has also a developed informatics structure, agreements with other related institutions, including NASA (SIAM: <http://servir.nsstc.nasa.gov>) to monitor forest coverage, forest fires, coral health, red tides and other biodiversity information in Central America. There's also the Mesoamerican Biodiversity Information System (SIMEBIO) proposed by the Central American Commission for Environment and Development to exchange biodiversity information for decision takers amongst the 8 mesoamerican countries. Still under development

**RE 7 b)**

Access to information is through MARN website. Other institutions such as Natural History Museum, Private botanical garden "La Laguna", Biology School at University of El Salvador lack websites for public access. Databases are not available at Biology School/University of El Salvador. The National History Museum is coordinating with MARN a digital database about its collections. The private garden mentioned has a database but not for public access. Some information is displayed at International IABIN website. Also, our country attended GBIF meetings.

**RE 9 d)**

Regarding the Programme on Coastal and Marine Biological Diversity:  
There is some new information on marine biodiversity (2000-2004). Mainly polychaetes, nudibranchs, corals, chitons and macroalgae. Most of it available at MARN website. Also, a paper on a new fish species collected in El Salvador was published in Zootaxa recently (462:1-15, 2004).  
Regarding ballast water, no foreign species have been detected so far, but the marine alga *Acanthophora spicifera*, which has invaded a very important rocky reef in shallow waters. We ignore the origin of the algae, not registered in the area 10 years ago. Frequent removal by hand has been recommended.  
MARN is about to start a monitoring plan on mangrove health by measuring fecal levels (NMP/100 ml) in black clams (*Anadara tuberculosa*). Main estuaries will be included. Sampling will be performed tow times a year.

**RE 11 c)**

Regarding the Programme of work on inland waters biodiversity:  
There are some national documents on fish inventories in continental waters, but oriented to fisheries.  
There are very few documents (not edited) on invertebrates and aquatic plants as bioindicators. Lack of knowledge on continental aquatic invertebrate taxonomy. MARN utilizes macroinvertebrates in assessment reports when a pollution case in rivers is denounced. MARN declares severe cases of organic matter pollution and oxygen depletion in water when the only present group are chironomids. MARN has measured water parameters to confirm this in many freshwater environments.

**RE 12 c)**

Regarding the Programme of Work on Agricultural Biodiversity:  
The Natural History Museum of El Salvador has been involved in inventories of

coleoptera, lepidoptera, hymenoptera, but not really related to agricultural biodiversity.

The project "Biodiversity and coffee" produced an important document on the most important biodiversity associated to coffee plantations, as well as other environmental benefits.

The Ministry of Agriculture and Cattle through its Center for the Transfer of Agricultural and Forest Technology (CENTA) joined the International Treaty on Phytogenetic Resources for Feeding and Agriculture (FAO, 2001)

Also, the Ministry of Agriculture and Cattle has been working on bees as pollinators. Holland assistance.

**RE 14 c)**

National protected areas have been proposed based on the presence of biodiversity as well as ecological properties.

Some studies on biodiversity (fauna-vertebrates- and flora) were carried out at the current national protected areas. Some studies are still going on.

In the marine protected and proposed areas some studies on invertebrates and fishes have been performed. Actually only one marine protected area is official, and mangroves occurs there. Also, the confirmation of hard corals presence on a rocky reef is a key factor to declare a marine protected area in El Salvador.

More information on [www.marn.gob.sv](http://www.marn.gob.sv) (biodiversidad y ecosistemas).

**RE 16 c)**

MARN produced the document: "Establishment of national information node about the invasive species in El Salvador"-Inter-American Biodiversity Network-Project IABIN I3N. Includes a diagnosis on the invasive species in the country.

A national diagnosis on invasive species has been produced in association to IABIN.

This information was distributed in CD. The document includes 3 groups: invertebrates, vertebrates and flora. Each species is well documented with a technical report.

**RE 17 a)**

There's a regional GEF project: "Integrated Ecosystem Management in Indigenous Communities" that includes Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica and Panama and is oriented to support a network of indigenous communities engaged in integrated ecosystem management in the Central American region. Also, it is expected that indigenous communities develop a common vision about natural resources and their traditional use. The project was approved on may 21, 2004.

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