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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.

The report was prepared by the coordinator and technical staff of the General coordination of Biodiversity Policies and Program of the Ministry of Science and Technology and the Ministry of the Environment.

In the Ministry of Science and Technology, the Coordination used its own documents and other sources aggregated with the elaboration and implementation of the PPBio - Research Program in Biodiversity. The PPBio is a nowadays active program, with Federal Government funding (PPA: 2004 - 2007), and supports three specific actions directly related with taxonomy and "ex situ" collections (see question XXX). This coordination has discussed in the last 4-5 years with academic societies aiming to establish the PPBio and defining priorities for its implementation. Personnel from the Environmental Coordination of the Ministry of Science and Technology and selected researchers from science and technology institutions (INPA, EMBRAPA, JBRJ) were also consulted in the process of the preparation of the last Brazilian Report of the CBD.

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**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

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
yes, comprehensive assessments made (please provide details)	
Further comments on country-based taxonomic needs assessments and identification of priorities	
<p>In 1983 and 1987 the Ministry of Science and Technology, through the National Research Council, produced documents based on a study made among scientists and institutions that described the situation of botany in Brazil, including information on taxonomy (Nogueira & Malhem, 1987). After the Convention on Biological Diversity, Siqueira & Joly (1995), Peixoto & Barbosa (1998) and Peixoto (1999) produced documents showing the development of botany, focusing specifically on the scientific collections that support taxonomic studies and floristic surveys.</p> <p>The Tropical Data Base, BDT, a department within the non-profit, non-governmental André Tozello Foundation created with the aim to promote science and technology in Brazil, engaged in the preparation of a series of reports on the project 'Biodiversity: Perspectives and Technological Opportunities'. The project was carried out in 1995/96 and aimed at characterizing the country's capacity in major areas that may contribute to the preservation, use and management of its biodiversity (fauna, flora and microbiota). The reports have been available electronically since 1998 at http://www.bdt.fat.org.br/index, and include a diagnosis of Botanical, Zoological and Microbiological Collections in Brazil, and an analysis of the information system, the collections technological infrastructure, guidelines and recommendations to promote their access.</p> <p>In 2000, the Brazilian Academy of Science, supported by American States Organization (ASO/OEA) and FINEP, the Brazilian Financing Agency for Technology and Science, through the Program to Support Scientific Collections, organized the elaboration of the report 'Brazilian Zoological Collections'. This report was done by researchers from São Paulo State University (USP), Rio de Janeiro Federal University (UFRJ), the National Institute for Amazon Research (INPA) and Paraná Federal University (UFPR).</p> <p>In 1999, a series of seven volumes, named 'Biodiversity of the State of São Paulo: Synthesis of knowledge at the end of the 20th Century', made an unpublished diagnosis of all groups of live organisms known in the State of São Paulo available (Portuguese and English versions at http://www.biota.org.br/publi/livros). The volumes synthesized the already existing scientific knowledge about São Paulo's biota, outlining capabilities of the research groups within the State and the existing infrastructure for "in situ" and "ex situ" conservation. This series is closely related to the Research Program on Sustainable Conservation of Biodiversity, named "BIOTA/FAPESP Program, the Virtual Institute of Biodiversity", created officially at 1999 and supported by FAPESP itself (Foundation to Support the Research at São Paulo State). The major aim of BIOTA-FAPESP is to inventory and characterize the biodiversity of the State of São Paulo, and define the mechanisms for its conservation and sustainable use.</p>	

In 1997, a project to profile the current knowledge on Brazilian biodiversity was conceived initially at the Biodiversity Working Group, an independent advisory board linked to CNPq (Brazilian National Council of Research), and further at the Section of Biodiversity and Forests of the Ministry of the Environment of Brazil (MMA). It was funded by the Global Environment Facility and supported by the United Nations for the Development Program (UNDP), the Brazilian Agency of Cooperation, and CNPq. This project resulted in a general report, 'Synthesis of the Knowledge of the Biological Diversity in Brazil' (Lewinsohn and Prado, 2000), and other seven reports related to specific groups (different authors): microbial biodiversity, vertebrates, freshwater organisms (except vertebrates), marine invertebrates, terrestrial invertebrates, Terrestrial vascular plants and genetic diversity (2003, available at <http://www.mma.gov.br/port/sbf/index.cfm>). These reports resulted in a diagnosis of the current capacity and knowledge on Brazilian biodiversity bringing, therefore, guidelines to assist the selection of priorities for further development of this knowledge and its application. The following items were searched as priorities and included in the report according to the available information: current status of the taxonomy of each group; the state of knowledge of its biodiversity in Brazil and in the world; extent of sampling in different biomes, habitats or geographic regions of the country; the value of each group for different applications and lines of interest; genetic studies of or within the group; current human resources; state and extent of biological collections; and the needs and proposed priorities to advance knowledge of the group.

In 2002, the project 'Biological collection to support survey, sustainable use and conservation of biodiversity' was elaborated to provide data and information that could promote and facilitate the design and implementation of instruments and that could guide specific actions of the government on this area. Considering a previous project funded by CNPq, 'Motion Project of Biological Collection', the 2002 project undertook the commitment to evaluate the "ex situ" collection state of the art and included three activities of evaluation: management of biological collections, the extent of taxonomic groups identified by specialists in the collections, and an experiment to estimate the costs and capabilities needed to turn the collections electronically accessible. The results were edited by Peixoto (2003) with many collaborators and analyzed the policy actions needed in general and in specific taxonomic groups as invertebrates, vertebrates, lower and higher plants.

In 2002 the Ministry of the Environment published a report about evaluation and identification of priority areas and actions for conservation, sustainable use and benefit sharing in relation to the Brazilian biodiversity (MMA 2002a http://www.mma.gov.br/estruturas/chm/_arquivos/biodivbr.pdf). This work comprised a wide process of consultation of experts on Brazilian biodiversity, bearing knowledge of each greatest national biome (executive summaries and other reports: MMA 1999, MMA 2000, Capobianco et al. 2001, MMA 2001, MMA 2002b, MMA 2002c, Cardoso da Silva et al. 2004). One of the results was the establishment of a set of priority actions on scientific researches, including taxonomic initiatives and improvements.

In an event organized by CRIA (Reference Centre of Environmental Information), Peixoto & Barbosa (2002) presented a document about the situation of the Brazilia herbaria, regional flora studies and taxonomists training in graduation programs in Brazil. In the same event, Berry et al. (2002) presented a proposal for a joint work gathering several institutions and scientists from Brazil and abroad and that would have as the starting point the update of the plant names in Martius Flora Brasiliensis.

The scientific communities also supported these documents by creating, through specific commissions, discussion groups for the themes related to the needs identified for the progress of botany in Brazil: the Flora of Brazil Commission and Brazilia herbaria network, in the range of the Brazilian Botanical Society (www.botanica.org.br). This society has also been promoting seminars in its annual meetings that seek to summarize the current knowledge available about specific themes and to propose actions for the advancement of botanical knowledge (Araújo et al., 2002; Jardim et al., 2003).

The Brazilian Botanical Gardens, gathered in a network, are defining priorities, an specifically in the two last years, making efforts to characterize and make available the data related to the biodiversity deposited in these institutions (rede Brasileira de Jardins Botânicos, 2000).

A concrete activity was planned in 2003 by CNPq, who gathered a group of taxonomists (botanists and zoologists) with the aim to identify gaps in the taxonomic knowledge of the Brazilian biota, and . The group should to elaborate, as a first step, a supporting fellowship program with the aim to fill these gaps. This activity is still to be implemented.

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

Through the Neotropical Flora organization a program was created that pointed the needs and priorities for the progress of taxonomic knowledge in the Neotropics. The Brazilian Environment Ministry is working on the concept of the project (Collection, systematization and use of taxonomic information to conservation and sustainable use of neotropical flora). This initiative is in cooperation with other countries and its objectives include the identification of priorities in the area of taxonomy of neotropical flora, capacity-building and the elaboration of taxonomic studies (keys, synopsis, monographs and others). The project will be supported by the Global Environment Facility - GEF and Food and Agricultural Organization - FAO. The preparatory stages are scheduled for 2004 and 2005 and the implementation will start on 2006.

Brazil participates in the South American Cooperation on Biodiversity (CYTED) in which countries that have already developed Biodiversity National Strategies discuss common actions, integration and cooperation to implement the Strategies. The problems related with taxonomy (Knowledge of Biodiversity and Genetic Resources Components) and the "ex situ" collections were discussed and priorities were defined.

During 2003 and 2004, delegations from Mexico and India came to Brazil and discussed with the Ministry of Science and Technology the development of joint actions in taxonomy

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

Brazilian scientists, individually, or institutions have tried to close ties with the Systematics Agenda 2000.

Is your country undertaking any activities of public education and awareness to promote the implementation of the programme of work for the GTI?	
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	

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

Is your country working to strengthen global and regional capacity building to support access to and generation of taxonomic information ¹ ?	
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	
<p>Taxonomy Capacity Program: this program is sponsored by CNPq and intends to qualify human resources to work specifically in taxonomy with the aim to promote the formation of 60 PhDs in 7 years and other technical related human resources. The Call for Proposals is waiting for funding. One of the most important problems identified in the diagnoses cited above is the education and preparation of taxonomists and their job fixation to work with "ex situ" collections.</p> <p>The Brazilian Botanical Society, through the country herbaria network, has been discussing the best mechanisms for training people for the management of collections and the integration between collection activities. In 2002, the National Research Council supported a modest project that promoted two workshops that addressed the management of biological collections and the measures necessary for the dissemination of information found in these collections.</p> <p>The Memoria Naturalis, a National Scientific Collection Network, was officially created in the end of 2003. This network aims to share biodiversity information promoting integrated research programs and partnerships among institutions, reducing costs and increasing results. It is now being implemented and searches for new funding opportunities. The Ministry of Science and Technology has managed the network.</p>	

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

With the aim of promoting the development of research, training of human resources, and to support institutions working on research on biodiversity, the Ministry of Science and Technology has conceived and implemented the PPBio, Research Program in Biodiversity. The program is supported over three main axes: (1) the implementation and support of inventories networks, (2) the support, expansion and electronic digitization of biological collections data and (3) the support of research in thematic areas of biodiversity. Taking into account the country regional differences, the program is being initially implemented in the Amazon region, having as regional coordinating institutions the "Instituto Nacional de Pesquisas da Amazônia" - INPA and the "Museu Paraense Emilio Goeldi" - MPEG. In a second phase the PPBio will be extended to the northeastern region. Both are less favored regions in terms of human resources and research efforts but, on the other hand, display a high level of biodiversity and therefore are considered relevant for studies and conservation activities.

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	X
d) yes, some activities undertaken for this purpose (please provide details)	
e) yes, comprehensive activities undertaken for this purpose (please provide details)	

Further comments on strengthening of existing networks for regional cooperation in taxonomy

Activities in this direction are still incipient. In 2003, through the CYTED, a cooperation network was created to strength taxonomy in the region and international cooperation with Mexico is being discussed.

The Brazilian Environment Ministry promoted a South America regional meeting for the identification of issues on biodiversity for the cooperation and interchanging among countries (<http://www.mma.gov.br/ingles/sbf/chm/estrateg/apringl.html>). This meeting was held on December 15-17, 2003, at the city of Rio de Janeiro, and the representatives of the following countries were present: Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Suriname and Uruguay. Representatives from French Guiana also attended. The participants discussed the possibilities of exchange and cooperation in the region, in order to facilitate compliance with the commitments undertaken under the Convention. Nineteen priority themes were defined, divided in six components (<http://www.mma.gov.br/port/sbf/chm/doc/guiaing.pdf>). Component 1, biodiversity knowledge, identifies the need of inventories and characterization activities.

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

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	
c) yes, to a limited extent (please provide details)	X
d) yes, to a significant extent (please provide details)	
Further comments on involvement in the development of a coordinated global taxonomy information system	
<p>Through CRIA, institutions located in São Paulo are participating in the development of programs. Several Brazilian herbaria are using the program BRAHMS, of free access, developed by the University of Oxford, and working for its improvement.</p> <p>The BIOTA/FAPESP begins to be extended to other regions in Brazil other than São Paulo State. Together with PPBio, the program will be implemented in Amazonia, which will be followed by dry and semi-humid areas (2005). The program should comprise the whole country in 3 or 4 years.</p> <p>As already mentioned in question two, the Brazilian Ministry of the Environment is working on the concept of a project of collection, systematization and use of taxonomic information to conservation and sustainable use of neotropical flora.</p> <p>Brazil is also part of an international initiative on conservation and management of pollinators for sustainable agriculture through an ecosystem approach, with GEF/FAO funding (Dias <i>et al.</i> 1999). This project aims, out of other things, to promote world-wide coordinated action to address the lack of taxonomic information on pollinators (http://mma.gov.br/biodiversidade/polinizadores).</p>	

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

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)	
d) yes, comprehensive studies and inventories made (please provide details)	X
Further comments on taxonomic studies and inventories made for a basic assessment of forest biological diversity	
<p>Yes. Many inventories in the remaining Brazilian forests have been carried out and published in good scientific journals or are available as MSc or PhD dissertations, while other works are still under development. The majority of them were done in areas under threat or in relevant areas for conservation. To ensure the identity of the species, many reviews on taxonomic groups are being done and published. Thus, a significant database of the Brazilian flora diversity is already available. However, there are still many areas to be surveyed and many key taxonomic groups to be studied.</p>	

Between 1998 and 2000 the Brazilian Ministry of the Environment promoted the evaluation and identification of priority areas and actions for conservation, sustainable use and benefit sharing in relation to the Brazilian biodiversity. This work comprised a wide process of consultation of experts on Brazilian biodiversity, bearing knowledge of each greatest national biome. The results were published in a set of executive summaries and reports (MMA 1999, MMA 2000, Capobianco et al. 2001, MMA 2001, MMA 2002b, MMA 2002c, Cardoso da Silva et al. 2004).

In 1997 the project "Evaluation of the State of Knowledge on Biological Diversity in Brazil" was conceived. Instruments were signed for this project in 1997 by the Brazilian Ministry of the Environment, with GEF/UNDP funding. The data were mostly collected between the end of 1997 and early 1999 and were organized and analyzed in 1999 and 2000. The main project topics were microbial diversity, marine invertebrates, terrestrial invertebrates, freshwater invertebrates and plants, vertebrates, terrestrial vascular plants, and the results were published in a series of papers (Brandão et al. 2000, Rocha 2000, Lewinsohn and Prado 2002, Manfio 2003, Migotto and Marques 2003, MMA 2003, Sabino and Prado 2003, Shepherd 2003).

In 2001 the National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supported 21 sub-projects (Call for Proposal 02/2001) to elaborate a report on the improvement on priority areas to scientific research (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=787) (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=681).

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
yes, many measures undertaken (please provide details)	

Further comments on taxonomy-related activities identified in the programme of work on marine and coastal biodiversity

The ' Evaluation Program of the Potential Sustainable Use of Living Resources of the Exclusive Economic Zone ' (REVIZEE), a program linked to the Intergovernmental Oceanographic Commission (IOC) and integrated to the activities of the Ministry of Science and Technology, has specific aims related to taxonomy and systematic inventories of marine biodiversity.

The Brazilian Antarctica Program developed a systematic work, collecting and identifying r organisms.

The Brazilian Ministry of the Environment promoted the first evaluation of the Brazilian marine and coastal biodiversity (MMA 2002b). This initiative led to a workshop in 1999 with the participation of several experts that synthesized a set of recommendations on marine and coastal biodiversity, including on taxonomic activities and ballast water organisms.

The National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supported sub-projects to the themes: National Inform on Invasive Alien Species (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=683) and National Inventories (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=681). Some of these projects were related to marine and coastal biodiversity.

In 2003 was published the Atlas of Coral Reef Protected Areas in Brazil (<http://www.mma.gov.br/port/sbf/dap/atlas.html>) which comprise the bases to the implementation of a national program on reef monitoring.

<p>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?</p>	
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)	
<p>Further comments on taxonomic support for implementing the programme of work on dry and sub-humid lands biodiversity</p>	
<p>In the Northeast region of Brazil, where the drought polygon is, the training of human resources in taxonomy and inventories of the flora have advanced enormously, especially in the last 10 years. Many inventories and studies of taxonomic groups are being produced from data derived from dry and sub-humid regions. In the Brazilian dry and sub-humid lands a pioneer program for the study of the local biodiversity and conservation of the region natural resources is underway - Millennium. Institute in the Dry and Sub-humid Lands: Biodiversity, Bioprospecting and Conservation of Natural Resources (IMSEAR - Instituto do Milênio do Semi-árido; www.imsear.org.br). The program is sponsored by CNPq, and involves 25 Universities and Institutions that work in the region. The program is centered in the articulation of regional Universities and Research Institutions in a network with the common goal of studying and preserving local biodiversity. Some national and foreign institutions are also involved. In four years, inventories, taxonomy studies and conservation diagnoses have been done for regional vascular plants, fungi, phytoplankton, pollen used by native Meliponinae bees and vertebrates, including fish, amphibians, reptiles, birds and mammals. The program ends in 2004 and due to its success, analysis are being made on how to continue the program or further support the network that has been created.</p>	
<p>The Brazilian Ministry of the Environment promoted an evaluation and identification of priority areas and actions for conservation, sustainable use and benefit sharing in relation to the Brazilian biodiversity. To the biomes Cerrado-Pantanal and Caatinga, recognized as sub-humid lands, workshops of experts were made in 1998 and 2000 respectively. The results established an analysis on taxa indicators (MMA 1999, MMA 2002a,c, Cardoso da Silva et al. 2004).</p>	
<p>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?</p>	
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)	
<p>Further comments on taxonomic support for the implementation of the programme of work on inland waters biodiversity</p>	
<p>The National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supported sub-projects to the themes: National Inform on Invasive Alien Species (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=683) and National Inventories (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=681). Some of these projects were related to inland waters biodiversity.</p>	
<p>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?</p>	

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	
<p>At SBSTTA-2 (1996), the Brazilian Government proposed the creation of a work program called "Agricultural Biological Diversity". This program included a proposal to establish the "International Pollinator Conservation Initiative". In the same year, the program "Conservation and Sustainable Use of Agricultural Biological Diversity", based largely on the Brazilian proposal, was approved at CBD COP3, (Decision III/11). In 1998, in São Paulo, the Ministry of the Environment (MMA) organized an international meeting of experts - "Workshop on the conservation and sustainable use of pollinators in the agriculture with emphasis on bees", with the aim to promote the "International Pollinator Initiative" as a fundamental element of the CBD program. The "São Paulo Pollinator Declaration" was presented to SBSTTA in 2000, and received the approval by the Parties at COPS 5 and 6. A project involving Brazil, Africa and South Asia was also submitted to the GEF, and was approved recently. Workshops related to the Brazilian work program were organized in 2003, financed by FAO and MMA, with the aims to standardize the methodologies and use of information technologies in the Brazilian Pollinators Program, and to bring together sparse knowledge, put them available to different actors as research and conservation institutions, agriculture people, and others. In the same year the Call for Proposal PROBIO 02/2003 (Conservation and Sustainable Use of Brazilian Biological Diversity Program) - "Sustainable use and recuperation pollinator diversity in agriculture an related ecosystems", funded by GEF, was published. In April 2004, the International workshop on solitary bees and their role as pollinators was sponsored by Brazil and congregated many national and international stakeholders and scientists.</p> <p>The Brazilian Agricultural Research Corporation (EMBRAPA) jointly with FAO organized an international technical workshop on biological management of soil ecosystems for sustainable agriculture, held in Londrina, Brazil, from 24 to 27 June 2002. The workshop identified, "inter alia", initial collaborative actions towards the development of a strategy and plan of action for the initiative.</p> <p>The EMBRAPA also promoted the 1st Latin-American Meeting on Oligochaete Ecology and Taxonomy, held in Londrina, Brazil, 1-3 December 2003 (www.cnpso.embrapa.br/elaetao). The purpose of the meeting was to summarize the state of the art of the knowledge on ecology, biodiversity and distribution of earthworms in Latin America and of their usefulness in various natural and agricultural ecosystems.</p> <p>In 1998 the Ministry of the Environment promoted an international meeting on pollinators witch led to the São Paulo Declaration on Pollinators - Report on the Recommendations of the Workshop on the Conservation and Sustainable Use of Pollinators in Agriculture with Emphasis on Bees (Dias et al. 1999 http://www.mma.gov.br/port/sbf/chm/doc/pollinas.pdf). In the subsequent years the Ministry also supported the publication of some works on this regard (Kevan and Imperatriz-Fonseca 2002, Silveira et al. 2002).</p> <p>The National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supports now sub-projects: to create inventories of Brazilian information on flora and fauna of actual and potential economic importance (http://www.mma.gov.br/estruturas/chm/_arquivos/cc1.pdf); to identify and distribute local cultivable plant varieties (http://www.mma.gov.br/estruturas/chm/_arquivos/ccparentes.pdf); and to create inventories on sustainable use of autochthones pollinators on agricultural ecosystems (Call for Proposal 01/2004) (http://www.mma.gov.br/estruturas/chm/_arquivos/edit104.pdf).</p>	
<p>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?</p>	

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	
<p>The National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supported National Inventories sub-projects (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=681), some of them related to mountain biodiversity, and also identified several regions corresponding to mountain ecosystems as priorities for conservation and biodiversity inventories (MMA, 2002a). In the great majority these areas have not been adequately surveyed and are not protected by conservation units. Some sporadic works covering mountain ecosystems have been produced, the majority concerned to floristic surveys in the Cerrado and Mata Atlântica biome. The knowledge of the biodiversity of mountain ecosystems in the Amazon and Caatinga biomes is still particularly deficient. A Brazilian botanist participated in the Ad Hoc Technical Expert Group on Mountain Biodiversity (AHTEG) in Rome, Italy, in July 2003. In this meeting a series of recommendations were formulated and presented to the Ministry of the Environment.</p>	
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)	
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	

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

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?	
no	
no, but some programmes are under development	X
yes, some measures taken (please provide details)	
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	
<p>Brazil has an access and benefit sharing system, based on specific legislation (Provisional Measure 2.186-16) and a national authority - the CGEN (http://www.mma.gov.br/port/CGEN) - Genetic Heritage Management Council. There are specific rules for granting permits on access to biodiversity for inventory and classification purposes. Sometimes, the scientific institutions don't need to obtain an authorization or it can obtain a special authorization, to develop many research projects.</p> <p>Furthermore, the legislation recognizes the right of indigenous and local communities to decide on the use of their traditional knowledge and there are clear rules established for asking their prior informed consent when the research is undertaken in their lands. These rules were created to protect those communities and ensure benefit sharing with them. We consider that having such a system, with clear rules for access and benefit sharing that consider the very specific issues related to biodiversity inventories and classification is an indirect way to strengthen capacity for the inventory and classification of biodiversity.</p> <p>The scientific societies have maintained an open channel for the discussion of topics related to access and benefit sharing and for the exchange of experiences with other regional networks. Inside the Brazilian Botanical Society the commission of ethnobotany is very active in grouping the scientists that work with this subject; its members are linked to regional networks.</p>	
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	
<p>The identification, control and eradication of invasive alien species are among the main guidelines of the national biodiversity policy, but measures taken are of a limited range. The Ministry of the Environment promotes a program for the control of invasive alien marine species and in 2003 the commission of the national program on biological diversity approved a national report about invasive alien species. On a related subject, the National Environment Council (CONAMA) approved a resolution by which environmental impact studies are needed for the use of genetically modified organisms.</p>	

The National Biodiversity Project - PROBIO (managed by the Ministry of the Environment) supported the National Report on Invasive Alien Species (http://www.mma.gov.br/?id_estrutura=14&id_conteudo=683) which comprised a set of four sub-projects on invasive alien species that affect marine and terrestrial ecosystems, agriculture and human health.

. 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	
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	
. 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?	
no	X
no, but some programmes are under development	
yes, some programmes in place (please provide details)	
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	

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

A large, empty rectangular box with a thin black border, intended for providing additional information on the implementation of the programme of work.