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Projeto de Co-Gestão da Estação Ecológica de Guaraguaçu [Co-Administration and Management Project for the Garaguaçu Ecological Station] - *Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental - SPVS* [Society for Research on Wildlife and Environmental Education - SPVS], Curitiba. The Paraná State Government delegated the management of the Garaguaçu Ecological Station (1,150 ha on the coast of the state) to the NGO SPVS. Elements of this pioneer programme, part of the *Programa Pró-Atlântica* [Pro-Atlantic Programme], included its effective implementation and protection, initiatives in adjacent areas, and the elaboration of a management plan.

Vila Rica State Park and Biodiversity Conservation in Paraná. The aim of this project is to establish parameters for monitoring effects on regional biodiversity of the reforestation (seasonal, alluvial, semi deciduous forest) along rivers in the areas adjacent to the Vila Rica State Park (PEVR), Fenix, Paraná. The aim is to increase connectivity between forest fragments in the municipalities surrounding the PEVR. The project is funded via Public Notice by the *Fundo Estadual do Meio Ambiente - FEMA* [Paraná State Environment Fund - FEMA].

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Política Estadual de Controle da Desertificação de Pernambuco [State Policy for the Control of Desertification in Pernambuco]. Of the five elements of this policy, two are related to the recuperation of degraded areas:

- Recuperation of areas undergoing desertification, including the development of methodologies and indicators for monitoring and evaluation;
- Capacity-building and environmental education, to create appropriate mechanisms for the recovery and conservation of semi-arid areas and their associated ecosystems.

Programa de Revitalização Ambiental da Baía de Guanabara / Projeto de Conservação e Reflorestamento de Manguezais [Environmental Revitalization Programme for the Guanabara Bay / Project for the Conservation and Reforestation of Mangroves]. Funded by the Ministry of Environment with resources made available by PETROBRAS following an incident of major oil spillage in the bay January 2000. The replanting of 18.5 ha of mangroves surrounding the bay is underway. Other components of the project include: promoting appreciation of the value of mangrove ecosystems particularly in their role in sustaining local fisheries, especially of crabs; information and documentation; and community mobilization. See www.baiadeguanabara.org.br/atuacao/manguezais.asp.

Projeto de Recuperação do Rio Tietê [Recuperation Project for the Rio Tietê] - BID 713-CO (Execution). "Cleaning-up the Rio Tietê" SABESP (06/93 - 12/98). This project aims to clean-up and remove the sources of pollution destroying the Rio Tietê and its main tributaries. Benefits will accrue for the entire state of São Paulo and most especially in the Billings Reservoir and the coast at Santos.

Projeto de Revegetação da Reserva Biológica de Poço das Antas - Jardim Botânico do Rio de Janeiro - RJBJ [Reforestation of the Poço das Antas Biological Reserve - Rio de Janeiro Botanical Gardens - RJBJ]. Covering 5,500 ha, the reserve is in the north of the state of Rio de Janeiro. The activities for the re-vegetation of the Poço das Antas Biological Reserve requires knowledge of the ecological characteristics of the species, which naturally regenerate in the different formations of the Reserve. The treatment of the vegetation cultures and the management of these species are the aims the *Programa Mata Atlântica* [Atlantic Forest Program]. See: www.jbrj.gov.br/pesquisa/pma/rev_mane.htm and www.baiadeguanabara.org.br/atuacao/manguezais.asp.

Presidential Provisional Measure No.1956-49, 27th April, 2000, changed the Forest Code and regulated the prohibition of exchanging forest for agricultural areas in the North and northern central-west of the country.

Projeto de Conservação e Utilização Sustentável de Diversidade Biológica Brasileira - PROBIO [Project for the Conservation and Sustainable Use of Brazilian Biological Diversity - PROBIO]. This project will result in the publication of a book "Fragmentation Effects on Biodiversity: Recommendations for Public Policies" in 2003. See www.mma.gov.br/biodiversidade.

Recuperação Socioambiental no Vale do Rio Doce: Minas Gerais e Espírito Santo - Instituto Terra [Social-Environmental Recuperation of the Rio Doce Valley: Minas Gerais and Espírito Santo - Terra Institute]. The program of the Instituto Terra "Education and Environmental Recuperation of the Atlantic Forest of the Rio

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Doce Valley" is being implemented in the Private Natural Heritage Reserve (RPPN) Fazenda Bulcão and the region of the middle Rio Doce in the states of Minas Gerais and Espírito Santo. The RPPN is located in the Atlantic Forest and has been officially recognized by IEF Edict No.081 (Instituto Estadual de Florestas/MG), 7th October, 1998.

Projetos de Ação Contra o Aquecimento Global: Seqüestro de Carbono - Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental - SPVS [Projects for Action against Global Warming: Carbon Sequestration - Society for Research on Wildlife and Environmental Education - SPVS]. This programme is being carried in a reserve of the SPVS, which will be made into a Private Natural Heritage Reserve - RPPN. The rationale for the research is based on the principle of carbon absorption by forest biomass contributing to reduce global warming. The aim is to increase forest cover and biodiversity conservation on degraded land, besides researching alternative models of economic development compatible with environmental conservation, such as the organic cultivation of bananas by local communities.

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Succeeded projects can be mentioned, however, due to the critical situation of the Brazilian ecosystems, which influences the number of threatened species, the actions are still insufficient.

Centro Nacional de Conservação e Manejo de Tartarugas Marinhas - TAMAR [National Centre for the Conservation and Management of Marine Turtles - TAMAR]. The TAMAR Project is dedicated to protecting and promoting the recovery of largely devastated the marine turtle populations and nesting beaches throughout the entire Brazilian coast. From 1997 to 2000, approximately 1 million young turtles were released by the project. See www.tamar.org.br.

Projeto Conservação do Mico-Leão-Dourado [Golden Lion Tamarin Conservation Programme - GLTCP]. Begun in 1983 and centred on the Poço da Antas Biological Reserve, this is a multi-disciplinary, multi-institutional project to protect remnant populations of the golden lion tamarin (*Leontopithecus rosalia*) in the Atlantic Forest of the state of Rio de Janeiro. Current goals include increasing the available habitat from 16,600 ha to 25,000 ha by the year 2025, an area of forest needed to support a population of about 2000 animals, which according to Population and Habitat Viability Analysis (PHVA) projections is the minimum needed to guarantee the survival of the species for the next 200 years or more. The project is being funded by WWF-Brazil and is executed by the *Associação-Mico-Leão-Dourado* [Golden Lion Tamarin Association] in partnership with the Smithsonian Institution, National Zoological Park and other institutions. The most relevant results achieved by the project include:

- A significant increase in population numbers of the golden lion tamarin in the wild. Current estimates indicate about 1000 individuals. This was in part due to the reintroduction of captive born animals in forest fragments on farms surrounding the reserve, and also a translocation programme involving six groups introduced to the União Biological Reserve (see below). In 1995, the wild population outnumbered captive population. Today there are about 480 golden lion tamarins in captivity. The translocated population has tripled from about 40 animals to 120 and is still growing.
- Through Population and Habitat Viability Analyses, the researchers have identified the factors that could reduce the chances of survival of the golden lion tamarin over the next 200 years, indicating priorities for conservation action.
- The project has contributed to the development and dissemination of innovative solutions for the conservation of the Atlantic Forest. The programme has resulted in 130 scientific publications. Lessons learnt from the reintroduction and translocation projects are contributing to endangered species programmes worldwide.
- The Poço das Antas Biological Reserve and the majority of farms with reintroduced golden lion tamarins have been mapped, and the conservation efforts of the Golden Lion Tamarin Association are now being guided and monitored using a Geographic Information System (GIS).
- Many landowners are now engaged in the protection of the golden lion tamarins and their forests due to the environmental education programme, begun in 1983. Environmental education was a crucial factor in the success of the reintroduction programme and has resulted in the creation of a number of Private Natural Heritage Reserves - RPPNs.
- In 1998, IBAMA created the União Biological Reserve (3,200 ha), in the municipality of Rio das Ostras. Translocation of golden lion tamarin groups to this reserve in 1993 resulted in a population now comprising about a quarter of the total population in the wild. For more information, see http://www.micoleao.org.br/saibamais_translocacao.htm.

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- In June 2002, the Ministry of Environment announced the creation of the Environmental Protection Area (APA) Bacia do Rio São João/Mico-Leão-Dourado (150,529 ha) covering the principal forest fragments surrounding the Biological Reserves of Poço das Antas and União.

Further information at www.wwf.org.br.

Projeto Arara-Azul [Hyacinth Macaw Project]. Begun in 1999, the focus of this project is the conservation of the Hyacinth macaw, *Anodorhynchus hyacinthinus*, in the wild, but also aims to promote biodiversity conservation in general in the Pantanal of the state of Mato Grosso do Sul. The macaw populations are being monitored, including approximately 310 natural and 170 artificial nests in an area of 400,000 ha. The project is engaging local landowners to provide incentives to protect the species, suffering from illegal capture for national and international markets, degradation and loss of habitat, and due to the collection of feathers for indigenous ornaments and carnival costumes. The decline of the species began to be reverted in 1990 with the first field studies of the species in the Pantanal of Mato Grosso. Today 42 farms participate in the project. Besides protecting them, the landowners themselves monitor the macaws and their nests. Tourists are also informed of their importance for the ecological equilibrium of the Pantanal and the responsibility of all in protecting the species. Partners/Executors of the Project: *Universidade para o Desenvolvimento do Estado e Região do Pantanal - UNIDERP* [University for the Development of the State and the Pantanal Region – UNIDERP], *Fundação Manoel de Barros*, *Fundação Ecológica*, Caiman Ecological Refuge (Miranda, Mato Grosso do Sul), WWF-Brazil, Toyota. Funding: WWF-Brazil, UNIDERP and the *Fundação Manoel de Barros*. For more information, go to www.wwf.org.br/english/informa/sitearara_principal.htm.

Projeto Baleia Jubarte [Humpback Whale Project] – A project of the *Fundação Baleia Jubarte* supported by PETROBRAS. More information at www.cria-ativa.com.br/jubarte/.

Centros Especializados de Fauna – IBAMA [Specialized Centres for Brazilian Fauna – IBAMA]. The Brazilian Institute for the Environment (IBAMA) has created a number of centres which specialize on the management and conservation of specific groups of threatened species. See www.ibama.gov.br.

Fundo Nacional do Meio Ambiente – FNMA [National Environment Fund – FNMA]. The *Public Notice 4/2001* of the FNMA selected project proposals for the Management of Threatened Species and Alien Invasive Species. They were:

- Conservation and reintroduction of threatened species of trees - Fundação Dalmo Giacometti, Federal District;
- Strategies for the conservation and management of arnica, *Lichnophora pinaster* - EMBRAPA/CENARGEN, Federal District;
- Endangered plant species of the Caatinga - EMBRAPA/SEMI-ÁRIDO, Pernambuco;
- Conservation and management of endangered species of forest trees: Pau-rosa and aquariquara - Fundação de Apoio Institucional Muraki, Amazonas;
- Conservation and biology of the La Plata dolphin, *Pontoporia blainvillei* - Grupo de Estudos de Mamíferos Aquáticos do Rio Grande do Sul, Rio Grande do Sul;
- Conservation and management of Eriocaulaceae, Orchidaceae, and Cactaceae of the Chapada Diamantina – Universidade Federal de Feira de Santana, Bahia;
- Metapopulation management plan for the golden lion tamarin - Associação Mico-Leão-Dourado, Rio de Janeiro;
- Management and conservation of predators in the vicinity of Emas National Park - Associação Pró-Carnívoros, São Paulo;
- Ecology of rare fishes of the middle Rio Doce - Instituto de Pesquisa da Mata Atlântica (IPEMA), Espírito Santo;
- Ballast Waters: Risk management, monitoring and the management of exotic species in Port of Paranaguá – Universidade Federal do Paraná, Paraná;
- Conservation of *Euterpe edulis* – Universidade Federal da Santa Maria, Rio Grande do Sul;
- Implementation of the Rescue Unit and rehabilitation of the West Indian manatee – Centro de Mamíferos Aquáticos, IBAMA, Pernambuco;
- Control of invasive grasses in the Emas National Park - Fundação Emas, Goiás.

The FNMA is also supporting projects under the theme of species management: Line 7 – Conservation Projects / Preservation of Native Fauna and Flora (7.1- Management of Fauna and 7.2 Management of Flora). This line of funding is for threatened and overexploited species. See: www.mma.gov.br/fnma.

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Environmental Licensing. The IBAMA licensing system requires protective measures actions for threatened species from enterprises with the potential of harming the environment www.ibama.gov.br.

Projeto Conservação In Situ do Jardim Botânico do Rio de Janeiro [*In Situ* Conservation Project of the Rio De Janeiro Botanical Gardens]. Two lines of research at the Rio de Janeiro Botanical Gardens deal specifically with *in situ* conservation of threatened species:

- Studies on Genetic Structures, systems of crossbreeding and genetic exchange of threatened species using molecular markers;
- Population ecology of Pau Brasil (*Caesalpinia echinata* Lam.): the *Pau-Brasil* Project.

Projeto Reserva Genética de Pau-Brasil [Pau Brasil Genetic Reserve Project]. This project is one component of a partnership between EMBRAPA and the Fundação Oswaldo Cruz (Fiocruz), Rio de Janeiro. It involves the monitoring of the Pau Brasil (*Caesalpinia echinata* Lam.) populations in the Veracruz and Pau Brasil Ecological Stations (together comprising a 7,214 ha of Atlantic forest between the towns of Porto Seguro and Santa Cruz Cabralia, Bahia), besides cloning and replanting.

Projeto de Conservação e Manejo de Espécies Ameaçadas de Extinção: pau-rosa e acariquara [Management and Conservation of Threatened Species: Pau-rosa and Acariquara]. A project of the *Instituto Nacional de Pesquisas da Amazônia – INPA* [National Institute For Amazon Research – INPA]. Period: Nov/2001 to Nov/2003. Funding: R\$489.000 from the Fundo Nacional do Meio Ambiente – FNMA [National Environment Fund – FNMA]. See www.inpa.gov.br.

Projeto Peixe-Boi [Manatee Project]. The Manatee Project was created in 1980 by the federal government in order to assess the status of the West Indian manatee (*Trichechus manatus*) in Brazil. In 1990 the project was expanded and became the *Centro Nacional de Conservação e Manejo de Sirênios* [National Centre for the Conservation and Management of Sireniens], a semi-autonomous unit of IBAMA. Since then, it counts with administrative and technical support from the NGO Fundação Mamíferos Marinhos [Marine Mammals Foundation]. In 1998, the Centre was turned into the *Centro Nacional de Pesquisa, Conservação e Manejo de Mamíferos Aquáticos* [National Centre for Research, Conservation and Management of Aquatic Mammals], while maintaining its partnership with the Marine Mammals Foundation in the execution of the Manatee Project. Similar actions are also underway for the Amazon Manatee (*Trichechus inunguis*). More information at www.projetopeixe-boi.com.br.

Programa Ararinha Azul [Spix's Macaw Programme]. In 1990 the Brazilian Government created the *Comitê Permanente para Recuperação da Ararinha-Azul - CPRAA* [Permanent Committee for the Recovery of Spix's macaw – CPRAA], which included representatives from IBAMA, São Paulo Zoo, Criadouro Chaparral (Recife) (private breeder), Loro Park Foundation (Tenerife), Birdlife International (Philippines), Houston Zoo, Texas, and keepers, and national and foreign institutions and researchers with expertise in the species. One group of the CPRAA work specifically with captive breeding. At the beginning of this programme there were 17 Spix's macaws (*Cyanopsitta spixii*) in captivity; today there are 60 in Brazil (Recife and São Paulo), the Philippines, Switzerland, and Tenerife (Spain). In 1991, CPRAA created the *Projeto Ararinha-azul* [Spix's macaw project], based in the municipality of Curuçá, at the state of Bahia, in order to study its natural habits, habitat, daily and seasonal movement patterns, and feeding ecology, and to create protected areas in accordance. See orbita.starmeda.com/~ararinha-azul/.

Projeto RAN [RAN PROJECT] (amphibians and reptiles). Created in 2000 from the former *Quelônios da Amazônia* [Chelonia of Amazon] Project the RAN Project, executed by IBAMA, protects and monitors threatened populations of freshwater turtles in nine states in Brazil. Notable success has been achieved in Rondônia, where, after 20 years of conservation efforts, the populations of freshwater turtles have recovered and are no longer considered endangered.

Projeto de Conservação do Papagaio-de-cara-roxa [Purple-faced Parrot Conservation Project] - *Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental - SPVS* [Society for Research on Wildlife and Environmental Education - SPVS], Curitiba. The Purple-faced parrot (*Amazona brasiliensis*) is endemic to the Atlantic forest endemic along the coast of São Paulo to the north of Santa Catarina. It nests on islands in the Bay of Paranaguá, Paraná. Conservation efforts include research on the species, and environmental education programmes with local communities, teachers, and tourists, besides campaigns and ongoing enforcement measures to stop illegal smuggling.

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Parque Nacional Serra da Capivara, PI [National Park Serra da Capivara] – the Fundação Museu do Homem Americano – FUNDHAM [American Man Museum Foundation], together with IBAMA, implements the management of this conservation unit since 1989. Different actions of research, surveillance, monitoring and management have been promoting the recovery of species under threat of extinction as: *Panthera onca* (onça pintada - jaguar), *Tolypeutes tricinctus* (tatu-bola – tree banded armadillo), *Sarcoramphus papa* (urubu-rei – king vulture), plant species under risk of genetic erosion as *Anadenanthera macrocarpa* (angico); *Myracrodruon pubesin* (aroeira); *Tabebuia impetiginosa* (ipê – Lavender Trumpet tree) and endemic (*Tapimurus helenae* – lagartixa da serra, *Kirodon rupestris* – mocó).

Revision of the List of Threatened Species for the State of Paraná. Paraná was the first Brazilian state to organize and publish its list of threatened species (Brazil, Paraná, SEMA, 1995a, 1995b). The revision will review the status of the threatened species in the state of Paraná, including their occurrence in different biomes, and pertinent aspects of their biology and ecology. The Revision was begun in December 2002 and will continue till June 2003. The project is being led by the NGO *Mater Natura*, and partners include the *Instituto Ambiental do Paraná - IAP* [Environmental Institute of Paraná – IAP], the *Fundação O Boticário de Proteção à Natureza* [Boticário Foundation for Nature Protection] and the University of Tuiuti, Paraná.

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This question is being discussed by the Brazilian Government. There is a proposal of creation of laws concerning this theme, but they have not been consolidated as a guideline. The government and the civil society sectors diverge in the use of genetically modified organisms. The legal instruments related to this question are cited:

Comissão Técnica Nacional de Biossegurança – CTNBio [National Technical Commission on Biosafety - CTNBio]. Law 8974, 5th January 1995 – the Biosafety Law – established the directives for the control of modern biotechnology, including DNA recombination and its products. The CTNBio controls and regulates this technology in Brazil. It is responsible for reviewing and evaluating requests the cultivation and commercialisation of Genetically Modified Organisms (GMOs), and for monitoring technical and scientific developments on biosafety and similar fields to ensure the safety of consumers and the population in general, and possible environmental impacts. As such, CTNBio, a technical organ of the Ministry of Science and Technology, must be consulted regarding any activities involving GMOs in the country. See www.ctnbio.gov.br.

Law 8974, 5th January 1995, established regulations for the use of genetic engineering techniques and the cultivation and use of genetically modified organisms. Available at www.ctnbio.gov.br/ctnbio/legis/leis/8974_95english.htm (in English).

Resolution 305, 12th June 2002, of the Conselho Nacional do Meio Ambiente – CONAMA [National Council for the Environment – CONAMA] determined that environmental licensing and environmental impact studies are required prior to the use of any Genetically Modified Organisms (GMOs). Available at www.mma.gov.br/port/conama/res/res02/res30502.html.

Decree 3871, 18th July 2001, ordered that foods which originate from or contain Genetically Modified Organisms must be labelled with the pertinent information: "Article 1: packed foods destined for human consumption containing or produced with Genetically Modified Organisms, exceeding 4% of the product, must supply this information on the label without jeopardizing compliance with Biosafety or related legislation applicable to foods in general or any other complementary regulations set by the competent regulatory or inspection agency"(...) §1º According to the intention of the *caput* of this article, the label must include the statements: "[type of product] "Genetically Modified" or "Contains [type of ingredient] Genetically Modified" Available at www.ctnbio.gov.br/ctnbio/legis/decretos/3871_01.htm.

Pending still is the adequate implementation of legislation on prohibition/control of illegal procedures and activities.

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Brazilian Agenda 21. See www.agenda21.org.br.

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Política Nacional da Biodiversidade [National Biodiversity Policy]. See comments on Article 6.

Montanhas de Tumucumaque National Park. See general comments on Article 8.

Fundo Nacional do Meio Ambiente - FNMA [National Environment Fund - FNMA]. Public Notice No.3, 2001, requested proposals for projects on the conservation and sustainable use of natural resources by communities in the vicinity of strictly protected areas (non-forest) (Federal, State, Federal District and Municipal), in the categories: non-forest ecosystems. R\$3,000,000.00 were made available to finance the projects. The following projects were selected:

- "Sustainable Mauá" - *Escola Técnica Rural de Mantiqueira* [Mantiqueira Rural Technical School], Rio de Janeiro;
- "Sustainable Development Plan for the Area Surrounding the Guatierla State Park" - *Instituto Ambiental do Paraná - IAP* [Environmental Institute of Paraná - IAP], Paraná;
- "Participatory Planning for Community Sustainable Development Projects" - *Museu Paraense Emílio Goeldi* [Emílio Goeldi Museum], Belém, Pará;
- "A Sustainable Development Plan for the Area Surrounding the Assis Ecological Station" - *Associação de Recuperação Ambiental do Médio Paranapanema* [Association for Environmental Recovery of the Middle Paranapanema] São Paulo;
- "Chapada da Diamantina (BA): Plan for Participatory Sustainable Development in the Vicinity of the National Park" - *Grupo Ambiental da Bahia - Gambá* [Environmental Group of Bahia - Gambá], Bahia;
- "Diagnosis for Sustainable Development - Islands of the Bays of Guaraqueçaba and Laranjeiras" - *Fundação da Universidade Federal do Paraná - FUNPAR* [Federal University of Paraná Foundation - FUNPAR], Paraná;
- "A Study for the Rational Use of Fisheries Resources in the vicinity of the Tupiniquins Ecological Station" - *Centro de Estudos Ecológicos Gaia Ambiental* [Gaia Ambiental Centre for Ecological Studies, São Paulo];
- "Participatory Management - An Eco-development Alternative for the Lago Piratuba Biological Reserve, Amapá" - *IBAMA - Executive Management of Amapá*;
- "Sustainable Development in the vicinity of the Carijós Ecological Station, Santa Catarina" - *Associação dos Amigos Pró-Conservação da Estação Ecológica Carijós* [Association of the Friends Pro-Conservation of the Carijós Ecological Station], Santa Catarina;
- "A Sustainable Development Plan for Communities in the Vicinity of the Comboios Biological Reserve, Espírito Santo" - *Fundação Pró-Tamar* [Pro-Tamar Foundation], Espírito Santo;
- "Sustainability Plan for the Vicinity of the Jurubatiba National Park" - *Associação dos Amigos do Parque Nacional da Restinga de Jurubatiba* [Association of Friends of the Jurubatiba National Park], Rio de Janeiro;
- "Priority Actions for the Sustainability of Communities Surrounding the Taim Ecological Station" - *Núcleo de Educação e Monitoramento Ambiental - NEMA* [Nucleus of Education and Environmental Monitoring - NEMA];
- "Sustainable Development Plan for the Vicinity of the Ibirapuitã Biological Reserve" - *Instituto para o Desenvolvimento de Energias Alternativas e da Autosustentabilidade - IDEAAS* [Institute of Alternative Energy Sources and Self-sufficiency - IDEAAS];
- "Implementation of Priority Actions for the Eco-development Plan of the Serra da Bodoquena National Park" - *Fundação Neotrópica do Brasil* [Neotropica Foundation of Brazil];
- "Agricultural Experiments and Alternatives for Processing Buri Palm Fruits (*Mauritia* sp.)" - *Sociedade Zeladora do Museu Paraense Emílio Goeldi* [Custodian Society of the Emílio Goeldi Museum], Belém, Pará and *Projeto de Conservação e Utilização Sustentável de Diversidade Biológica Brasileira - PROBIO* [Project for the Conservation and Sustainable Use of Brazilian Biological Diversity];
- Implementation of the Sustainable Development Plan for Surroundings of the Grande Sertão Veredas National Park" - *Fundação Pró-Natureza* [Pro-Nature Foundation] - FUNATURA".

Fundo Nacional do Meio Ambiente - FNMA [National Environment Fund - FNMA] - Public Notice No.6, 2001, requested proposals for projects on environmental management and Indigenous lands. Budget R\$4,000,000.00. The following projects were selected:

- "Ethnic-environmental Diagnosis and Environmental Management Plan for the Potiguara Indigenous land" - *Associação de Apoio à Produção e ao Pequeno Empreendimento* [Association for the Support for Production and Small Enterprises];
- "Rescuing the Burum Nak: Our Land is Our Life" - *Associação Indígena Krenak* [Krenak Indigenous Association];

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- "Kiriri Environmental Management" – *Associação Nacional de Ação Indigenista* [National Association of Indigenous Action];
- "Ethnic-environmental Diagnosis of the Sangradouro Indigenous land" - *Associação Xavante Warã* [Xavante Wara Association];
- "Environmental Management Plan of Votouro" - *Associação Riograndense de Empreendimentos de Assistência Técnica e Extensão Rural* [Riograndense Association of Technical Assistance Enterprises and Rural Extension];
- "Environmental Management Plan – Terra Waiapi" - *Centro de Trabalho Indigenista* [The Indigenous Work Centre];
- "Environmental Management Plan in Guarani Areas" - *Centro de Trabalho Indigenista* [The Indigenous Work Centre];
- "Ethnic-Sustainable Development of Kaingangue Peoples from southern Brazil" - *Conselho Estadual dos Povos Indígenas* [State Council for Indigenous Peoples];
- "Ethnic-Sustainable Development of Kaingangue and Guarani peoples" - *Conselho Estadual dos Povos Indígenas* [State Council for Indigenous Peoples];
- "Environmental Project of the Trincheira Indigenous Land" - *Coordenação das Organizações Indígenas da Amazônia Brasileira* [Coordination of Indigenous Organizations of the Brazilian Amazon];
- "Diagnosis of Guarani Environmental Management" - *Empresa de Assistência Técnica e Extensão do Estado do Rio de Janeiro* [Association of Technical Assistance and Rural Extension of Rio de Janeiro];
- "Ethnic-environmental Diagnosis of the Upper Rio Negro" - *Federação das Organizações Indígenas do Rio Negro* [Federation of Indigenous Organizations of the Rio Negro];
- "Environmental Management of Uru-eu-wau-wau Indigenous Land" - *Kanindé - Associação de Defesa Etno-Ambiental* [Kanindé – Ethnic-environmental Protection Association];
- "Pankaré Environmental Association" - *Universidade Estadual de Feira de Santana* [Feira de Santana State University];
- "Environmental Management in the Ivai Indigenous Land" - *Universidade Estadual de Maringá* [Maringá State University];
- "Etenhiritipa Project" - *Universidade Estadual de Mato Grosso* [State University of Mato Grosso];
- "Norowedena'rada Project" - *Universidade Estadual de Mato Grosso* [State University of Mato Grosso];
- "Pataxo Hahahai Environmental Management" – *Universidade Federal da Bahia* [Federal University of Bahia].

See comments on Article 10.

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Brazil does not have specific legislation for threatened species, but the environmental legislation includes considerations for the protection of such species:

- *Constituição Federal de 1988* [Federal Constitution of 1988], Article 225, §1, VII. "To protect the fauna and flora: practices that put at risk their ecological function and that result in the extinction of species or submit animals to cruelty are prohibited by law." ["*Proteger a fauna e a flora, vedadas, na forma da lei, as práticas que coloquem em risco sua função ecológica, provoquem a extinção de espécies ou submetam os animais à crueldade.*"]
- *Lei de Crimes Ambientais* [Law of Environmental Crimes] (see comments on Question 70).
- Decree 4339, 22nd August 2002. This decree instituted the *Política Nacional da Biodiversidade* [National Biodiversity Policy].
- *Código de Proteção da Fauna* [Faunal Protection Code] (Law No.5197, 3rd January, 1967). Although not ruling specifically on threatened species, it protects fauna in general and determines in Article 1 "Animals of any species, at any developmental phase and living naturally, out of captivity, constituting wild fauna as well as their nests, shelters and natural breeding grounds, are property of the State, and their use, persecution, destruction, hunting or capture is prohibited." ["*Os animais de quaisquer espécies, em qualquer fase de seu desenvolvimento e que vivem naturalmente fora de cativeiro, constituindo a fauna silvestre, bem como seus ninhos, abrigos e criadouros naturais são propriedade do Estado, sendo proibida sua utilização, perseguição, destruição, caça ou apanha.*"] (Wolff, 2000).
- *Código Florestal* [Forest Code] (Law No.4771, 15th September 1965). Defines as an Area of Permanent Preservation anywhere where there is one or more threatened species, besides the requirement of specific authorization to commercialize flora.

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- *Código de Pesca* [Fishing Code] (Decree Law No.221, 28th February, 1967). Regulates the use of fisheries resources, although according to Wolff (2000), this legislation is biased towards utilitarian and economic gains.
- Law No.7643, 18th December 1987. Forbids whaling (any cetaceans) in waters under Brazilian jurisdiction (see www.senado.gov.br/legisla.htm).
- Law No.7679, 23rd November, 1988. Forbids the fishing of species during the reproductive season (www.senado.gov.br/legisla.htm).
- Decree 7623, 17th November, 1975. Promulgates the Convention on International Trade in Endangered Species of Wild Flora and Fauna (see www.senado.gov.br/legisla.htm).

Question 82.

- *Constituição Federal de 1988* [Federal Constitution of 1988], Article 225, §1º, V: "...control the production, commercialisation and the employment of techniques, methods and substances which imply a risk to life, to quality of life and to the environment." ["...controlar a produção, a comercialização e o emprego de técnicas, métodos e substâncias que comportem risco para a vida, a qualidade de vida e o meio ambiente."]
- *Constituição Federal de 1988* [Federal Constitution of 1988], Article 225 §2º: "Those who exploit mineral resources are obliged to restore the degraded environment, according to the technical solutions demanded by the competent agency determined by law." ["Aquele que explorar recursos minerais fica obrigado a recuperar o meio ambiente degradado, de acordo com solução técnica exigida pelo órgão público competente, na forma da lei."]
- Law No.7643, 18th December, 1987. Forbids whaling (any cetaceans) in waters under Brazilian jurisdictional (see www.senado.gov.br/legisla.htm).
- Law No.7679, 23rd November, 1988. Forbids the fishing of species during the reproductive season www.senado.gov.br/legisla.htm.
- Law No.7802, 11th July, 1989. Concerns research, experimentation, the production, packaging, labelling, transport, maintenance, commercialisation, advertising, use, importation, exportation, the disposal of residues and packaging, registration, classification, control, inspection and the monitoring of irregularities for agrototoxic compounds, their components and by-products.
- Decree No.98816, 11th January, 1990. Regulates Law No.7802, 11th July, 1989 (see above).
- Decree No.750, 10th February, 1993. Deals with the cutting, exploitation and suppression of primary or advanced or middle successional vegetation of the Atlantic forest; among other determinations.
- Decree No.875, 18th July, 1993. Promulgates the text of the Convention on Transfrontier Movement of Dangerous Residues and their Storage.
- Decree 2661, 8th July, 1998. Regulates the single paragraph of Article 27 of Law No.4771, 15th September, 1965 (Forest Code) establishing precautionary measures in the use of fire in agricultural and forestry practices, among other determinations.
- Resolution No.001, 23rd January, 1986 of the *Conselho Nacional do Meio Ambiente* [National Environment Council]. Concerns the licensing of activities that modify the environment. See www.mma.gov.br/port/conama/res/res86/res0186.html.

See comments on Article 8h.

Question 84.

Programa Piloto para a Proteção às Florestas Tropicais do Brasil PP-G7 [Pilot Program for the Protection of the Tropical Forests of Brazil PP-G7]. This programme was created to strengthen and maximize the environmental benefits of the Brazilian tropical forests in a way which is compatible with the developmental aspirations of the country. It is a unique model of cooperation between the Brazilian government, civil society and the international community. The PP-G7 was instituted by Decree No. 563, June 1992, and modified by Decree 2119, January 1997. Its execution is the charge of the Brazilian Government through the Ministry of Environment (Coordination), the Ministry of Justice, and the Ministry of Science and Technology, with the participation of the World Bank, the European Community and the member countries of the G7.

Since 1990, the American Man Museum Foundation is supported by the BID in order to implement the National Park Serra da Capivara. This support is destined to actions of preservation and *in situ* conservation of this priority area for Caatinga biodiversity conservation. Other external funding from CNRS, France,

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Italian Ministry of Foreign Affairs/TERRA NUEVA and the Japanese government, have been supporting projects of research, health and social development, and without.

Amazon Region Protected Areas - ARPA Project. The aim of this project is to expand the protected areas system of tropical forest in the country. It is a joint effort of World Bank and the World Wildlife Fund (WWF) to increase protection of the world's tropical forests. Financial resources have been made available from the Global Environmental Facility – GEF (managed by the World Bank), WWF-Brazil, the Institute of Credit for Reconstruction (KFW)), and BrazilConnects (a non-governmental organization, which focuses on international art exhibitions and ecological projects, with the mission of promoting and protecting the cultural and natural heritage of Brazil), and federal funding. Approved by the GEF in March 2000, the aim of the ARPA Project in its first four-year phase is to create 18 million ha of new protected areas in Legal Amazon, half as strictly protected areas and half as sustainable use areas. It will also involve the establishment of a Trust Fund for the maintenance and management of strictly protected areas and for personnel to monitor and control activities in the protected areas of sustainable use, in order to guarantee their financial sustainability. As such, ARPA has five components:

- Creation of protected areas;
- Consolidation of existing protected areas;
- Trust funds for protected areas;
- Monitoring of protected areas; and
- Coordination, administration and management of the Project.

The ARPA project was originally designed only to expand and consolidate the strictly protected areas system in the Amazon. The goal was to protect 10% in this way. In the last year, the Brazilian Government decided to maintain this goal, but include also protected areas of sustainable use (Extractivist Reserves and Sustainable Development Reserves). The rationale behind this decision took into account the fact that the social-environmental complexity of the region required different forms of protection, and that local community participation in environmental protection was fundamental. This change made it coherent with the *Lei do Sistema Nacional de Unidades de Conservação – SNUC* [Law of the National System of Protected Areas - SNUC], ensuring its implementation without social conflict by allowing for legal and appropriate options for areas which are important for biodiversity conservation but occupied by traditional communities. The project also provides for inherent social conflicts in many of the protected areas, especially in the Amazon national parks. Despite the fact that this type of protected area disallows human presence, many were created in areas already inhabited. To reach a definitive solution to this type of problem, a Conflict Mediation Unit was established to analyse each case and find solutions which respect the rights of the communities while assuring the protection of the biodiversity. More information at www.amazonia.org.br/arquivos/16656.doc.

Fundo Nacional do Meio Ambiente – FNMA [National Environment Fund - FNMA]. One of the aims of this fund is to promote conservation *in situ*. The fund was created from the Loan Agreement 1013/SF-BR with the Inter-American Development Bank - IADB (29th April, 1999) for US\$40 million, with a national matching fund of US\$6 million. Project themes of the FNMA include: Forestry Extension, Integrated Administration and Management of Protected Areas, Sustainable Management of Flora and Fauna, Sustainable Use of Fishery Resources, Environmental Education, Sustainability in Amazon, Environmental Quality, and the Integrated Management of Solid Residues. Projects are funded which arise from spontaneous as well induced demand. See www.mma.gov.br/port/fnma/fnma/recfin.html.

There are also *in situ* conservation projects that are funded by international NGOs:

The Nature Conservancy (TNC), based in Arlington, Virginia, USA, with its regional programme, TNC-Brazil, based in Brasília. See nature.org/wherewework/southamerica/brasil/work.

- *Amazon*: TNC, together with a Brazilian NGO, *SOS Amazônia*, has developed a management plan for the Serra do Divisor National Park in collaboration with local communities and the *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA* [Brazilian Institute for the Environment and Renewable Natural Resources - IBAMA]. Together, the three partners are implementing strategic approaches to protect the Park, including education and capacity-building for the community, management of natural resources, environmental research and ecotourism.
- *Atlantic Forest*: TNC joined forces with the *Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental – SPVS* [Society for Research on Wildlife and Environmental Education – SPVS] and the *Fundação O Boticário de Proteção à Natureza* [The Boticário Foundation for Nature Protection], to create Private Natural Heritage Reserves (RPPNs) totalling 25,000 ha in the Guaraqueçaba Environmental Protection Area. There, TNC and its local partners are also carrying out the first project to address

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climate change in Brazil through the restoration and protection of 7,000 ha of tropical forest and as such the removal of more than one million tons of carbon dioxide.

- *Caatinga*: TNC evaluated 26 potential areas for conservation in the state of Ceará. It has helped in the acquisition of one strategic reserve and is in the process of acquiring a second. These are two of the most important areas in the region. The *Associação Caatinga* [Caatinga Association], a partner organization created with the support of TNC directors, manages both reserves and helps to promote conservation in the Caatinga.
- *Cerrado*: TNC and its partner the *Fundação Pró-Natureza – FUNATURA* [Pro-Nature Foundation - FUNATURA], have established a twenty-year fund for the management of the Grande Sertão Veredas National Park through a unique initiative: The conversion of the Brazilian external debt into a program of environmental protection. A rapid assessment of the Park by TNC gave rise to a management plan that is currently being developed by IBAMA, with the assistance of TNC. TNC is also launching a sustainable agriculture initiative in the Cerrado, a region under threat from current non-sustainable agricultural practices. This initiative will start with a sustainable agriculture project in partnership with the *Fundação Emas* [Emas Foundation] in the area surrounding the Emas National Park, Goiás.
- *Pantanal*: TNC helped its partner organization *Ecotropical* to purchase 60,000 ha bordering the Pantanal Matogrossense National Park, of great importance to guarantee its protection, and turned the area into a Private Natural Heritage Reserve (RPPN). With the support of TNC and the US Department of the Interior, the authorities of the Everglades National Park are providing resources to improve the management of the Pantanal Matogrossense National Park and adjacent private reserves. The Nature Conservancy is working with Brazilian, Paraguayan and Bolivian institutions to better identify the priority areas, threats and conservation actions for the entire region.

World Wildlife Fund (WWF) - Brazil, based in Brasília, DF. See www.wwf.org.br/mata/default.htm.

WWF's Program of Biodiversity and Parks aims to identify priority areas for conservation, supporting the creation and implementation of strictly protected areas within them, and also the conservation of threatened species throughout the country. The projects developed in this Program are:

- Amazon Region Protected Areas Project (ARPA). WWF-Brazil is collaborating with the Ministry of Environment and IBAMA to assure the preservation of at least 10% of the Amazon's natural forests, with representation of each ecoregion in the biome (see above).
- Using a Geographic Information System (GIS), WWF-Brazil is working with the Federal and State Governments to identify priority areas for conservation, and participating in the economic-ecological mapping of Amazon states (such as Acre, regarded as a model for the region) to include biodiversity as a factor in territorial planning.
- Incentives and technical support for the creation of Private Natural Heritage Reserves (RPPNs).
- WWF-Brazil provides direct support for a number of strictly protected areas and areas of sustainable use. The organization's conservation team participates in the preparation of management plans and works with the local communities in the following areas: Chapada dos Veadeiros National Park (Goiás), Jaú National Park (Amazonas), Mamirauá State Sustainable Development Reserve (Amazonas), Una Biological Reserve (Bahia), Fernando de Noronha National Park (Pernambuco), the Pantanal Highway Park (Mato Grosso do Sul), Transpantaneira (Mato Grosso), and the Pantanal Biosphere Reserve (Mato Grosso and Mato Grosso do Sul).
- WWF-Brazil actively supports a number of projects which deal specifically with species conservation and threatened species, including wildlife trade, the Golden Lion Tamarin Conservation Programme and the Hyacinth Macaw Conservation Project.

Conservation International (CI), based in Washington, DC, with its regional programme Conservation International do Brasil, based in Belo Horizonte, Minas Gerais. See www.conservation.org.br:

- Conservation of the Cerrado – Emas National Park. The project's aim is to improve our understanding of Cerrado ecosystems and consolidate one of the most important protected areas in the biome; the Emas National Park. Conservation International do Brasil and its local partner the *Fundação Emas* [Emas Foundation] are working to protect the Emas National Park, guaranteeing its management, and through institutional strengthening and the protection the water resources of the region, highly vulnerable due to widespread and intensive agriculture. Results to date include: 1) Capacity-building and the strengthening of the infrastructure of the Emas Foundation; 2) the planning and development of the Cumeeira Project, which focuses on the Emas National Park and its buffer zone, and includes environmental education programmes, recuperation of degraded areas, soil conservation, and research

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- on the region's fauna and flora; 3) Support for the "Encontro Ecológico do Centro-Oeste – Recursos Hídricos e Desenvolvimento Sustentável" ["Ecological Meeting of the Central-West Region – Water Resources and Sustainable Development"], held in September 1997, in Mineiros, Goiás; and 4) participation in divulging information on the Cerrado of south-east Goiás through a bimonthly newspaper insert "Folha do Cerrado".
- Conservation of Brazilian Fauna. A particular emphasis of Conservation International do Brasil's portfolio is research on and the conservation of the Brazilian fauna and flora. It carries out and supports a number of research projects and publications, as follows: 1) Discovery and description of primates in the Amazon region; 2) Support for projects on the management of the Pantanal alligator (*Caiman crocodilus yacare*); 3) Support for the Lear's macaw (*Anodorhynchus leari*) conservation programme; 4) Support for the TAMAR Project (conservation of marine turtles, see comments on Question 78), in partnership with CPAP/EMBRAPA; 5) Participation of the staff of Conservation International and its associated researchers in institutions promoting and coordinating wildlife research and conservation, such as the IUCN Species Survival Commission (SSC) Specialist Groups for Edentates (ESG) and Primates (PSG), and in the International Committees for the Conservation of Lion Tamarins (*Leontopithecus* spp.) and Capuchin Monkeys (*Cebus xanthosternos*); 6) Publication of the IUCN/SSC Primate Specialist Group journals *Neotropical Primates* and *Primate Conservation*, important for the integration and dissemination of information on the taxonomy, research and conservation of Neotropical primates; 7) Research on mammals in the Una Biological Reserve, southern Bahia; 8) Support for the postgraduate course (Master's and Doctoral levels) in "Ecology, Conservation and Wildlife Management" of the Institute of Biological Sciences of the Federal University of Minas Gerais; and 9) the compilation and dissemination of information on Brazilian threatened species.
 - Conservation of the Southern Bahia Centre of Endemism in the Atlantic Forest – Serra do Conduru State Park. A strictly protected area of 9,000 ha recently created by the State Government of Bahia, it is a core area for the protection of the second largest portion of forest still remaining in the region. The conservation of this forest has been ranked as of highest priority for watershed protection and the opportunities it offers for ecotourism, a growth industry along the coast of Bahia. The principal aim is to consolidate the protection of the park, develop a program of assistance and rural extension for local landowners, and support the development of ecotourism in the region. Results: 1) the establishment of a technical cooperation agreement with the *Departamento de Desenvolvimento Florestal* [Department of Forestry Development] of the Bahia state government; 2) the ordination of land title and mapping of landownership in the Park; 3) measures to mobilize local communities, the identification of the local stakeholders and an understanding of their expectations regarding the creation of the park; 4) aerial surveys, including the area covered by the Park to provide a solid basis for an Emergency Action Plan and identify the measures necessary for its implementation; 5) planning and monitoring the construction of the Ilhéus-Itacaré Highway Park – a way to integrate the surroundings of the Serra do Conduru State Park and promote ecotourism in the region.

Japan International Cooperation Agency - JICA. Study and Survey of Areas for the Implementation of the Cerrado Ecological Corridor. A project of the *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA* [Brazilian Institute for the Environment and Renewable Natural Resources – IBAMA]. Duration: 26th September, 2000 - 25th September, 2002. The objective is to contribute to the effective conservation of Brazilian biological diversity through research and surveys examining the possibilities and options for an ecological corridor in the *Cerrado*, adopting the most recent techniques and tenets of conservation biology, planning strategies and socio-environmental management in a way which is shared and participative.

Instituto Sociedade, População e Natureza – ISPN [Institute for Society, Population and Nature]. Small Projects Fund for the Global Environment. This programme was developed with the support of the United Nations Development Programme (UNDP), and is designed to promote and support small community projects, organizations and/or grass roots movements, and NGOs, for the conservation and sustainable use of the Cerrado. The ISPN is committed to divulging the programme and receives and carries out the preliminary analyses of project proposals, which are then forwarded to the programme committees. The ISPN also follows up and evaluates those which receive support. The following programmes receiving international support through this programme are relevant for, *in situ* conservation in the country. The sums awarded are combined external and Brazilian Government contributions.

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PROGRAMME	Executor	Start	End	Award (US\$1000)
BID/2002/03 Implementation of a Support System for the Administration and Management of the Tijuca National Park	IBAMA	01/04/02	01/07/03	950,00
BRA/00/021 Sustainability and Benefit-Sharing of Biodiversity	MMA	01/02/01	15/12/04	8.058,00
BRA/00/G31 Conservation and the Use of Biodiversity in the Frontier Forests of North-western Mato Grosso Government	MT/FEMA/MT	01/10/00	31/12/08	6.808,50
BRA/01/036 Pantanal Programme/MT	FEMA/MT	01/10/01	20/12/05	1.744,00
BRA/01/037 Administration, Management and the Conservation of Fisheries Resources	IBAMA	15/12/01	31/12/05	17.466,90
BRA/95/G41 Biodiversity Conservation in Juruena/MT – Viability Study for Non-Timber Forest Products	ADERJUR, PRONATURA	10/03/97	30/09/99	279,00
PD 141/02 Ver.1(F) Mangrove Ecosystems in the State of Rio de Janeiro: Characterization, Diagnosis and an Integrated Management Plan for the Conservation and Restoration of vegetation Cover	PESAGRO/RJ	01/01/01	31/12/03	1.232,50
BRA/00/G35 Establishment of Private Natural Heritage Reserves in the Cerrado	FUNATURA	01/01/01	01/02/04	750,00

Question 85.

Experiments and case studies are available on the internet and in materials published by institutions which carry out actions implementing Article 8. See comments on the other questions (including the web addresses of the institutions).

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Article 8h Alien species

86. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium		c) Low	X
87. To what extent are the resources available adequate for meeting the obligations and recommendations made?					
a) Good		b) Adequate		c) Limiting	
				d) Severely limiting	X

Further comments on relative priority and availability of resources

<p>Questions 86 and 87.</p> <p>Decision V/8. In 2002, a meeting was held by the Brazilian Government, organized by the Ministry of Environment and the <i>Empresa Brasileira de Pesquisa Agropecuária - EMBRAPA</i> [Brazilian Agricultural and Cattle-Breeding Research Company – EMBRAPA] of the Ministry of Agriculture, Farming and Supply, in partnership with the US Government, through the State Department and the US Embassy in Brazil, and with the Global Invasive Species Programme (GISP). Held in Brasília, 17th-19th October, 2001, the meeting brought together specialists from Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, French Guiana, Paraguay, Peru, Suriname, Uruguay and Venezuela, and resulted in a formal declaration by the participating countries.</p> <p>The Ministry of Environment promotes the programme for the control of marine invasive species – <i>Programa Globalballast</i>. The <i>Secretaria de Qualidade Ambiental nos Assentamentos Humanos - SQA</i> [Secretariat of Environmental Quality in Human Settlements – SQA] is the designated national focal point for the project. See www.mma.gov.br).</p> <p>The principles and directives of the <i>Política Nacional da Biodiversidade</i> [National Biodiversity Policy], instituted by Decree No.4339, 22nd August, 2002, underline the specific objectives concerning the identification, control and eradication of alien invasive species.</p> <p>Environmental monitoring by the National Epidemiological Centre. The <i>Fundação Nacional de Saúde - FUNASA</i> [National Health Foundation – FUNASA], through the <i>Centro Nacional de Epidemiologia - CENEPI</i> [National Epidemiological Centre – CENEPI], and based on Decree No.3450, 10th May, 2000, attributes to CENEPI the "administration and management of the national system of environmental monitoring". It is setting up the <i>Sistema Nacional de Vigilância Ambiental em Saúde - SNVA</i> [National System of Environmental Vigilance in Health – SNVA], and giving priority to information on: biological factors (vectors, hosts, reservoirs, venomous animals); water quality for human consumption; chemical and physical contaminants interfering with water, air and soil quality; and the risks of natural disasters and of accidents involving dangerous products.</p>
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88. Has your country identified introduced alien species?	
a) no	
b) only major species of concern	X
c) only new or recent introductions	
d) a comprehensive system tracks new introductions	
e) a comprehensive system tracks all known introductions	
89. Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?	
a) no	
b) only some alien species of concern have been assessed	X
c) most alien species have been assessed	

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90. Has your country undertaken measures to prevent the introduction of, control or eradication of alien species which threaten ecosystems, habitats or species?

a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	

Decision IV/1. Report and recommendations of the third meeting of the SBSTTA

91. Is your country collaborating in the development of projects at national, regional, sub-regional and international levels to address the issue of alien species?

a) little or no action	X
b) discussion on potential projects under way	
c) active development of new projects	

92. Does your national strategy and action plan address the issue of alien species?

a) no	
b) yes - limited extent	X
c) yes - significant extent	

Decision V/8. Alien species that threaten ecosystems, habitats or species

93. Is your country applying the interim guiding principles for prevention, introduction and mitigation of impacts of alien species in the context of activities aimed at implementing article 8(h) of the Convention, and in the various sectors?

a) no	
b) under consideration	
c) limited implementation in some sectors	
d) extensive implementation in some sectors	X
e) extensive implementation in most sectors	

94. Has your country submitted case-studies to the Executive Secretary focusing on thematic assessments?

a) no	X
b) in preparation	
c) yes	

95. Has your country submitted written comments on the interim guiding principles to the Executive Secretary?

a) no	X
b) yes	

96. Has your country given priority to the development and implementation of alien invasive species strategies and action plans?

a) no	X
b) yes	

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97. In dealing with the issue of invasive species, has your country developed or involved itself in mechanisms for international co-operation, including the exchange of best practices?	
a) no	
b) trans-boundary co-operation	X
c) regional co-operation	X
d) multilateral co-operation	X
98. Is your country giving priority attention to geographically and evolutionarily isolated ecosystems in its work on alien invasive species?	
a) no	X
b) yes	
99. Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species?	
a) no	X
b) yes	
100. Has your country developed effective education, training and public-awareness measures concerning the issue of alien species?	
a) no	X
b) some initiatives	
c) many initiatives	
101. Is your country making available the information which it holds on alien species through the CHM?	
a) no	X
b) some information	
c) all available information	
d) information available through other channels (please specify)	
102. Is your country providing support to enable the Global Invasive Species Programme to fulfil the tasks outlined in the decision and its annexes?	
a) no	X
b) limited support	
c) substantial support	

Further comments on implementation of this Article

Question 88.

The initially called *Comissão Coordenadora do Programa Nacional da Diversidade Biológica* [Coordinating Commission of the National Program of Biological Diversity], linked to PROBIO, approved the creation of a national report on alien invasive species to be carried out in 2003.

Vilela, E. F., Zucchi, R. A. and Cantor, F. (eds.). 2000. *Histórico e Impacto das Pragas Introduzidas no Brasil*. Editora Holos, Ribeirão Preto. 173pp. [History and Impact of Introduced Pests in Brazil].

Question 90.

Resolution No.305, 12th June 2002, of the *Conselho Nacional do Meio Ambiente – CONAMA* [National Environment Council - CONAMA] determines that environmental licensing and environmental impact studies are required prior to the use of any Genetically Modified Organisms (GMOs). See www.mma.gov.br/port/conama/res/res02/res30502.html.

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Questions 91 and 97.

Brazil is a signatory of the Agreement for Sanitary and Phytosanitary Measures of the World Health Organization (WHO) and of the International Plant Protection Convention (IPPC) of the United Nations Food and Agriculture Organization (FAO).

Bilateral Agreements		
Australia	Memorandum of Understanding for Cooperation on Sanitary Matters	Current
Chile	Complementary Amendment to the Standard Agreement on Scientific, Technical and Technological Cooperation on Issues Concerning Agricultural and Livestock Sanitation	Current
China	Accord on Plant Quarantine between the Government of the Federative Republic of Brazil and the Government of the People's Republic of China	Current
Hungary	Accord on Cooperation in the Area of Plant Quarantine and Plant Protection	National Congress
India	Complementary Trade Amendment on Sanitary and Phytosanitary Issues	Current
New Zealand	Memorandum of Understanding on Technical Cooperation and Sanitary and Phytosanitary Procedures	Current
Peru	Accord on Cooperation and Coordination on Matters of Agricultural and Livestock Sanitation	National Congress
Czech Republic	Accord on Technical Cooperation and Sanitary and Phytosanitary Procedures	Current
Russia	Accord on Cooperation in the Area of Plant Quarantine	National Congress
Venezuela	Complementary Amendment on the Agreement of Friendship and Cooperation on Matters of Animal Health and Plant Sanitation	Current

Question 96.

Brazil has not yet given priority to the development and implementation of alien invasive species strategies and action plans related to the environment. However, there are some policies, programmes and projects on alien species in health and agricultural areas.

Public Notice No.04/2002 of the *Programa de Conservação e Utilização Sustentável da Diversidade Biológica Brasileira - PROBIO* [Program for Conservation and Sustainable Use of Brazilian Biological Diversity – PROBIO] and the *Fundo Nacional de Meio Ambiente - FNMA* [National Environment Fund –FNMA] supported projects for development and implementation of management plans for the conservation of threatened species and control of invasive species.

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Brazil has a number of programmes for the control of disease vectors. They are executed by the Ministry of Health. They include:

- *Programa Nacional de Controle da Dengue* [National Programme for the Control of Dengue Fever]. Facing the trend of an increasing incidence of this disease, the Ministry of Health, in partnership with the Pan-American Health Organization (PAHO), held an International Seminar in June 2001, to evaluate experiences and develop the *Plano de Intensificação das Ações de Controle da Dengue – PIACD* [Intensification Plan for Control Measures for Dengue Fever – PIACD]. This plan selected 657 municipalities in the country for which priority would be given in intensifying control measures which had been identified as successful in previous campaigns: 1) An appropriate infrastructure for vector control in states and municipalities (vehicles, spraying equipment, microscopes and computers); 2) around 60,000 agents trained for vector control in more than 3,500 municipalities; and 3) the establishment of a combination of routines and nationally standardized technical norms for vector control.
- *Plano de Intensificação das Ações de Controle da Malária na Amazônia Legal* [Plan for the Intensification of Measures for the Control of Malaria in the Legal Amazon]. This plan will use strategies of selective vector control, including the strategic employment of insecticides, and environmental sanitation projects.
- *Plano de Intensificação das Ações de Prevenção e Controle da Febre Amarela* [Plan for the Intensification of Measures for the Prevention and Control of Yellow Fever]. One of the aims of this plan is to implement and/or intensify measures against the mosquito vector, *Aedes aegypti*, throughout the country.

Brazil has the *Programa de Vigilância Agropecuária Internacional* [International Programme for the Agricultural and Livestock Surveillance], executed by the Ministry of Agriculture and Livestock. This programme is aimed at protecting our borders against pest introduction and exotic diseases. The *Manual de Procedimentos Operacionais da Vigilância Agropecuária Internacional do Brasil* [Manual for Operational Procedures and International Agricultural and Livestock Surveillance of Brazil] is available at http://www.agricultura.gov.br/pls/portal/docs/page/mapa/menu_lateral/estudos_publicacoes/vigilancia_agropecuaria/manual.doc.

Chapter 1

Article 8j Traditional knowledge and related provisions

103. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?

a) High		b) Medium	X	c) Low	
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104. To what extent are the resources available adequate for meeting the obligations and recommendations made?

a) Good		b) Adequate		c) Limiting		d) Severely limiting	X
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Further comments on relative priority and on availability of resources

Questions 103 and 104.

Provisional Measure No.2186-16, 23rd August, 2001. This measure deals with access to the country's genetic patrimony, access to and the protection of associated traditional knowledge, the sharing of benefits, and access to technology and the transfer of the technology involved in its conservation and use. The following rights are guaranteed to indigenous and local communities, which create, develop, detain or preserve traditional knowledge associated with genetic resources:

I – to have the origin of the traditional knowledge referenced in all publications, forms of use and exploitation, and promotional materials;

II – to prevent unauthorized third parties from using, testing and carrying out research or exploration related to the associated traditional knowledge;

III – to prevent unauthorized third parties from divulging, transmitting or re-transmitting data or information, which includes or constitutes associated traditional knowledge;

IV – to receive benefits, remuneration or royalties for the direct or indirect economic exploitation by third parties of associated traditional knowledge, the rights of which they are entitled to.

Single Paragraph. For the purposes of this Provisional Measure, a community can hold title to any traditional knowledge associated with genetic patrimony, even if only one individual, a member of the community, is the detainee of the knowledge.

Conselho de Gestão do Patrimônio Genético [Council for the Administration and Management of the Genetic Patrimony]. Decree No. 3,945, 28th September, 2001, defines the composition of the *Conselho de Gestão do Patrimônio Genético* [Council for the Administration and Management of the Genetic Patrimony] and establishes the procedures and rules governing its *modus operandi*, under the regulation of Articles 10, 11, 12, 14, 15, 16, 18 and 19 of the Provisional Measure No.2186-16, of 23rd August, 2001. See www.mma.gov.br/port/cgen.

Política Nacional da Biodiversidade [National Biodiversity Policy]. The National Biodiversity Policy includes a component that addresses access to genetic resources and associated traditional knowledge, with the fair and equitable sharing of the benefits arising from their use. This component has 17 specific objectives which address a number of aspects related to the protection of and access to traditional knowledge, including legislation (foreseen is the creation of a *sui generis* legal regime for the protection of traditional knowledge) and the establishment of mechanisms for the sharing of benefits. In component number 1 of this Policy (Knowledge of Biodiversity), there is a directive that addresses research on traditional knowledge, with seven specific objectives. See: www.mma.gov.br/biodiversidade/estrateg/politica/decreto2.html for the complete text of the National Biodiversity Policy.

Programa Piloto para a Proteção às Florestas Tropicais do Brasil - PPG7 [Pilot Program for the Protection of the Tropical Forests of Brazil - PPG7]. *Subprograma PDA Projetos Demonstrativos dos Povos Indígenas - PDPI* [Demonstration Project (PD/A) and Indigenous Peoples Demonstration Project - PDPI]. When implemented, these projects will provide support for local initiatives which target the sustainability of indigenous lands following demarcation. The aim is to improve the prospects of economic, social and cultural sustainability of indigenous peoples on their lands while promoting the conservation of the natural resources they contain by financing demonstrative sub-projects, planned and executed with active community participation at the local level. The *Projeto Integrado de Proteção às Populações e às Terras Indígenas - PPTAL* [Integrated Project for the Protection of Populations and Indigenous Lands - PPTAL] is a component of the *Programa Piloto para a Proteção às Florestas Tropicais do Brasil PP-G7* [Pilot Programme for the Protection of the Tropical Forests of Brazil PP-G7] Protected Areas and Natural Resources Management Sub-Programme. The aim of this project is to contribute to the improvement in living conditions of Indigenous populations in the Amazon through land demarcation and the legitimization of land title, as well as through the conservation of their existing natural resources.