

Central and North Americas: Financial Planning for Biodiversity

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Belize

Belize's strategy document¹ contained an annex on assessment of investment in biodiversity conservation 1997/98 at BZ\$5.7 million, including Ministry of Tourism and the Environment (total budget: General Administration, Archaeological Operations, Department of the Environment) and Ministry of Natural Resources (General Administration, Lands Administration, Surveys and Mapping, Property Tax Valuation, Forestry Department). The estimated management costs for protected areas (annual operating costs in US\$) were 2.28 million, and investment needs for protected areas in US\$9.757 million.

Belize's action plan² presented detailed costs of around 400 activities at BZ\$ 74.7 million.

Annex 15. Assessment of investment in biodiversity for two ministries (5,702,514 BZ\$ 1997-98)

Annex 16a. estimated management cost of protected areas (annual operating costs in US\$2,281,452)

Annex 16b. Investment needs for protected areas (US\$ 9,757,033)

Each item of action plan was costed, with a total of around US\$48.7 million)

¹ Belize (1998). The Belize Biodiversity Strategy, Ministry of Natural Resources and the Environment, Belmopan, September 1998, 139 pp.

² Belize (1998). The Belize Biodiversity Action Plan 1998-2003: Activities to Conserve and Use Sustainably Belize's Biological Diversity, National Biodiversity Committee, Ministry of Natural Resources and the Environment, September 1998, 129 pp.

Costa Rica

Costa Rica's planning document³ presented some projects related to funding. A strategic issue (11) was on strengthening measures to internalize costs of environmental services and incentives for sustainable use of biodiversity, with the following projects:

- Project: Enactment of a specific legal framework in the field of environmental services. Objective: Define the legal framework in support of the implementation of the integrated system of payment for environmental services (PES). Expected results: Integrated PES operating under a single legal framework with optimal manageability. Activities: Develop consultative processes; manage through the relevant actors, enact the law through a participatory process, prepare proposals for the rules of law, promote the adoption of the rules of law; develop operating procedures for compliance with the law.
- Project: Development of assessment and management mechanisms for the collection and payment of environmental services. Objective: Development of instruments and parameters necessary for fair valuation and efficient and necessary administration, the collection and payment of environmental services. Expected results: Evaluation mechanisms for the collection and payment of environmental services provided; management mechanism for the collection and payment of environmental services provided. Activities: Hiring consultants to determine valuation parameters, review and approve the valuation tools; establish an effective monitoring and supervision system for the areas benefiting from the payment of environmental services.
- Project: Promotion and consolidation of projects that generate financial resources for the payment of environmental services. Objective: Promotion and monitoring of projects related to the protection and conservation of natural resources that allow the acquisition of financial resources for the payment of environmental services. Expected results: Revenue for the payment of environmental services. Activities: Compile a list of projects under formulation, formulate, negotiate and implement these projects, manage project within the rubric of biodiversity conservation; make efforts to achieve financial resources for the implementation of approved projects.
- Project: Zoning priority areas for environmental service payments according to their biological relevance and other benefits for the country. Objective: Identification of priority areas and zoning for the payment of environmental services including biological corridors. Expected results: The preservation and representation of different life zones of the country (in private hands), guaranteed; natural resource owners (indigenous communities) directly benefited; maps and databases that include different variables prioritization established, greater representativeness of protected ecosystems outside the current protected areas, including private reserves, protected areas incorporated into the PSA, where there are important biodiversity resources or

³ Costa Rica (2000). Estrategia Nacional de Biodiversidad, 151 pp.

requiring rehabilitation, risk of loss of species (populations declared endangered species), decreased; protected aquifer recharge areas. Activities: Consider cranes prioritization study; promote the legitimacy of the land, in areas prioritized by CRANE (procedures) Establish criteria and set priorities; promote private initiatives payment for environmental services; Get Data and map , periodically review the prioritization criteria; Validate community and regional level defined criteria.

- Project: Promoting and strengthening incentives for research, development and marketing of biodiversity products. Objective: Research with multidisciplinary approach, on the discovery of new uses of national biodiversity and the rescue of the ancients for subsequent distribution to the population; establishment of township enterprises for the production of products derived from biodiversity. Expected Results: List defined on biodiversity uses with commercial potential or extend to the public, as an input to communal enterprises that should promote them; communal companies that offer natural products, consolidated; consumer educated about the importance of buying products derived from wild biodiversity, under a production system consistent with conservation. Activities: Conduct anthropological and sociological studies to rescue old customs related to the sustainable use of biodiversity; promote scientific validation of different cultural practices that use biodiversity; Regular different activities that rescue or promote the use of traditional knowledge, in order to be sustainable and make a fair and equitable sharing of benefits; conduct feasibility studies for possible marketing of biodiversity products.
- Project: Strengthening financing programs for sustainable production activities from biodiversity. Objective: Development of sustainable production activities from biodiversity resources; Search upfront financing. Expected results: Financial instruments designed and in operation; experience generated, systematized and disseminated; seed financial resources defined and available. Activities: Adapt the legal framework; establish revolving funds; seek funding; establish and strengthen local structures for management and distribution of funds; develop financing programs; systematize and disseminate the experiences generated.
- Project: Financial consolidation of protected areas. Objective: Provision of financial and administrative mechanisms for the management of biodiversity in situ. Expected results: More human resources, infrastructure and equipment available, existing areas of greater protection, protected wildlife areas fulfilling the function for which they were created; legalization of land tenure of the parks and reserves in state hands, achieved. Activities: Quantify and run charge for environmental services; find new revenue generation mechanisms; design efficient mechanisms for fund administration; adapt the legal framework for financial management required.

El Salvador

The planning document of El Salvador⁴ recognized that funding is a limiting factor.

⁴ El Salvador (2000). Estrategia nacional de diversidad biológica, Proyecto MARN/PNUD/GEF/97/G31, San Salvador, abril de 2000, 196 pp.

Guatemala

Guatemala's planning document⁵ had a section on financial mechanisms.

1.3. Financial Mechanisms

Objective: To develop financial mechanisms to support biodiversity management in the long term and in a decentralized manner.

Funding for biodiversity conservation and management are limited, particularly those from the State. However, there are other factors that strongly affect the efficiency of available funds:

- They are managed centrally, without responding to local realities.
- They are sporadic, unstable and lack of continuity, so that programs and projects are truncated
- Often duplicated shares are invested in low-impact projects, neglecting strategic areas.

Traditionally funding for biodiversity conservation comes from donations and state. The new arrangements should emphasize financial independence of action by recognizing the economic value of biodiversity and develop tools for beneficiaries to contribute to their conservation. Also it will help the state and private owners see maintenance costs as an investment for the safety and welfare of the country.

1.3.1. Conservation Program (PROCON)

Conservation Program is a system of state compensation to protected area managers and owners of areas of conservation interest, through an ongoing annual payment per hectare from 0.5% of the national budget.

Economic compensation programme for management of areas of national importance: The State is responsible for financially supporting the management of protected areas or conservation concerns that are of national importance. The proposed system is a Conservation Program (PROCON), for an annual fee per hectare preserved. The Program will award annual permanent funds to owners or managers who will generate other revenue to cover all costs of area management. To access this facility, administrators must submit required Master and Operational Plans and CONAP must monitor its implementation through the Regional Councils. Areas of conservation concern must be duly registered and all the protected areas will be eligible for the same funding. The State shall allocate at least 0.5% of the national budget to the program, which will be managed through the National Fund for the Conservation of Nature (FONACON). Short term actions: Program Design, considering maintenance and extension costs to cover; presentation of the law before Congress to ensure budgetary allocations from the State; strengthening FONACON for the management of the program.

⁵ Guatemala (1999). Estrategia nacional para la conservación y el uso sostenible de la biodiversidad y plan de acción, 1999, 117 pp.

Preliminary cost estimate: The current management expenses vary from Q 8/ha in larger areas of 45,000 ha, as in Petén, to Q500/ha in less than 1,000 ha such as USAC biotopes. The Sierra de las Minas Biosphere Reserve, one of the two areas with full management, requires an expenditure of Q 46/ha of forest (146,000 ha), which can be considered the most secure data for large areas. Considering 0.5% of Q 20.000 million budget, the program will feature Q 100 million to cover a total of the 2 million acres requiring protection in the country.

- Compensation mechanisms for environmental services: The recipients of the services generated by the wild area should cover the costs of conserving them at market prices. It is proposed to initiate studies to identify appropriate mechanisms, as well as educational campaigns to sensitize beneficiaries. These mechanisms are related to water, tourism and carbon sequestration. In 1999 the Forestry Incentive Program would be initiated for the conservation of water recharge areas by INAB.

Development of compensation mechanisms for environmental services. Objective: Recognize the economic cost of the services generated by the wild areas and compensate their owners and managers. The environmental service users rarely pay its value, since it is the widespread perception that the services generated by the wild areas have no cost (e.g. water production). In this account, there are still no legal and financial mechanisms to facilitate corresponding collection and payment. Also, by the nature of these services, it is difficult to determine who beneficiaries are and how should collect benefits.

1. Studies of economic valuation of ecosystem services. The economic value of a wilderness area can be determined by the value of the goods and services it provides. The economic value of ecosystem services can, in turn, determine the compensation the owners of wilderness areas should receive from the beneficiaries and society. Priority services to be valued economically are: regulation of the water cycle, landscape for tourism and recreation and vulnerability mitigation. Actions: Preparation of action plan for economic valuation with MARN; CONAP, INAB, MAGA, Banco de Guatemala.
2. Identification of permanent mechanisms of direct compensation from beneficiaries to owners of wilderness generating services. It is necessary for users of the services provided by wilderness areas pay for their use, and that value is compensated to the owners thereof, primarily to ensure their conservation and reward their contribution to society. Other countries have developed mechanisms for beneficiaries to pay for the preservation of wilderness areas that provide priority services. It is necessary to identify and analyze the mechanisms more adaptable to the conditions of Guatemala.

Services	users or beneficiaries	Mechanisms
Hydro cycle regulation	water users, hydropower, drinking water consumers, industries	Consumption rates, contributions to watershed conservation, volunteering.

Landscape	Tourists and recreation	entrance fees, tourism tax
Carbon sequestration	Carbon producers: vehicle owners, industries	fuel consumption tax imposed by emission produced
Biodiversity	Users of genetic resources	access fees genetic resources

Actions: Development of comparative studies of compensation mechanisms for Guatemala.

3. Awareness and education of beneficiaries and decision makers. Most people are aware of the need to conserve the wild to maintain its ability to generate environmental services, mainly water. However, there is still little direct payment arrangement, since it is a new practice and considers environmental services should be free. It is necessary to raise awareness among decision makers and the public on their individual responsibility to pay for services received.

- Strengthening national conservation funds: Guatemala has several national funds which were very recently established, little funded and institutionally underdeveloped. However, these entities would be well enough developed to channel financing to biodiversity. Their policies have broad participation of civil society and government entities.
- Region conservation and protected areas trusts: The decentralization of funds managed and captured by conservation areas can be channeled through regional trust funds managed by the FONACON and private banks. Councils may provide the management of funds in accordance with established regulations. Short term: Creating trusts and regulations in priority regions; campaigns of national and international collections.
- Coordinated and strategic management of international funds: Managing funds internationally will have greater efficiency and success in coordinating activities within the environmental sector, with a long-term external financing plan. Consolidate environmental sector's planning matrix, and coordinate project formulation. The financing of the priority areas listed in this Strategy will be managed through the Office of Monitoring. Short term: Integrating planning office of environmental sector entities; Technical Office for Monitoring the Strategy.

The document explored temporary compensation mechanisms for the protection of priority areas. Objective: Maintain the ability to generate environmental services of wilderness in the short-term priority. The State should generate permanent legal mechanisms based on the value of water according to destination and the cost of conservation, and applicable to all water users. Temporarily mechanisms should be established to encourage conservation in priority areas and also as pilot projects that illustrate future mechanisms.

- Identification of key areas for regulating the water cycle. The limited resources of the state should focus on priority areas. The Protected Areas Act directs CONAP to create the water-producing forest subsystem and forest law orders the INAB to determine the most important

areas for the production of water. Actions: Definition of "priority areas" for the regulation of the water cycle; ad-hoc group to assess key areas; consultation to determine priority areas.

- Incentive programs for conservation of water recharge areas. INAB will start a pilot program of incentives for conservation of specific water recharge areas. These funds come from the central government, and give the owner a payment per hectare of forest preserved for a period of 5 years. However, these mechanisms should be considered temporary, since it is necessary that the user should pay permanently, directly or indirectly, to the forest owner. Actions:
Implementation of the pilot program.
- Development of pilot mechanisms to support conservation for irrigation users, agribusiness and hydroelectric. There are large water users in Guatemala, such as users of irrigation, agribusiness (coffee, sugar, etc.) and hydroelectric. All large users must assume commitments to respective watershed conservation, to guarantee stable water production. The central government should define specific mechanisms to ensure and facilitate the commitment of support to conservation. Basin authorities and protected area managers must devise pilot mechanisms. Actions: CONAP, INAB, MEM, MAGA, MARN ad hoc group; identification of priority watersheds and key users; formation of government-users working groups; development proposals for compensation mechanisms.

The document further explored tourism financial mechanisms for conservation. The conservation of landscape and natural resources that attract tourists has high costs that are not borne by tourists, who cause major disruptions. It is necessary to establish collection mechanisms for tourists and tourist activities to conserve wild areas of the country. Short-term actions: Establishing differentiated entrance fees for protected areas (national, foreign, groups with guides); identification of indirect collection mechanisms for landscape use in areas where access charges is not feasible (e.g. Atitlán); establishing a share of the tourism tax for the conservation; establishment of the Tourism Trust within the FONACON to manage tourism related taxes that contribute to conservation.

System support for new businesses in ecotourism and recreation. Objective: to establish the basis to further develop the tourism and recreational potential wilderness areas of Guatemala. For product development, it is necessary to generate a support program that allows investment. This should include marketing, technical assistance, training, financial assistance, infrastructure development.

- Certification Program. The best way to achieve sustainable management of ecotourism services and ensure low impact on natural areas is encouraging tourism operators to participate in an attractive certification system. The INGUAT-CONAP and the private sector, through the Council of Ecotourism, develop an ecotourism certification system to rate all services (tours, hotels, transportation, etc.). The Certification Program is the main tool of promotion. Actions: design and implementation of ecotourism certification program.
- Promotion of certified sites. The main limitation for the development of ecotourism sites is the promotion and advertisement of them. Doing this together with and through INGUAT at

national and international level is more effective. Promotion program only advertises services and sites that are registered in the Certificate Program, so there is a strong incentive to participate in the certification. Actions: design promotion program.

- Incentive program for new businesses in ecotourism. The development of tourist sites located in priority bioregions will access the Incentive Program for New Businesses. Essential elements of Incentive Program: Program grants for pre-investment studies and management plans and ecotourism in protected areas of conservation interest selected; program credits for investment, marketing studies and access to the information system. Short-term actions: establishing trust in FONACON and in private banks.
- Incentive program for new businesses in the recreation. The development of recreation areas at local level needs a support program that encourages private investment in municipal and local level (employers, communities, organized groups). There should be two separate programs, tourism and recreation, to emphasize the difference: target groups, locations and objectives. Essential elements of incentive program: program grants for pre-investment studies and management plans for recreation in protected areas and AIC; program for investment credits. Actions: establishing trust in FONACON and in private banks.
- Training of human resources. Training of technical and professional to provide various services to tourism. Actions: identify gaps and/or weaknesses in vocational and technical training related to tourism; coordination for the scheduling of courses and other training activities.
- Development of strategic public infrastructure. Some joints of sites require the development of road infrastructure, particularly in remote areas where there are more wild areas. Action: determine the priority sites, with greater potential and social return on investment, fund management and project investment.

The document also discussed support mechanisms for the management of projects in the carbon market. Objective: Develop the institutional, technical, formulation and negotiation capacities to compete in the international market for carbon emissions.

- Support Programme for project initiatives. Many organizations and forest owners seek access to compensation mechanisms. However they lack the technical and financial capacity to do so. As a country, project preparation is an investment to obtain more resources in the future. Actions: Establish a Technical Assistance Program; establish a Pre-Investment Fund.
- Bank credit and carbon transaction system. Mechanisms are needed to save the credits for currently fixed carbon, but there is no market at the moment. Without any mechanisms, actual fixation will never have access to compensation. Actions: design and development of mechanisms and Carbon Credit Bank and Transaction System.

The document explored new businesses based on sustainable use of wild flora ex situ. Objective: Increase ex situ production capacity of wild flora and competitiveness of the productive sector in the international market. There is a high demand in the international market of certain species of wild flora, however, current production systems cannot meet the demands of the international market. As a result, other countries exploit better our native flora commercially.

- Creating spaces for multisectoral dialogue. There is mutual distrust and ignorance between government authorities that manage nontimber wild flora and ex situ producers. This has led to confrontation and inhibited the design and implementation of standards of mutual benefit. It is necessary to create permanent spaces for communication among stakeholders to identify user needs and agree on strategies for promoting sustainable ex-situ commercial use of flora. Short-term actions: creation of a permanent space for dialogue between the actors of the commercial use of wild species to identify and/or define together: the role of the state, user needs, and research priorities
- Administrative simplification, streamlining and efficiency. Administrative processes for the production of wild flora ex situ are usually complicated and do not encourage the activity. Additionally, the lack of sustained information to verify the sustainability of activities delays or prevents regulatory approval. It is necessary to develop more simple and efficient administrative processes, and recognize the scarcity and uncertainty in the available information. This must result in a reduction of transaction costs for users of wildlife and becomes an incentive for sustainable use. Actions: evaluation of technical and legal procedures that wildlife users must complete; identifying bottlenecks in procedures; determining the acceptable level of uncertainty in the information; identification of mechanisms for streamlining and simplification of procedures.
- Regularization of plantations and nurseries of wildlife for marketing. Many commercial plantations and nurseries cannot market their wildlife products in the domestic and external market without authorization of CONAP due to irregularities in obtaining brood stock or seed. Some irregularities are due to ignorance of the rules, problems in the process of authorization, or intentionally. It is necessary to regularize the situation of these companies so that they can enter the market and make sustainable use of biodiversity. Short term: defining regularization mechanism; strengthening CONAP ability to advise and monitor; agreements of CONAP and related private sector; mechanisms for rescue and reintroduction of endangered plants.
- Certification of wild flora products produced sustainably. The trend toward certification in the international market for products of wild origin (extracted or grown) is irreversible, so the State, through the CONAP and instances of private initiative related to natural resources and export should promote certification. This is a mechanism that facilitates the insertion of the country's products in the international market and promotes sustainable production. Short-term actions: promoting forest certification and agreements of INAB and CONAP with prestigious certification.

- Market research to determine potential of wild species. Several species of wild flora of Guatemala have reached high demand in the international market, but there are still other species that can have same or more potential. The promotion of market research on the flora of Guatemala will determine its potential of new species for external commerce. Actions: Agreements of CONAP, INAB, AGEXPORT CONCOFOR, Chamber of Industry; identifying international market niches; collection and dissemination of information on national and international demand of species and varieties of plants, market opportunities, techniques and sustainable methods of reproduction, credit lines.

The document explored certification for sustainable production management of natural forests.

Objective: To promote sustainable production management of natural forests in priority areas.

- Communal and business forest concessions. The State has not developed the capacity to manage natural resources on state lands. There is also demand from communities and businesses to obtain concessions, usufruct or licenses for the use of those resources. The granting of concessions and usufructs with clear rules allows the state to care for and manage their resources, obtain income and meet the needs of communities and businesses. Short-term actions: continue the process of community forest concessions, with emphasis on priority areas; develop forest concessions business; concessions monitoring and control system.
- Promoting productive development through incentives. Forest production requires relatively substantial upfront investments that generate long-term credits. This has been one of the limitations for owners of forest land with investment in forest production. It is proposed to give incentives to promote strategic productive investment nationwide. Short-term actions: Forestry Incentives Program (PINFOR) focused on priority areas.
- Green certification system for forest products. Forest certification is irreversible, so the State, through the MAGA and instances related to forest resources promotes certification as a mechanism to facilitate the integration of the country's forest products in the international market. Short-term actions: define requirements and forest certification system; promoting forest certification; agreements of INAB and CONAP with prestigious certification.
- Identifying and promoting innovative sources of financing. Forestry investment is long-term performance, so it is necessary to supplement the incentives with greater access to financing for producers, because these mechanisms do not currently exist in the financial market. Short-term: leveraging existing financial markets; creating specific credit lines through BANRURAL.
- Training and technical assistance in production and marketing. The weak participation of forest sector in the economy is partly due to low demand and limited access to training and technology to production and marketing that are necessary to make the sector competitive. Short-term: transfer of modern technology and specialization of producers; promoting relationships between service providers and users; continuous training programs.

- Strengthening the control and monitoring of the management of natural forests and sawmills. Wilderness areas, where concessions have been granted licenses to use, are subject to control and monitoring to determine compliance with the sustainable use and harvest plan. But this control is not effective and allegations of broken promises persist. The inability of the authorities to control and persistence of mismanagement of the timber causes the population to oppose any type of use, whether legal or illegal, well managed or not. To promote the sustainable use of natural forests is essential and strategic to ensure the necessary supervision and control of harvesting. Short-term: rethinking the control and monitoring system of harvesting in natural forests, transportation and sawmills in coordination with Regional Conservation Advices; design a specific program for the control and monitoring of natural forests in areas of conservation interest; coordination and cooperation with the SEPRONA-PNC and the judiciary bodies for enforcement.

The document had a further section on exploration and development of value added to wild genetic resources. Objective: to have a system to identify, leverage and add value to genetic resources and products. Technological developments and globalization have increased sharply the demand on genetic and biochemical materials. These are more abundant and diverse in tropical countries, creating market opportunities for our resources. Guatemala lacks the technological and financial capacity to conduct research and add value to the genetic material. As a result, we have to pay large sums for modified organisms, improved species and biochemicals derived from genetic material of our countries but produced abroad. Bioprospecting can become a profitable activity and support conservation of wilderness areas, particularly the SIGAP. The Strategy prioritizes the bioprospecting of wild material on the material domesticated to be more biodiverse and have more potential.

- Developing an institutional model for regularization and promotion of bioprospecting. Legal and institutional mechanisms have not been developed to regulate, promote and conduct exploration activities. Study should be done on an institutional model that is agile and decentralized, so that it can perform these tasks governed by the institutions responsible for resources like CONAP (wild) and the MAGA (crops and livestock). Short-term: participatory design of a proposed institutional model; legislation to create the proposed model.
- Institutional network for bioprospecting and value added products. Bioprospecting can be developed by various institutions in the country, universities, companies or government entities. These should sign agreements with the institution responsible for regulating bioprospecting. Agreements involving financial obligations, resource ownership and dissemination of results. Additionally, there should be links to the domestic industry to create value added products. Short-term: promoting technological development of the concerned institutions; contracts for bioprospecting with the regulator.
- Inventories in the wild. Wilderness areas of Guatemala, particularly those that are protected, have very diverse genetic material, largely unknown. Inventories are carried out in areas with the greatest potential to contain species of interest for bioprospecting, generally areas of high

biodiversity and high endemism. There must be some threatened areas and programs framed within long-term protection (areas of interest for conservation and protected areas) or with a high probability of becoming so. Inventories should be funded through bioprospecting agreements. Actions: identify and prioritize areas with high potential for genetic diversity, initial inventories in areas with high potential.

- Exploration, collection and evaluation of species and varieties in the wild. The regulator held agreements with entities interested in carrying out bioprospecting so as to perform the tasks of exploration, collection and evaluation. Genetic resources inventories provide information on the location of genetic material of interest. Actions: identify and prioritize materials and areas for exploration, collection and evaluation; promotion of agreements with institutions and regulator.

1.3.2. COMPENSATION MECHANISMS FOR ENVIRONMENTAL SERVICES

The beneficiaries of the services generated by the wild shall cover the maintenance costs thereof to market prices. Chapter 6 proposes to initiate studies to identify appropriate mechanisms, as well as educational campaigns to raise awareness among beneficiaries. These mechanisms are related to water, tourism and carbon sequestration. In 1999 he initiated the Forestry Incentives Program for the conservation of water catchment areas by the INAB. See proposed in Chapter 3: Use and Assessment of Wildlife Areas.

1.3.3. STRENGTHENING NATIONAL CONSERVATION FUNDS

Guatemala has several national funding very recent, so have little institutional financing and underdeveloped. However, these entities would be well developed sufficient to attract the necessary financing for biodiversity. They are also agencies whose policies have broad participation of civil society and government entities.

1.3.4. TRUST OF CONSERVATION REGIONS AND PROTECTED AREAS

The decentralization of funds managed and received by the regions of conservation can be channeled through trusts managed by the FONACON regional and private banks. Councils may provide for the management of funds in accordance with regulations established.

Short term actions:

Creation of trusts and its regulations in priority regions.

· Campaigns national and international fundraising.

1.3.5. STRATEGIC MANAGEMENT AND COORDINATED INTERNATIONAL FUNDS

The management of funds internationally have greater efficiency and success in coordinating activities within the environmental sector and have a plan for long-term external financing. There will be consolidate through the matrix of environmental sector planning and coordinating the formulation of projects.

The financing of the priority areas referred to in this Strategy will be managed through the Office of Monitoring.

Short term actions:

· Integration of the planning office of the environmental sector entities (equal to 1.2.3).
· Office to Monitor Technical Strategy.

3.5.4. FINANCIAL MECHANISM FOR THE CONSERVATION OF TOURISM

The conservation of landscape and natural resources that attract tourists have high costs are not borne by tourists, who have greater enjoyment of them. It is necessary to establish mechanisms to collect people and tourism for the conservation of wild areas of the country.

Short term actions:

- Establishment of differentiated entrance fees to protected areas (national, foreign, groups with guides).
- Identification of mechanisms of indirect collection of landscape use in areas where charging for access is not feasible (eg Atitlan).
- Establishment of a share of tourist tax for conservation.
- Establishment of the Trust within the FONACON Tourist to handle tourism-related taxes that contribute to conservation.

Honduras

Honduras' planning document⁶ referred to financing in several areas:

- Identify potential funding sources, national and international, to create a fund for protected areas in a concerted, transparent manner, and with broad participation.
- Design proposals for financial management to enable the collection of funds for the construction of infrastructure through partnerships between the public and private sectors in the areas of influence of protected areas in relation to the importance of environmental goods and services that natural areas generate.
- Coalition with the National Financial System incorporating the environmental variable as a prerequisite to granting loans for projects related to biodiversity.
- Management of the funding for the creation, strengthening and implementation of training and scientific research programs.
- Management of special funds for financial institutions and other entities cooperating in order to finance projects within the CDM.

24 strategies and 110 actions but no cost estimates.

STRATEGIES

- Create the National System of Private Protected Areas.
- Create and harmonize legal instruments aimed at regulating the operation of the National public and private Protected Areas System, as well as sustainable use and equitable sharing of benefits arising from them.
- Identify potential funding sources, national and international, to create a fund for protected areas in a concerted, transparent manner, and broad participation.

Actions:

- Preparation and conclusion of the Regulation of Private Protected Areas.
- Creation of the National Network of Private Protected Areas.
- An inventory of natural assets, such as environmental goods and services of protected areas that will generate funds that can be used for biological diversity conservation.

⁶ Honduras (1998). Estrategia Nacional de Biodiversidad y Plan de Acción, Dirección General de Biodiversidad, Secretaría de Estado en los Despachos de Recursos Naturales y Ambiente, 79 pp.

- Development and implementation of management plans of protected areas that take into consideration the active participation, knowledge and practices of indigenous and local communities that enclose traditional lifestyles, ensuring equitable distribution of benefits derived from sustainable management.
- Review and adjustment of management categories and the boundaries of protected areas that make up the SINAPH.
- Strengthening mechanisms for co-management or management support to public protected areas, and lacking a co-management agreement, applying the State Procurement Act.
- Updating the map of life zones.
- Development of ecosystem map.
- Preparation of the official map of protected areas.
- Socialization of the process of declaration of natural areas with the potential to integrate SINAPH.
- Creation of National Geographic Information System for the exclusive SINAPH.
- Design of financial management proposals to enable fund raising for the construction of infrastructure through partnerships between public and private sectors of the catchment areas of protected areas in relation to the importance of environmental goods and services areas generate natural.
- Design and development of monitoring programs for the management of the National System of Protected Areas.
- Strengthening of CCAD regional initiatives aimed at in situ conservation of the different components of biological diversity.
- Development of a regulation for the management of Protected Areas Fund.

SUBJECT AREA: SUSTAINABLE USE OF BIOLOGICAL DIVERSITY

POLICY

Promote the conservation of biodiversity through sustainable use of its components.

STRATEGY

- Establish technical and legal mechanisms aimed at achieving a sustainable use of biodiversity, consistent and in harmony with the traditional knowledge and practices of ethnic groups and local communities.

OPERATIONS

- Review, update and application of technical standards manual for development and commercialization of wildlife.

- Review, adjust, consultation and approval of the draft Law on Fisheries and Aquaculture.
- Establishment of a forest certification program.
- Use of components of biological diversity as tourist attractions, which take into account the carrying capacity of ecosystems.
- Development of projects aimed at sustainable agroforestry practices used to make a proper use of water and soil resources.
- Documentation and systematization of traditional practices that involve elements of biodiversity within the framework of respect for cultural values of indigenous and local communities.
- Strengthening the Social Forestry through the participation of municipal authorities and local communities.
- Coordination with the National Financial System incorporating the environmental factor as a prerequisite to the granting of credits for projects related to biodiversity.
- Preparation of inventory of sustainable economic activities.
- Update and disclosure of inventory and potential tourist attractions.
- Certification of tour operators focused on the components of biological diversity.
- Certification of the fishing fleet as a requirement to maintain or choose the flag and fishing permits.
- Strengthening of artisan groups through technical training, technology transfer and access to credit.
- Review, adjust, consultation and approval of the new Forestry Act in order to achieve a sustainable use of forest resources.
- Coordination and training of various related institutions in meeting the current legal framework, in order to prevent illegal trade in wildlife.

Mexico

Mexico's planning document⁷ referred to financing in several places, including:

- Increase the number of ANP that have guaranteed funding for basic conservation measures; in the short term, at least cover the priority areas of federal interest.
- Establish a permanent endowment fund to finance the actions linked to the prevention, mitigation and management of emergencies as well as to provide relief to environmental refugees.
- Promote joint and equitable activities between the private sector and local communities to finance innovative experiments around the diversification of productive activities, and the use and conservation of natural resources.

The document had a section on trade and markets (4.4): promote and facilitate the consolidation or opening of markets, and the marketing of products (goods and services) of biodiversity. The priority actions included:

- Review the current markets and initiate necessary steps to consolidate.
- Develop and implement the legal, technical and institutional arrangements necessary to identify products produced in a sustainable way.
- Promote the development of (sustainable) producer organizations for the marketing of their products, to avoid intermediaries and ensure that production communities benefit directly from marketing; strengthen, where appropriate, the networks between production communities and national and international buyers.
- Improve understanding and evaluation of the marketing of the species in popular use in Mexico, as well as the species of limited use but with high marketing potential; perform further comparative analysis of prices and markets of our biodiversity elements that have distribution outside the country and are part of the international commercial flows.
- Create and update relevant financial information banks to stimulate market development and legal channels for biodiversity marketing. Share and supplement this information with the National Foreign Trade Bank (Bancomext).

⁷ Mexico (2000). Estrategia nacional sobre biodiversidad de Mexico, Secretaria de medio ambiente, recursos naturales y pesca, Mexico, 2000, 103 pp.

Nicaragua

Nicaragua's planning document⁸ had a section on secured funding for the implementation of the Action Plan of the National Biodiversity Strategy (4.3).

- Identify sources of funding for the National Biodiversity Strategy.
- Raise funds and promote awareness and appreciation of genetic resources.
- Build a portfolio of project profiles or institutional initiatives for more rational use of the BSA and the generation of funds to ensure the sustainability of biodiversity resources.

Indicators: amount of money received in donations, projects or other up-takings; number of funding sources contacted; number of project profiles developed with social and gender equity criteria; portfolio of bankable projects; documents of funded projects; reports of visits; interagency communication documents.

The document also had a strategic line (2) on economic viability of sustainable use of biodiversity.

Immediate objective: to promote the economic viability of biodiversity considering its wealth and economic value as well as the costs of their degradation in the country.

- Economically value environmental goods and services. Actions: design and implement methodologies for economic valuation of environmental goods and services, according to local realities; identify and assess economically negative impacts of productive activities; define economic and environmental criteria for decision making. Indicators: number of valuation methods; number of economic instruments used by men and women; amount of economic valuation of goods and services; number of documents printed and distributed, elaborated with gender criteria; economic valuation methodology guide; economic instruments; sustainable experiences documented; National Budget; Annual Reports of Central Bank.
- Create a National Environmental Services Programme to facilitate the assessment and management of collection and payment of environmental services. Actions: define the framework necessary for the implementation of the National Environmental Services Programme; develop and implement economic instruments to stimulate sustainability and environmentally friendly practices; develop compensation mechanisms for the use of BSA and by those causing negative environmental impacts; design mechanisms of direct compensation to owners of farms producing environmental services; promote the development and implementation of projects for the protection and conservation of biodiversity, that capture financial resources for payment for environmental services; develop and implement actions guiding the sale of environmental services with emphasis on carbon; promote the sale of

⁸ Nicaragua (2000). Estrategia Nacional de Biodiversidad, Versión Popular, 72 pp.

environmental services with emphasis on Clean Development Mechanisms. Indicators: types and amounts of compensation made; amount captured by payment of environmental services differentiated by sex; number and diversity of mechanisms implemented; functioning National Environmental Services Program; CDM projects designed and implemented.

- Implement economic alternatives that promote sustainable use of biodiversity. Actions: promote responsible ecotourism in protected areas as a mechanism to support conservation; promote the dissemination and replication of profitable and eco-friendly production practices and systems; establish integrated management plans of watershed for drinking water supply; establish programs with farmers of agricultural border to promote the use of agroforestry production systems more stable (use of green manure, agroforestry, perennial plantations, among others); strengthen programs to promote the production and marketing of non-traditional products; establish tax incentives for agroforestry production alternatives, non-wood and non-traditional use; develop financial mechanisms for technical cooperation at the national and international levels for conservation and use of genetic resources; develop a marketing program of crop species in captivity; implement a program of reforestation in degraded areas with a focus on the sale of environmental goods and services. Indicators: types and amounts of compensation made; amount captured by payment of environmental services differentiated by sex; number of eco-friendly programs and projects; number of integrated watershed management plans with gender equity; ecotourism plans; watershed management plans; site visits to eco-friendly programs and projects.

Panama

Panama's planning document⁹ provided a list of projects at B/.23.7 million.

The document contained a component on technical and financial cooperation. Following the Rio Summit and the signing of the Convention on Biological Diversity, there is increased access to international financial resources from international organizations and donor countries to strengthen national capacities of developing countries to conserve and use sustainable biodiversity. It is important to generate mechanisms that facilitate access to these funds by the various sectors of Panamanian society, related to the conservation and use of biodiversity. The aid must be oriented according to the agreement conceived in the National Biodiversity Strategy and Plan of Action for the Conservation and Sustainable Use of Biodiversity, so that it is addressing national priorities. Similarly, it is required to promote and encourage private enterprise to make contributions to biodiversity conservation by funding scientific research and pilot projects on sustainable use of resources, which in turn translate into higher profits.

Financial cooperation was considered under several strategic lines:

- Participation of governmental organizations, private sector and local communities in raising funds for the financing of sustainable production systems, nationally and internationally; analysis of the current financial and technical cooperation and development of the National Action Plan for the Conservation and Sustainable Use of Biodiversity, in accordance with the priorities identified; establishment of links or arrangements between the institutions, responsible private companies, local communities and universities to promote research at national level as well as international and foreign level; use and fitness of the infrastructure, resources and staff available in governmental institutions, NGOs, universities, institutes and research centers, preferably.
- Management for publishing biodiversity information to different audiences; management for cooperation at international, national and local levels for the establishment of networks of biodiversity information.
- Preparation of feasibility analysis of investment projects in the field of sustainable use of biodiversity, as a complement to in situ conservation.
- Generating self funds from ex situ conservation projects or activities; creation and assignment of incentives for ex situ conservation of species.
- Creation of incentives for financing research on biodiversity by the private sector; creation of a state rondo for awarding scholarships and grants for national researchers; support and

⁹ Panama (2000). Estrategia nacional de biodiversidad, autoridad nacional del ambiente, 2000, 105 pp.

strengthening of national capacity to formulate projects and obtain international funds that help with research and increased knowledge on biodiversity; strengthening of the Environment, Natural Resources and Biodiversity Sector of the National Secretariat for Science, Technology and Innovation; creation of mechanisms for cooperation between universities, institutes, research centers and private companies for the development of research and knowledge; increase of institutional capacity to strengthen education and research.

- Strengthening of the Wildlife Fund.
- Regulation and granting of concessions for public services and administration of some protected areas as a pilot; regulation and promotion of ecotourism and scientific research in protected areas; strengthening of the system of charges for services provided by protected areas and investment in these areas; provision and collection of basic shelter and food services to scientists and other visitors in protected areas that have adequate infrastructure for such purposes; design and participation in bi-national or regional projects oriented to conservation and sustainable use of biodiversity.

The document contained a sub-programme on cooperation and finance as follows:

- Goal: Increase the efficiency of international aid and technical cooperation in biodiversity. Actions: identify international funding sources; evaluate ongoing projects; follow up on proposals for cooperation and financial assistance; train local staff in management, design, evaluation of national and international cooperation projects. Indicators: donor funded projects and profiles; reports delivered and results reported; acquisition of new financing, management and negotiation of projects; people trained.
- Goal: develop mechanisms to facilitate the financing of the activities for the conservation and sustainable use of biological diversity. Actions: establish private trust funds for conservation; promote and regulate donations and grants for conservation; support local initiatives on conservation and sustainable use; develop negotiation mechanisms for negotiating equitable share of the benefits; promote the benefits of funding scientific research and technology for private sector. Indicators: private trust funds available; rules and donations received; conservation and sustainable use projects executed by local communities; negotiation mechanisms for benefit sharing; research funded.

Canada

Canada's planning document¹⁰ indicated:

GOAL 5 - International Cooperation

To work with other countries to conserve biodiversity, use biological resources in a sustainable manner and share equitably the benefits that arise from the utilization of genetic resources.

In ratifying the Convention, Canada has demonstrated a commitment to the international effort to conserve the planet's biodiversity and use biological resources in a sustainable manner. Canadians recognize that the protection of the global environment is the common concern of all nations. The international dimension of the Convention addresses the need for countries to coordinate and organize efforts on a global scale, while respecting each country's own priorities and sovereignty over its biological resources.

International Cooperation

Article 5:

Cooperate with other Contracting Parties through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biodiversity.

Convention on Biological Diversity

One of the key features of the Convention is to share benefits arising from the use of genetic resources in a "fair and equitable way", particularly with respect to developing countries. Working with other countries involves participating in international biodiversity programs, activities, institutions and agreements. The international community will need to assist some countries in improving their capacity to address the objectives of the Convention. Canada realizes the importance of building partnerships with other countries by developing and sharing knowledge, expertise, technologies and genetic resources in a fair and equitable way. The establishment of a consistent framework for sharing benefits will be a key outcome of the Convention.

Canada is cooperating with developing countries on a broad range of activities in order to develop their capacity to conserve biodiversity and use biological resources in a sustainable manner. Through contributions to the Global Environment Facility, Canada has provided new and additional funding to address global environmental concerns, including biodiversity loss. Canada's Official Development Assistance programs provide resources and technical assistance to support sustainable development in developing countries, including projects and programs designed to help these countries reap long-term benefits from the sustainable use of their biological resources. Other Canadian government and non-government organizations also carry out valuable work in developing countries which support the

¹⁰ Canada (1995). Canadian Biodiversity Strategy: Canada's Response to the Convention on Biological Diversity, 1995, 86 pp. http://www.biodivcanada.ca/560ED58E-0A7A-43D8-8754-C7DD12761EFA/CBS_e.pdf

objectives of the Convention. Canada is an active participant in international bodies devoted to the conservation and sustainable use of biodiversity in these countries.

Strategic Directions:

1. Participate in international efforts to coordinate and enhance activities related to the conservation of biodiversity and the sustainable use of biological resources by:
 - a. encouraging the implementation and integration of the objectives of the Convention;
 - b. participating in international bodies to consider the development of international agreements to complement the Convention; and
 - c. considering the objectives of the Convention in the context of, and in relation to, other international agreements.

Wetlands of International Importance - The Ramsar Convention

The Convention on Wetlands of International Importance, was signed in Ramsar, Iran in 1971 and came into force in 1975. This Convention provides a framework for international cooperation for the conservation of wetland habitats.

Canada has designated over 30 Ramsar sites since its accession to the Convention in January 1981.

2. Support the implementation of the Convention in developing countries by:
 - a. providing assistance, in particular through the Global Environment Facility; and
 - b. cooperating with developing countries to improve their capacities to plan and implement biodiversity conservation policies, strategies and plans and to use biological resources in a sustainable manner.
3. Explore mechanisms to facilitate the transfer of environmentally sound technologies to promote the conservation and sustainable use of biodiversity by:
 - a. encouraging collaboration to develop new approaches to technology transfer among the private sector, government, non-governmental organizations and communities; and
 - b. facilitating access to samples of Canada's genetic resources on mutually-agreed terms, and under the understanding that arrangements will differ for each sector using these resources.
4. Cooperate with the international community to explore mechanisms to encourage the private sector, government, indigenous communities, non-government organizations and communities to share benefits derived from using genetic resources provided by other countries.
5. Encourage the participation of stakeholders, including non-government organizations, the private sector, and indigenous communities, in international efforts to implement the Convention.
6. Incorporate biodiversity conservation and the sustainable use of biological resources into the criteria for choosing, designing, and evaluating development assistance projects.

GOAL 4 - Incentives and Legislation

To maintain or develop incentives and legislation that support the conservation of biodiversity and the sustainable use of biological resources.