

BIODIVERSITY PLANNING SUPPORT PROGRAMME
(BPSP – PNUMA)
RESEARCH FOR THE BIODIVERSITY INTEGRATION INTO THE TOURISM SECTOR –
COUNTRY CASE STUDY

RESERACH PROJECT

Study Case in Mexico
UNEP/UNDP/GEF/BPSP

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INTRODUCTION

In the historic milestone represented by World War II and thereafter, mankind expressed all its potential for

- SELF-DESTRUCTION
- SURVIVAL
- CREATION

in the economic, social, productive, technological, geographical, educational, historical, cultural, ecological, scientific, and emotional spheres of its life and its perception of human values, both, positive and negative, which to this date continue dominating the species *Homo sapiens* as an element of the structure of everyday life.

This conflagration caused approximately 60 million casualties worldwide, which in monetary terms amounted to one billion dollars US in lost opportunity and eventually affected, in one way or another, every human being on this planet. Sixty-one countries, with a population of 1,700 million (1.7 billion), participated in the struggle, which was continued with the subsequent international wars of Korea, Vietnam, China, and Cuba, among others. The emotional and social condition of people, specifically the U.S. society whose young adults had participated in previous conflicts (16 million were recruited during World War II alone) had been undermined. Leisure time, a new facet of the developed world, created the opportunity to interact with environment through recreational activities and allowed for the repair of this social damage.

It is obvious that tourism emerges as one of the most logical applications of leisure time and that Mexico can become an ideal destination for recreational traveling. Consider that:

Geographically, the United States shares its southern border with the northern region of Mexico.

- ✓ The 50's witnessed a boom in the development of communications and transportation to encourage traveling.
- ✓ A reduced operation and service cost, intended to assist the local economy, lowered prices and investment expenses.

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Mexico offers climate attributes that appeal to visitors from northern latitudes, namely: tropical coasts and beach front properties ideal for spending leisure time.

- ✓ During the period of 1940 to 1960, the Mexican coastline was preserved in a practically pristine state. This preservation in conjunction with other factors such as tenancy of land and political permissiveness, allowed investments in infrastructure and tourist development works at a large scale.

Due to the added value represented by centers having a high appeal because of their natural beauty and cultural background, archeological zones played an outstanding role.

- ✓ Mexico was basically a rural country with urban centers sufficiently suited to providing basic and supplementary travel services. Ultimately, advantage has been taken of the natural landscape and of the cultural expressions of Mexico as a contribution to the travel experience.
- ✓ Social peace and safety throughout the country meant no obstacle to travelers.

It is in this framework that Mexico initiated its tourism program of the 1960s; under a model of internationally competitive development for lodging, food, and beverage and under the provision of leisure activities within a beautiful natural environment that served more as a landscape than as a forum for interaction. Notwithstanding the above, investors had the advantage of being allowed to manipulate the natural environment as required.

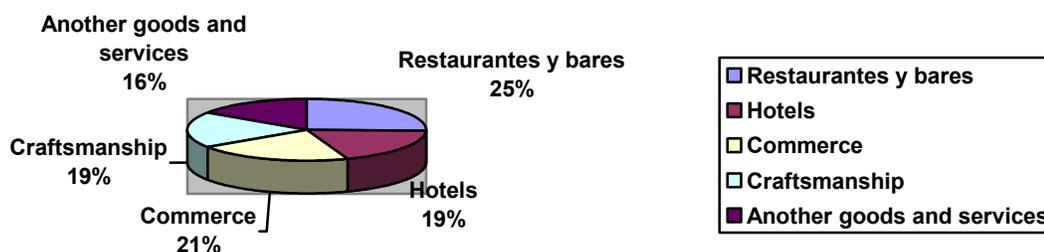
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**1. OVERVIEW OF THE CURRENT SITUATION OF TOURIST DEVELOPMENT
IN MEXICO**

1.1 General framework and importance of tourism in the domestic economy

Tourism in Mexico represents a fundamental driving force for the domestic economy. First of all, it is an important source of foreign exchange receipts, taking third place after the manufacturing and oil sectors; it also contributes 8.3% to the *Gross Domestic Product (GDP)* and provides 1.8 million direct employments, which represents 6.2% of the work force. As far as salaries are concerned, the average is 20 to 30% above the national level (data from Satellite Account and INEGI, 1999).

Structure of Tourist GDP (PIB Tourism)



World tourist indicators list Mexico as an important destination, *ranking seventh in international visits and second in the American continent in 1999 (graph 1).*

Graph 1

Place		Country	Thousand of International Arrivals		Variation %	TMAC	%World Share	
1990	1999		1990	1999	99/90		1990	1999
1	1	FRANCE	52,497	71,400	36.0	3.48	11.46	10.87
3	2	SPAIN	34,085	51,958	52.4	4.80	7.44	7.91
2	3	UNITED STATES	39,363	46,983	19.4	1.99	8.59	7.15
4	4	ITALY	26,679	35,839	34.3	3.33	5.82	5.46
12	5	CHINA	10,484	27,047	158.0	11.10	2.29	4.12
7	6	UNITED KINGDOM	18,013	25,740	42.9	4.05	3.93	3.92
8	7	MEXICO	17,176	20,216	17.7	1.83	3.75	3.08
10	8	CANADA	15,209	19,556	28.6	2.83	3.32	2.98
28	9	POLAND	3,400	17,940	427.6	20.30	0.74	2.73
6	10	AUSTRIA	19,011	17,830	-6.2	-0.71	4.15	2.71

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Preliminary estimates for the year 2000 indicate that tourism generated a foreign exchange flow of approximately 8 billion dollars US (10th place worldwide). The tourist balance reflects a 3 billion dollar surplus.

Graph 2

Place		Country	Incomes Million Dollars		Variation %	TMAC	World Share%	
1990	1999		1990	1999	99/90		1990	1999
1	1	UNITED STATES	43,007	73,000	69.7	6.06	16.66	16.04
4	2	SPAIN	18,593	25,179	35.4	3.43	6.98	5.53
2	3	FRANCE	20,185	24,657	22.2	2.25	7.58	5.42
3	4	ITALY	20,016	31,000	54.9	4.98	7.52	6.81
5	5	UNITED KINGDOM	14,940	20,972	40.4	3.84	5.61	4.61
7	6	GERMANY	11,471	9,570	-16.6	-1.99	4.31	2.10
25	7	CHINA	2,218	14,099	535.7	22.81	0.83	3.10
6	8	AUSTRIA	13,410	11,259	-16.0	-1.92	5.04	2.47
9	9	CANADA	6,339	10,282	62.2	5.52	2.38	2.26
10	10	MEXICO	5,467	7,850	43.6	4.10	2.05	1.73

As for the tourism services infrastructure, Mexico receives an investment of approximately 26 billion dollars. Mexico has the following infrastructure: 420,000 rooms, distributed in 10,000 hotels; 628 car rental agencies, 3,850 travel agencies, 39 marinas, a 300,000 kilometer coast to coast road network (55% of which is asphalt coated); 1,700 (airstrips), 30 national airports, 54 international airports, and 26,000 kilometers of railway.

Remark: Tourism in Mexico is undoubtedly an economic activity which has been influenced by the U.S. market as 85% of the tourist base is American.

1.2 Priorities in the Planning of National Policy

One of the greatest challenges facing the tourism (industry??) today is the production and consumption model inherited from the Industrial Revolution (a model currently implemented by first world countries) and the reorganization of the use, management, and acknowledgment of values which may sustain progress and social welfare through tourism. The international community has started to recognize these values as a need to keep, preserve, and restore human and natural factors. This will be accomplished not only by promoting development but by accepting that the very existence of the resources sustaining the existence of man are at stake, and by recognizing also that there is a cultural differentiation allowing human reflection of existence and emotional health.

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(The only ideas I can extract from this last paragraph include:

- The promotion of development.
- That natural resources upon which Mexicans depend for their survival are in jeopardy.

Principles governing national policy

In the spirit of the 1995-2000 National Development Plan, tourism "due to its impact on regional development, creation of jobs, and foreign currency receipts, the tourism (industry) is the fastest and most feasible way of developing certain areas of the country; that tourist employment is rapidly generated, cost effective, and recruits a labor force constituted basically by young men and women, and that, in our country, tourism offers extraordinary advantages due to the singularity of its resources."

Strategic Objectives: To strengthen the competitiveness and sustainability of Mexican tourism products with the intention of creating employment, generating foreign currency, and promoting regional development.

Specific Objectives:

- To increase the competitiveness of the tourism sector;
- To promote sustainable tourism development;
- To maintain, improve, and enlarge the employment capacity of tourism;
- I To increase the foreign exchange receipts produced by foreign visitors, and
- To encourage regional development.

Strategies:

- To consolidate and diversify tourist supply and demand;
- To promote tourism products, destinations, and regions;

Mission:

- ⇒ To design and implement national and international tourism development and promotion policies, in addition to tourist services.

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Vision:

- ⇒ To support a sustainable tourism development program, by a) increasing the competitive capacity of the sector; b) increasing the foreign currency receipts; c) promoting the generation of employments and, d) promoting regional development by means of a vigorous and balanced expansion of this sector.

The priorities of the Tourism Sector point towards concrete aspects derived from the reliance on specific **elements** (sustainability, competitiveness and sustained benefits) and solid **values** (trust, creativity, aesthetics, excellence, honesty, freedom and acknowledgment) of a long-term productive business:

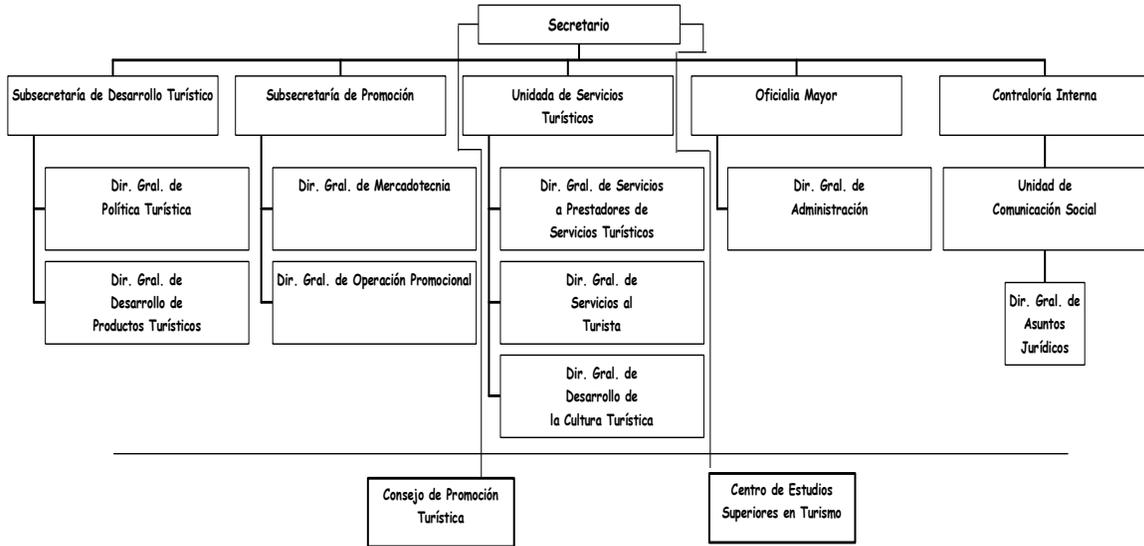


1.3 Institutional and political structure for tourism planning in the Government

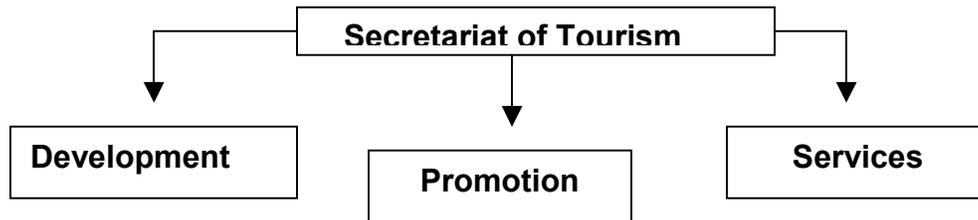
At present, the current administration (2000-2006) has not yet approved its development plan, however, a series of changes have been initiated to improve tourism results in the new century. Although it is true that the objectives and guidelines have not yet been defined, priorities are being focused on increasing the quality, competitiveness and diversity of tourism products by linking culture with **nature**.

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Estructura Orgánica de la Secretaría de Turismo



Strategic Plans and Programs



⇒ **Development:**

- ✓ *Competitiveness and development of products:* To be competitive in the tourism sector requires a long term strategy that takes advantage of Mexico's strengths. This strategy should be supported by: competitive facilities and development of products; attendance to national and international forums of competitiveness; preparation of seminars by line of product (golf, fishing, spas, cynegetics and ecotourism); and workshops for transfer of technologies (at international, national, regional, state and local levels).

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- ✓ *Differentiation and Diversification:* Differentiation of tourist supply, based upon conditions of singularity or value added, strengthens the capacity to attract, receive, attend and satisfy visitors.
- ✓ *Sustainability:* This development model is relatively new and (requires??) that policy criterion be followed, including a difficult social component that establishes wide margins for social participation within a democratic context of co-responsibility and economic equity. Its strategic lines are education and culture, certification of sustainable companies, social participation, recovery and protection of ecological destinations.

At international level, Mexico actively participates in the Association of Caribbean States to integrate the Sustainable Tourism Zone.

- ✓ *Information and Statistical Culture:* It is necessary for the decision-making process to have a statistical system providing reliable data. Such a system is achieved through the Tourism Satellite Account included in the National Account System.

⇒ **Promotion:**

- ✓ *Advertising, public relations and direct marketing:* integration of advertising campaigns such as radio and television, TV cable, promotional printed material, newspapers and magazines.
- ✓ *Exhibitions and international events* intended to: increase tourism flow and business profitability; consolidate a platform for launching new promotional campaigns including *tianguis turistico* (tourist fair) and fostering of specialized tourism, business-based tourism, and alternative tourism. The above in compliance with the Advisory Board of Tourism created through a private trust.

⇒ **Services:**

- ✓ *Service Quality:* There is an on-going national crusade to achieve quality and excellence in tourist services.

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- ✓ *Tourism facilitation:* There is an institutional strategy to include a greater number of people in affordable, high quality recreational activities throughout Mexico's tourism destinations.
- ✓ *Tourist Safety:* This includes the group Corporacion Angeles Verdes (*green angels*), which has been working for almost 40 years in the fields of orientation services, information distribution, mechanical aid and first aid to tourists who make use of the country's highways.
- ✓ *Executive Commission of Tourism:* Created by the Federal Law of Tourism as an organization for inter-sectoral integration.
- ✓ *Implementation of sector related standards:* The law provides for two types of norms: Official Norms (compulsory) and Mexican Norms (voluntary).

⇒ **Regional Programs**

The current objective of regionalization is to ensure that development planning occurs at the regional level prior to the local community level with the intention of enhancing coordinated activity between states and municipalities. This effort is focused foremost on those destinations that are already established in terms of the tourist trade. Traditional or conventional destinations; and the lines of products already identified are then strengthened by further providing a value added to the destination, specifically in other regional programs including all destinations in the Mexican Republic grouped in 7 regions: Mayan World (Campeche, Chiapas, Tabasco, Quintana Roo and Yucatan); Northern Mexico (Baja California, Coahuila, Chihuahua, Durango, Nuevo Leon, Sonora and Tamaulipas); Pacific (Baja California Sur, Colima, Jalisco, Nayarit and Sinaloa); Colonial Treasures (Aguascalientes, Guanajuato, Michoacan, Queretaro, San Luis Potosi and Zacatecas); the Heart of Mexico (Distrito Federal, Guerrero, Hidalgo, Estado de Mexico, Morelos and Tlaxcala), The Path of the Gods (Oaxaca, Puebla and Veracruz). Secondly, the product must help to consolidate new destinations, particularly those featuring natural sites (both protected and unprotected) , as well as rural, cultural, and historical places of interest.

These programs are headed by the Secretariat of Tourism (SECTUR) along side decentralized governmental organizations which allows managerial autonomy in their respective strategies.

1.4 Types and practices of tourism in our country

⇒ **Conventional tourism.** Sol y mar (sun and beach) was and continues to be the foundation motto of Mexican tourism with major destinations acting as focal points for national and international tourists. Acapulco Port in the State of Guerrero was the first development of this type.

Alongside sun and beach, other conventional forms of tourism in Mexico include:

- **Sport Tourism:** This includes cynegetic (synergistic) activities of the Northern Mexican States such as: sport fishing in both coastal and freshwater environments; and golf which has become very popular over the last few years with leading courses located at beach destinations.
- **Cultural Tourism:** Archaeological sites and viceregal cities and towns represent this segment of Mexican tourism with value added through such attractions as: culinary delights, museums, monuments, ethnic groups, and theme parks. Historical cities featuring colonial architecture, archeological sites and ethnic groups are also popular draws.
- **Health:** With centers called Spas "Health through water", located, unlike the ones mentioned above, in rural and traditional zones.
- **Recreative Parks:** Zoos and *balnearios* (bathing resorts).

⇒ **Tourism based on nature.** - Nature based tourism is a relatively new trend. It follows that activities targeted towards national and international markets in this domain are also relatively new in the commercial and political structures of Mexico and that it is also new to both the private and public sectors. Nature based activities surged as a segment of the tourist product approximately eight years ago.

SECTUR (Secretariat of Tourism), with the purpose of classifying this segment in accordance with the objective of the activities being offered, has identified three lines of products encompassing the so-called "**Alternative Tourism**"

Three products encompassing the "alternative tourism" phenomenon have been identified.

- **Ecotourism:** Ecotourism includes those activities in which there is an interaction or communion with nature. Examples of ecotourism would be: flora and fauna appreciation, ecosystem observation, environmental education workshops, and flora and fauna rescue programs among others.

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- **Adventure Tourism:** Adventure tourism consists of activities related to physical sports. These activities take place in an outdoor setting that often presents hazards to be overcome. Examples include: mountain climbing, rafting, mountain biking, tandem and parapente flights, balloon voyages, among others.
- **Rural Tourism:** Rural tourism focuses on interaction with rural communities in the social, cultural, and industrial context of daily life. Examples include: ethno-tourism, agro-tourism, ecoarchaeology, culinary workshops, and medicinal workshops among others.

1.5 Tourism development: Participation and degree of interaction among different sectors.

Currently there are several participants in Mexico's tourism program:

- ⇒ **Government participants:** Programs exist within the structures of public institutions that play an important role in tourism development. Such programs complement the pursuit of (government??) objectives, missions and policy, resulting in actions and agreements with SECTUR.
 - Secretaria de Desarrollo Social (Secretariat of Social Development) (**SEDESOL**). The SEDESOL goal is to seek participation from individuals and groups. Moreover, SEDESOL wishes to increase levels of education, health, and productivity, (particularly in marginal groups), through social investment. For this reason, SEDESOL has within its structure a program called "**FONAES**" (Fondo Nacional de Apoyo a Empresas Sociales) (National Fund for Supporting Social Business) whose priority is to support communities and organized groups with financing for small commercial enterprises. This Fund also supports the community tourist projects called "*ecoturísticos*" (*ecotourist projects*).
 - Secretaria del Medio Ambiente y Recursos Naturales (Secretariat of Environment and Natural Resources) (**SEMARNAP**). The purpose of SEMARNAP is to strategically plan **legislate**, and standardize the use, handling, and development of Mexico's natural resources. In this endeavour, sustainable methods are to be employed with the intention of protecting the environment, overcoming poverty, and contributing to the economy.

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SEMARNAT's structure maintains three branches directly related to the tourism sector:

- Instituto Nacional de Ecología **INE** (National Institute of Ecology) (decentralized organization) The INE is a decentralized organization whose purpose is to analyze, coordinate and approve permits for works, activities, and projects related to tourism.
- Comisión Nacional de Áreas Naturales Protegidas **CONANP** (National Commission of Protected Natural Zones) (decentralized) CONANP is a decentralized organization whose purpose is to administer and foster projects for productive and sustainable development where ecological tourism is included as a strategy for conservation of biodiversity.
- Centro de Educación y Capacitación para el Desarrollo Sustentable (Center of Education and Training for Sustainable Development) **CECADESU** (decentralized) CECADESU is also a decentralized organization whose purpose is to foster and develop harmonious environmental technologies through training and implementation. One of its functions is to include ecotourist workshops as a part of a technical activity focused on sustainability.

Instituto Nacional Indigenista (National Indigenous Institute) (**INI**) The INI exists to promote comprehensive development actions within the indigenous peoples and to lend support to SEMARNAT. INI, through its Division of Operation and Development, carries out and supports productive projects with respect to both planning and financing. Among these projects are those designed to promote low impact tourism of conventional and nature-related types.

In similar fashion, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (National Commission for Knowledge and Use of Biodiversity) **CONABIO** intends to provide knowledge on environmental policy to assist sustainable development, which includes support and orientation for tourism.

⇒ **Private Sector:** This sector plays an important participation role in the policy and development of tourism. The private sector consists of more than 30 thousand companies, and they work to generate resources for the promotion and design of strategies for tourism development. To assist in this endeavour an organization known as Consejo Nacional Empresarial Turístico (National Council of Tourist Companies). has been created to regulate tourism policy.

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⇒ **Local Communities:** Participation of local communities in the tourism sector has been notable although an up-dated compilation of data is yet to be tabulated. If carried out such a compilation should: count the number of communities dedicated to tourism, record the types of activities practiced, and calculate the economic contribution. Current statistics suggest that about 13 of Mexico's 58 indigenous groups operate tourism services, representing 12 of the 32 states of the Mexican Republic.

In addition, nearly the whole of Mexican territory has community tourism services providers. They offer such things as:

Lodging in hostels, camping zones, huts, guest houses, and familiar inns, among others.

Food in restaurants, fondas (eating houses), cocinas economicas (low-rated eating houses), and ambulant eating stands.

Transportation: from terrestrial and aquatic transportation to rural transportation;

Guides: general, specialized, and environmental interpreters;

Recreational theme parks and handicraft sales centers.

⇒ **NGO'S (Non-Governmental Organizations):** In Mexico, participation from NGO'S is almost non-existent. Xxx ESTO NO ES EXACTO. HAY UNA PROLIFERACIÓN DE ONGs POR TODO EL PAIS Currently, there are approximately five organizations XXX INFORMACIÓN INCORRECTA: HAY MILES DE ORGANIZACIONES that are pro preservation and ecology. These NGOs promote community programs and projects focused on the development of nature related tourism as a method of conserving natural resources. They have established effective relationships with the three governmental levels, and also with private companies, international institutions, and organizations that are co-adjutors to community tourism.

⇒ **Educational Sector:** Currently, Mexico lacks educational programs to produce well-trained students capable of satisfying employment opportunities within the tourism industry.

1.6 Tourism Training and Education.

- In Mexico, the major strategy to achieve qualification levels responsive to the competitiveness and diversification of the tourist product is to assess the market trends and behavior so as to identify opportunities and threats regarding competitiveness.

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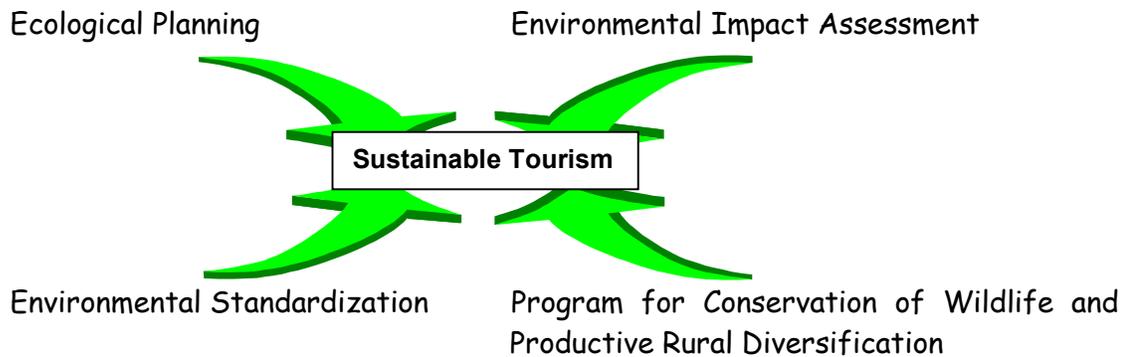
- At present, Mexico has failed to achieve the necessary interaction amongst Government, corporate sector, and educational sector to achieve the comprehensive development of the tourism program. In Mexico about *45% of the corporate sector has expressed their inability to find qualified executives. In a similar fashion, more than 40% have had problems finding specialized employees. Furthermore, less than a third consider that the tourist education and training programs are efficient. (* survey to tourist companies, 1995, CESTUR unpublished)
- The educational criteria of the formal and informal training programs are being studied by SECTUR. The intention is to increase the number of activities and instructors.

1.7 Practices of Sustainable Tourism in compliance with international guidelines

- Compliance and participation in the international approach to sustainability. Sustainable tourism constitutes an issue of interest around the world and is reflected in the diverse international organizations of which Mexico is a part. This list of organizations includes: the World Tourism Organization (WTO); the North American Commission for Environmental Cooperation (NACEC); Convenio sobre la Biodiversidad Biologica (Agreement on Biological Biodiversity) (BCD); the United Nations Commission on Sustainable Development (UN CSD); and the Association of Caribbean States (ACE). These are all organizations that recognize that natural, historical, and cultural resources utilized by tourism should be preserved in the long term. Any proposals are therefore done in strict environmental conscience with the intention of avoiding socio-cultural problems. In this framework, SEMARNA-TP and SECTUR have prepared and promoted a National Strategy for Sustainable Tourism aimed to guide the tourist policy of the country towards new approaches of conservation and utilization by applying diverse tools of environmental policy. This will lead the tourism program in a progressive manner to sustainability.

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- The following diagram helps to illustrate the approach Mexico will take



1.8 Brief description of ecoturistic attractions in the country

Mexico is one of the 17 most biologically diverse countries on the planet. It has 9 of the 11 principle world habitat varieties housing 10% of Earth's higher plant species, more than 40% of which are endemic. Mexico also ranks second in reptiles species with 717. This reptile count represents 11% of those known in the world.

In regards to mammals, Mexico ranks fifth in the world with 450 species (29% of which are endemic). This is equivalent to 12% of the world's known mammal species. In regards to amphibians, Mexico holds fourth place overall with 284 species representing 7% of the world's known species. Mexico holds twelfth place in bird species with 1,150 of a total of 9,198 on the planet. It should also be noted that Mexico is the only country in the world where two of the four biogeographical regions (Neo-arctic and Neo-tropical) converge, allowing for diverse geographical scenarios involving mountains, valleys, rivers, valleys, plains, deserts and coasts. This creates great potential in attractions for nature-based tourism alongside the 117 Protected Natural Zones.

In some of these zones there is already an ecotourism product of importance in the national and international markets. Those of most importance include:

- The Sanctuary of the Gray Whale in the State of Baja California Sur: Observation of the whales attracts national and international tourism.

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- The Monarch Butterfly Biosphere Reserve located in the States of Michoacan-Mexico: Migration of the Monarch butterfly from Canada draws tourist observation.
- Rio Lagartos Biosphere Reserve in the State of Yucatan: Observation of the flamingo attracts national and international tourism.
- Cooper Canyon in the State of Chihuahua: Exploration by foot allows for interaction with nature and provides an added value to the region's indigenous groups.
- N.P. Lagoons of Montebello in the State of Chiapas: Exploration by foot, aquatic activities, and interaction with indigenous groups are the three focal points of the area.

SECTUR has listed about 100 sites deemed suitable for ecotourism, some of which are already developing attractions and activities.

2. Overview of the current status on bio-diversity and plans to preserve it.

2.1 Planning Priorities of the National Policy.

Recent Mexican environmental policy has been closely tied to worldwide decisions, plans, and agreements taken by the International agenda meetings.

Mexican environmental policy started to focus in an integral fashion as of 1982, by making changes to the constitution, creating new institutions, and defining the new legal and administrative grounds to protect biodiversity.

In compliance with the National Development Plan the challenge becomes the preservation of natural resources in such a way that the quality of life for Mexicans is improved, and that social and regional equality is established.

The national strategy focuses on a global and regional balance of economical, social, and environmental goals with the purpose of stopping environmental deterioration while simultaneously allowing reorganization of the national territory.

The Mexican environmental policy shall focus on the following priorities resources:

- Protecting natural areas, where some standard preservation mechanisms are already being employed (such as ecological tourism). Within protected areas flora and fauna species will be managed, as well as forestry development.
- Water will be preserved from all sources including aquifers, rivers, lagoons, and seas. Irrational uses will be eradicated.
- Industrial pollution will be minimized in accordance with the meetings held in the OCDE (Organization Cooperation Development Economic), and in accordance with the North American Free Trade Agreement
- Fishing resources will be re-assessed resources
- Atmospheric contamination will be reduced for better air quality. This will include programs for urban centers, as well as education, training, and problem awareness
- Soils will be preserved through promotion of anti-desertification programs

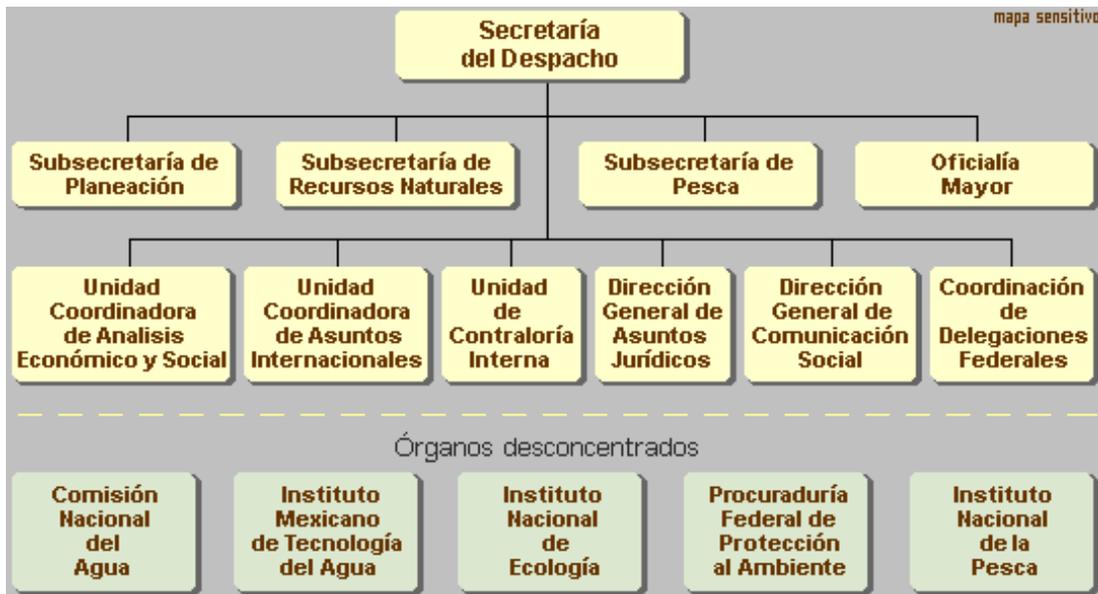
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The General law for Ecological balance and ecological protection (LGEEPA by its Spanish abbreviation) is the entity that governs instruments and provisions to organize ecology, impact and environmental risk assessment, flora & fauna protection, rational use of natural resources, ecological prevention and restoration, safety measures, control and sanctions. This law was voted into effect in the 1980s.

2.2 Institutional and political structure of Biodiversity in the Government.

Biodiversity policy planning and preservation plans are the responsibility of the Secretaría de Medio Ambiente y Recursos Naturales-SEMARNAP (*Environment And Natural resources Ministry*), which (determines the national strategy for sustainable development??)

SEMARNA Organizational Chart



Source: SEMARNAP

The experience Semarnap has gained since the Rio Summit, in addition to the knowledge accrued in environmental problem solving, has enabled a dramatic re-orientation and re-design of environmental plans and programs.

From an institutional point of view, environmental policy process in Mexico is still very much a new issue, but during these last ten years the government has experienced an

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accelerated transformation and significant attention has been given to priorities, changes, and scenarios, which include the following actions taken by SEMARNAP:

- Biological diversity and natural areas have been put under protection.
- Oceans and coastal areas are now protected.
- Fishing and aqua related activities have been modernized.
- Soils have been restored and preserved.
- Forest resources (have been developed wisely).
- Water management (has been improved).
- Air quality in large cities has been improved.
- Hazardous solid residuals are now disposed of wisely.
- The ecology of Mexico's National territory has been mapped.
- Consulting processes and legal frameworks have been revised.
- Handling and development of wild life has been improved.

Semarnap was founded on the creation of [de-concentrated (government related)] entities that enable standards and control policies such as:

- The Instituto Nacional de Ecología-INE, (*Ecology National Institute*)
- The Procuraduría Federal de Protección al Ambiente-PROFEPA (*Environmental Protection Federal Procuratorship*) (created in 1992),
- The Comisión Nacional de Áreas Naturales Protegidas-**CONANP** (*National Comisión of Protected Natural Areas*) (which splits from INE, in June 2000),
- The Centro de Educación y Capacitación para el desarrollo Sustentable-**CECADESU**, (*Training and educational Center for Maintainable Development*)
- The Comisión Nacional de Aguas y (*National Waters Commission*)
- The Comisión Nacional para el Conocimiento y Uso de la Biodiversidad-**CONABIO**. (*National Commission for Biodiversity Knowledge and use*)
- The Instituto Nacional Indigenista-**INI**. (*National Indigenous Institute*)

Likewise, INE and de-concentrated (decentralized??) entities are governed by an ample legal framework including: the Rules and Regulations and Law by Semarnap;, the LGEEPA; Wild life General law; Fishing law; forestry law; National Waters law; Mexican official Standards to protect environment; among others.

these entities don't appear as part of the conservationist government structure, this being an incongruence as *farming and animal husbandry* are two very important factors which affect biodiversity and, on the other hand, their role has not been properly defined: It would seem that their existence is the result of a fortuitous fact, as their activities are not clearly defined and they don't represent an opinion for preservation policies.

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Note: As you may see, there is a considerable number of government agencies in our country that are involved in several aspects related to biodiversity; however, two are the key government entities devoted to the use and control of biodiversity: The *Secretaría de Agricultura, Ganadería y Desarrollo Rural (SAGAR)* (Farming, Animal husbandry & Rural development Ministry) and, The *Comisión Nacional de Control de la Desertificación.*) (The National Commission for desert reduction). **XXX**
reducción de postres?- desierto se escribe en inglés "desert" xxx

2.3 Participation of our country in the World Convention on biological diversity (CBD) and benefits achieved:

Mexico is highly committed to (sustainable??) development. Case in point is Mexico's participation in several worldwide, regional, sub-regional, multi-lateral, bilateral conventions, and agreements, with a decided spirit to achieve a more harmonious relationship with the environment.

Since the Biological Diversity Convention (CBD) was created, Mexico has made commitments and collaborations unlike any other country in the world. Among the projects in which Mexico has participated we find: the Agreement to Prevent Sea Contamination caused by vessels and its protocol; the Basilea Agreement; the Montreal protocol; the Rotterdam Convention on hazardous chemicals and pesticides subject to international trade; the inter-governmental forum for chemicals and the inter-governmental committee for the Negotiation on Persistent organic contaminants

The agreement on biologic biodiversity also provides the opportunity to re-examine the national relationship with nature, and to promote new and more feasible economical, social, and ecological (agendas??).

The Mexican government signed this agreement and had it ratified in March of 1993. Since that time, its goals have been incorporated into Mexican legislation and have helped outline policies of some sectors of the country. Mexico has even gone farther than the CDB requires by establishing that the equitable benefits distribution shall not be restrained to the ones derived from the use of genetic resources, but to all biodiversity components.

In attention to SDB's requirements, Mexico prepared two documents "The Biologic diversity of Mexico" and the "National Strategy on Biodiversity", which will serve to prepare a National Preservation Action Plan (which has not yet been completed).

2.3 General overview on ONG's participation (Non Government Institutions) in biodiversity Preservation in Communities; main activities, obligations and projects.

ONGs have become more and more important in Mexico since the mid 1980s in light of the environmental deterioration of the. The earthquake in 1985 revealed that when society is properly organized it may achieve far more than public institutions. Mexico now has approximately 4000 NGO's, 60% of which operate within rural and natural areas.

51% of Mexico's ONG's originated around or before the 1990s and focus mainly on human rights, ecology, health, community development & education among other issues. Their influence is **42% in the urban area**, 7% rural and 41% in both areas. Most (31%), are based in Mexico City but there is otherwise good distribution of these organizations: Coahuila (8%), Estado de Mexico (5%), Nuevo León (4%), Jalisco (3%). The remaining 49% are scattered throughout the rest of the country.

Close to 300 of the ONG's were properly identified by 1999. Their focus is in such domains as: Integral Environmental Administration; Environmental legislation; Research, Promotion and sustainable use of natural resources; sustainable economic alternatives; publications and information dissemination; training for sustainable development; Environmental education; Eco-tourism recreational activities; Analysis and diagnoses of Biodiversity conditions; Integral forest handling; Development of wild life populations; and Genetic preservation research, among others.

Main Projects: Community participation; Eco-tourism; Surveillance and Monitoring; Environmental Education; Habitat Preservation and Restoration; Flora and Fauna Reproduction; Resources Human Resources; Clean technology development and diffusion; Biodegradable industrial products development; reforestation; Open Air Recreational Activities; Analysis of Chemical and Biological Environmental Contamination.

Even though most ONG's are located in large urban centers a large percentage (54%) are devoted to ecological matters and have a strong influence on uses of natural resources and biodiversity. The Mexican President's most recent declarations state that ONG's will play an important and active role in constructing consensus with the participation of all social sectors.

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Note: Up to now there are no indicators enabling us to know the impact on activities and projects in the benefit of the environment.

2.4 General overview of the National Protected Areas System: Managing structure, budget, brief description, visitor's statistics & profiles.

The ANP (Natural areas protected by men) pursuant to article 3 of the LGEEPA, are areas located in "the domestic territory" in which the original environment has not yet been significantly altered by men or, that require to be preserved and restored".

Among the new LGEEPA's participation efforts in ANP matters, is the creation of the National Commission for Protected natural areas- **CONANP**. CONANP is a consulting and support entity of SEMARNAP, and acts to strengthen the decentralization process in the management and handling of ANPs which are currently under federal jurisdiction, with the participation of the states, municipalities, agrarian communities, indigenous towns and social organizations (INE, 1997).

The Goals of the ANP are to: preserve representative natural environments of the bio-geographic and ecologic regions; maintain fragile ecosystems for the security and continuity of evolving ecological processes; ensure preservation and sustainable development of biodiversity at all organization levels, especially species that are in danger of extinction, being menaced, rare, subject to special protection, endemic, or valuable to scientific research; publish knowledge of traditional practices; develop technologies development that enable biodiversity preservation; protect natural surroundings at culturally important sites involving such things as archeology, history, the arts, and tourism.

At present there are **117 ANPs** in Mexico distributed throughout an area of 12'375, 851 hectares. LGEEPA has broken these ANPs into eight categories. The most significant of these categories is the Parque Nacional (National Park) representing 64 ANPs. It should be noted however that this category covers only 11.3% of the total areas under protection. 32% of the national parks (15) have a surface smaller than 1000 hectares, which, per the UICN, is deemed as minimum to secure ecosystems preservation (Ordoñez y Flores, 1995).

This category includes a wide variety of protected ecosystem, ranging from national marine parks to restricted access locations such as Isla Isabel and Nayarit, to urban areas that have lost most of their original vegetative cover and which now operate as recreation centers (as Cumbres del Ajusco, Mexico City, Federal District).

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The next category of protected area is the Biosphere Reserve. In all there are 26 such reserves and they represent 71% of all protected areas in the country. These reserves are function using four key principles: (1) involving local people and local institutions; (2) considering regional socio- economic situations in research and reserve development; (3) appointing research institutions to independently manage day to day operations (4) considering the reserves as a component of a global preservation strategy.

Above scenario means that successful and not so successful biosphere reserves work as research points for a maintainable regional development. In addition to National Parks and Biosphere Reserves, there are also 11 Flora & Fauna Protection areas, which constitute 13.5% of all protected areas. Four places of importance have also been decreed as Natural Monuments. Natural Monuments represent only 1% of all protected area. No area has yet been decreed as a Sanctuary and there are still seven natural areas that are protected under various jurisdictions. They are subject to revision and are to be reclassified. Currently they represent close to 3.6% of the total areas under protection.

PROTECTED NATURAL AREAS		
Situation by the end of 1999		
<i>Category</i>	<i>Quantity</i>	<i>Surface (ha)</i>
Biosphere reserve	26	9'163,276
National Park	64	1'397,010
Natural Monument	4	14,099
Natural Resources Protection Area	5	117,906
Flora and Fauna Protection Area	11	1'667,717
Other categories	7	371,101
Total	117	12'731,109
<i>By the end of 2000</i>	<i>124</i>	<i>14'500,000</i>

Source: Semarnat

Natural Resources Protected Areas include sub-categories such as the Forest Reserve and the Forest Protecting Area which include dams, national watering systems, hydrologic basins, creeks, lagoons and rivers. Even though there are 220 of these sites recognized under federal decree, their administration system is still under revision pending probable derogation or re-classification. Because of this uncertainty only five are managed as natural areas, and are protected pursuant to legal provisions in effect (INE, 1997).

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International aspects related to natural areas under protection in Mexico.

Through its Protected Areas Commission (WCPA, by its English initials), the UICN-World Union for Nature has lead the international classification for protected areas since 1969 (Glowka *et al.*, 1996).

At the same time the United Nations Organization for Education, Science and Culture-UNESCO, has established two programs of its own that focus on protection for natural areas on the international stage: World Patrimony and, the Man and the Biosphere.

The World Patrimony Program was created to protect natural and cultural properties with universal value against the environmental damage currently occurring all over the planet. Four Mexican natural areas are included in this framework. Within the Man and Biosphere Program-MAB, the **Biosphere Reserve World Network** was established by acknowledging its importance in preserving biologic diversity, scientific progress, technical ability and human values, with the additional advantage that an international network will facilitate research and follow up of works done in those reserves. Up to now, there are eleven Mexican ANPs belonging to this network (INI, 2000, *estrategia nacional de biodiversidad*).

Finally, there are four Areas in Mexico that recognized within the Ramsar Convention for their unusually humid climate that provides habitat for aquatic birds. Two more areas are in the process of being included under this designation.

ANP'S

Protected Natural Areas (ANP) policy helps preserve important biotic resources in the country, including flora and fauna, wildlife habitat, and other biodiversity. This is accomplished by enforcing by-laws that legally protect some defined areas and, which are deemed as representative. Declaring an area as an ANP is the important first step in the protection of a natural system, its biodiversity and the environmental services provided. In this endeavour it is important to involve owners and inhabitants of the local areas in question.

In compliance with the 1995-2000 Protected Natural Areas Program, we have continued working in two directions:

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- Consolidating existing ANPs by improving care effectiveness in areas already included in preservation by-laws and with better and larger material and human resources and strengthening process mechanisms.
- Progressively enlarging areas under protection status with the intention of preserving even more national biodiversity. Several priority areas have already been appointed in the terrestrial, marine and hydrologic regions based upon their biologic diversity.

The current government administration gives priority to ANPs in 36 selected areas, based on their importance, extension, and variety and is focusing its efforts on consolidation. ANPs selected as priority cover 80% of the surface and are under the decree's protection. The largest natural biodiversity patrimony of Mexico lies in these areas. They include remarkable flora & fauna species deemed as endemic, menaced, or in danger of extinction. More and more funds, specialized personnel, infrastructure and equipment have been assigned to these areas. Mexico has been working to make sure that every area is counted on an Advisor technical Committee and has a Managing Program to rule its evolution.

The National Commission for Protected Natural Areas continues to carry out its mandate to advise on the subject of Government Preservation Policies; specially by making the follow up in the creation of trusts and making negotiations for a second World Bank donation through Global Environment Facility (GEF) that is currently managed by the Mexican Fund to preserve Nature and, which is to be distributed among 25 ANPs. The Board is very interested in agreements with private enterprises to fund preservation actions; it has appointed a Commission to handle such tasks. Likewise, prepared a manual and set criteria to integrate the National Protected Natural Areas System to which 34 areas have been included. The Board held 6 reunions during 1999 and will continue to carry out support activities to define methodology for reclassification, re-limiting or derogation of decrees of the ANP pursuant to the Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA). (The General law for Ecological balance and environmental protection).

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ANP's tourist visitors in Mexico

ANP	VISITORS 1999	VISITORS 2000
<i>Sian Ka'an, Q.R.</i>	<i>12,000</i>	<i>15,000</i>
<i>Santuario de Ballenas, B.C.S.</i>	<i>14,000</i>	<i>16,000</i>
<i>Isla Contoy, Q.R.</i>	<i>29,000</i>	<i>30,000</i>
<i>San Pedro Mártir, B.C.</i>	<i>3,700</i>	<i>4,000</i>
<i>Constitución de 1857, B.C.</i>	<i>34,700</i>	<i>35,000</i>
<i>Cuatro Ciénegas, Coha.</i>	<i>23,500</i>	<i>25,000</i>
<i>Izta-Popo</i>	<i>500,000</i>	<i>250,000</i> <i>(Active volcano problems)</i>
<i>Mariposa Monarca</i>	<i>120,000</i>	<i>150,000</i>

Currently, there is no program that actively compiles statistics related to ANPs. This means that ANP characteristics, profiles, and economic impacts created from tourism visitation are not tabulated. Figure x provides some of the very few indicators of the ANPs in existence. that carry out such tasks, (as it is discretionary for ANPs administration entities); then it does not really represent all ANPs in the country. We wish to outline that INE forecast shows that 5% of the incoming tourism received during the 2000 year focused in natural spots, thus representing 1 million visitors.

Main activities reflected in ANPs	
Activity	% /1997
Birds observation	58
Wild life observation	55
-Recreational navigation	42
Botanic studies	31
Landscape appreciation excursions	28
Contact with cultures	25
Mountain climbing	42
Hunting and/or fishing	4
Recreational camping	4

Source: Semarnat

3. GENERAL OVERVIEW OF THE RELATION BETWEEN TOURISM DEVELOPMENT AND BIODIVERSITY PRESERVATION PLANS.

3.1 *Description and comments on existing strategies in the country: plan or policy applied to any interaction between tourism development and plans to preserve biodiversity.*

For the first time in Mexican history the Ministry of Tourism (SECTUR) and the Environment and the Natural and Fishing Resources Ministry (SEMARNAP), published strategies entitled "National Policy and Strategy for Sustainable Tourism Development" and "the National Strategy on Biodiversity in Mexico". Both strategies were published in the year 2000.

The first strategy focuses on establishing a competitive tourism development model. This model should include criteria related to sustainable development as a response to global factors related to the use, handling, and preservation of natural resources.

This policy model identifies six issues:

1. Planning Sector and Destination Development where: master plans for tourist development are implemented; development of sustainable tourist products is operated, incentives, educational and awareness plans are orchestrated; and public health and visitor safety plans are devised.
2. Soil Use Planning where: potential tourist areas are appointed for development based on their: load capacity, projects "type"; soil use permitted limits; development of associated tourist loops; and natural and cultural historical attractions
3. Infrastructure Planning and Development where: Promotion of systems and technologies related to tourist transportation is promoted; minimizing emissions and soil use for transportation purposes is promoted; improving water administration systems in the tourist industry is promoted; improving efficiency at solid wastes transfer stations, sanitary fillings and recycling deposits is promoted.

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4. Tourist Projects Planning and Development where: measuring and mitigation of environmental impacts, and construction and codes for effective use of power and water is administered.
5. Tourist Facilities Operation where: Management of residual waters, solid waste, hazardous materials and damaging emissions controls occur.
6. Tourism Support Services where: Environmental administration systems and systems to qualify performance are administered.

Likewise, six strategic operational lines are set for sustainable tourism development:

1. Education, Training and Culture where:- technology transference takes place for planning and development of sustainable tourist products, and the sustainability of culture.
2. Sustainability Certification where: tourist services, promotion of environmental negotiation, and strengthening of sustainable tourist chains takes place.
3. Measure, Research and Assessment where: information systems for tourism sustainability are generated.
4. Social Participation where: networks and prizes for sustainable tourism are created and consolidated.
5. Recovery and Preservation where: inter-institutional guidelines for the protection and development of tourist sites and protected areas are prepared and where ecological recovery of priority tourist destinations is planned.
6. Simplification, Funding and Fiscal Support for Investment Addressed to Sustainable Tourism where: Administrative simplification programs, funding, and fiscal support are administered.

The second strategy attempts to propitiate the acknowledgement and the role that corresponds to every sector to secure permanence and continuity of the country's biologic wealth.

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This strategy proposes four lines of action:

1. Protection and Preservation of: the various components of biodiversity *in-situ*; elements pertaining to biological diversity, bio-safety, exotic species handling, illicit acts, follow up, and emergency care.
2. Biodiversity Assessment and its importance within the national culture, biodiversity contributions, and institutions updating.
3. Information Knowledge and Handling Research and study, inventory and collections, knowledge rescue, information interchange, publication, training and academic formation, environmental education, negotiation on biodiversity.
4. Use Diversification: Current use, productive diversification, criteria and indicators, marketing and markets.

Both strategies show enough elements and tools that answer to a current need in regards to use, natural resources handling and tourism, which is the reflect of a global conditions that require a political, economical and social depuration to create harmony between resources required by humans and their existence.

There is no doubt that these jointly submitted first editions justify a consensual job among the various sectors (public, private, social and civil) which proves their great value as a tool for development projects, particularly those that study the integration of biodiversity and tourism

3.2 Analysis of main problems and restrictions nationwide in:

⇒ Politics:

At present, there is a great uncertainty and controversy when tourism matters are discussed in the domestic and international sectors of economy, politics, and society. When our country increases income by this concept make us feel very well knowing that our country is more and more appreciated by visitors due to its natural attractions. However, there is a big concern about saving natural resources and this analysis is the ground-base for the main problems to which strategies have to face to integrated tourism and natural resources.

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It must be conceded that tourism activities have been left behind because of political matters and that its slow progress is attributed to the small support given to long-term projects. Another problem is that rural communities have not been integrated as responsible entities when they are in fact the hosts in many circumstances.

In order to progress and eradicate paradigms involved in the preservation of tourism, new routes for interaction have been opened creating working links with the federal government as well as with the other three government sections. Plans to preserve biodiversity will therefore be successfully integrated with plans to develop tourism.

The most outstanding preservation issues of the political agenda are:

- Environmental economy
- Climatic change
- Protection of the ozone layer
- Biosafety
- Environment and Energy
- Environment, science, and technology
- Integral handling of coastal areas
- Ecological ordering and
- Sustainable Tourism

We also list the most important aspects of a well-defined policy to preserve tourism biodiversity.

- **Lack of opportunity:** among government entities with constitutional faculties to promote development and regulation of natural resources use *is emphatic*. Territorial and bureaucratic interests have long been the cause behind failed programs and projects.
- **Lack of political will:** to change to a different form to make political science, much more operational, where information is generated among few people and distributed the same way supported by an excluding juridical-political.
- **Lack of interest to apply, promote, and strengthen public rights:** This is especially true in regards to: the constitutional branches, the administrative branches, the fiscal and criminal responsibility for the protection and sustainable use of natural resources, its ecosystems, species and genetic values.

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- Lack of knowledge between “preservation” and the “preservation business” has gone from a development point of view to a political perception.

⇒ **Economy**

Some of the efforts to modernize political negotiations include the quantitative monetary assessment to regulate natural resources through the Regulatory Impact Manifestation (MIR) and through the Environmental Impact Manifestation (MIA). Given this information, any judicial decision must be accompanied by a cost-benefit analysis (*Ley Federal sobre Metrología y Normalización*) (Federal Law on Metering and Standardization).

Biodiversity analysis has not, as yet, considered any of the following factors:

- Economic factor continues depending on the so-called government paternalism, politic will and interpretation given to domestic priority, which details are reflected in the budget. History shows that there has never been assigned enough economical funds to maintain a good human, technical and scientific structure to enable a long-term development of preservation and tourism as an alternate financial project.
- The recurring economic crisis in the country has considerably decreased the sustainable development projects undertaken in natural areas. This problem is compounded by the fact that such projects usually require long terms to be consolidated.
- Entrepreneurial patronage has not reached transcendental levels in the participation to preserve through tourism, the problems regarding land ownership system has affected the economical consolidation of development.

Despite these setbacks, SEMARNAT has been working to carry out the economical assessment of the environment. A four-step approach is being implemented:

- Environmental accounting
- Economical assessment of environment
- Thematic and sector assessments
- Economical models for prospecting and environment

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⇒ **Technology**

As a strategy to develop participation, interchange, and interaction between environmental policy dependencies and organizations, the SEMARNAT has achieved the collaboration of universities and research centers. Their intention is to promote the discussion of the following themes:

The *Sistemas de Investigación Regionales (SIR's) (Regional Research Systems)*, currently there are nine such systems. Their purpose is to identify research projects that may offer alternatives to environmental regulation of productive activities in issues such as: atmosphere, alternate energy sources, environmental impact, contaminants control and disposal, technology generation and transference, among others.

Application of technology to environmental preservation and tourism is still incipient due to lack of analysis in both sectors. Associated with this problem are the facts that:

- Traditional use and practices in regards to biodiversity fail to gain attention as alternative technological tools, despite their proven value
- Indicators in regards to technology for the promotion of tourism and biodiversity are non-existent, thus limiting the effective participation

⇒ **Human Resources**

Human resources are a basic element in the preparation of any operational project. Human resources integration to preserve environment integrating them into other sectors such as tourism is priceless due to the complexity of ideas needed to handle plans addresses to preserve environment.

Mexican policy invests in the training of scientists and technicians that help in the implementation of environmental policies focused on specific problems.

Quantitatively, we have carried out training courses, workshops and seminars that unfortunately have not succeeded to involve communities. Qualitatively, we seek for ideal profiles of the involved, for instance, integration between SEMARNAT and SECTUR, as in many cases biologists are the ones in charge of tourist projects, which are not congruent with environmental preservation; therefore, or conclusions are the following:

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- There is a lack of training and research in the tourism field and this in turns affects participations in biodiversity conservations. Tourism is not yet being taught in schools.

There is a lack of specialization in tourist activities appropriate to rural and natural areas.

4. STRATEGY AND SOLUTIONS PROPOSAL.

4.1 Proposal for the conservation of biodiversity in the tourism sector:

⇒ Orientated Politics

The Mexican tourism program is in need of a transformation so that it reflects changes in global tendencies including: vacation preferences; natural resource deterioration; and the need for conservation.

In regards to tourism the "National Strategy for the Sustainable Development in Tourism", will be the central tool to orient activity relative to the financial conservation of the natural capital.

The political instruments that affect biodiversity conservation are as follows:

- Ecological land use planning
- Evaluation for environmental impact assessment
- Sustainable Management Program for the beach, federal maritime zone and earthly
- Environmental standards related to tourism
- Natural Protected Areas Program
- Wild Life Conservation Program and Rural Sector Diversity Program
- National Biodiversity Strategy

The projection for these tools have to permit consolidate services and products in the tourism, and demonstrate facility and benefits.

Consolidated services, products, and benefits must be demonstrated for all projects.

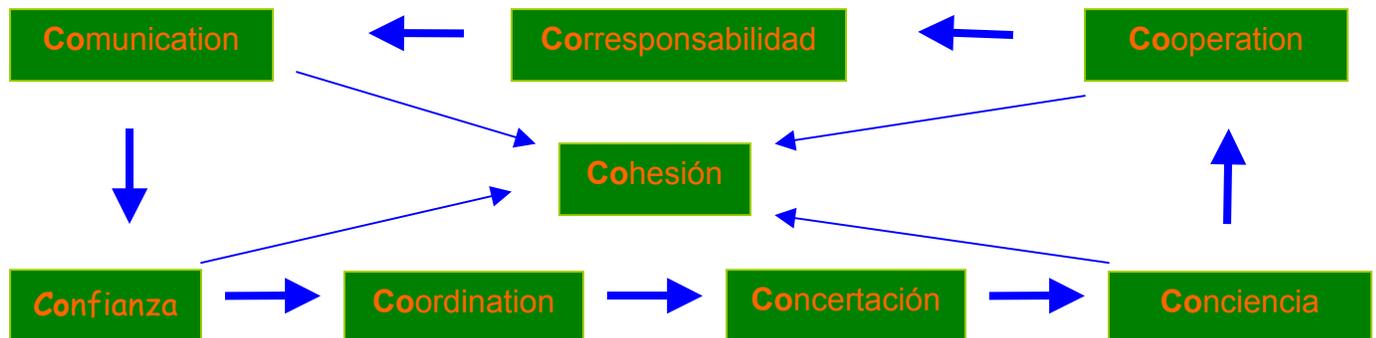
Proposed is the following:

- Use incentive tools such as financing to encourage tourism companies to promote sustainable development.
- Implement the "co" scheme in the tourism sector to encourage strategic alliances in all sectors (public, private, social, academic, and civil), with the objective to:
 - Promote the sector like an important factor for general benefits, with a political project with regional opinions, institutional, social and academic, so that fostering the tourist culture like a priority point in the national development.

Legislate a sustainable development model with the intention of applying creativity and modern technology. Politic desire for to impulse the creation, adaptation, pursuit, control and application of this legislate in the technologic.

Scheme "Co"

The actor's participation in the external and internal precinct.



⇒ Human Resources

There's no doubt if all the elements includes in the scientific and technical, academic and empiric knowledge have formal standards for increase the quality in the human resources. The fault and direct investigation don't have the human development, this is the case of the tourism.

Tourism is like a business and as a business the nation must consider values, feelings, and emotive needs as these elements are very important to the new global tendencies of the tourist.

In fact:

- The tourism sciences like Ambient Economy, Sociology, Ecology, Biology, Anthropology, Ambient Engineering and History must be included within study programs.
- The force in the investigation methodology is a need for to reach the objective and goal for the competitive quality and development.

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⇒ **Biodiversity Conservation (in three levels: ecosystems, species and genetic)**

Tourist activity if implemented correctly should generate support the conservation of biodiversity.

- All scientific and technical knowledge about the use and conservation of natural resources should be recorded.
- The tourist activity is a pedagogic element, where the science is converted in tourism.
- The tourism is converted in a recreation bond for to know seeing and understanding all the nature's cycles Tourism can be used as a tool for understanding all of nature's cycles.

⇒ **Following are examples of biodiversity conservation practices as they apply to tourism**

- **Chipinique Ecological Park:** This park is located in the state of Nuevo León, 20 kilometers from downtown Monterrey. Its purpose is the conservation of the region's natural resources: **mainly a humid pine-oak forest and spectacular geologic forms**. Within the park, visitors can participate in investigation-oriented activities that are educational, fun, and safe. Some projects are water's quality, theoretical and practical training for ambient educator in natural protected areas, introduce native species in the park and guide senders.
- **Mazunte Development:** This tourism site is located in the state of Oaxaca, between Huatulco and Puerto Escondido in the Pacific. It provides coastal activities, ecotourism, ecological tours, and alternative sustainable projects.
- **San Nicolás Totolapan:** This mountainous forest site is located in the Distrito southern suburbs of Mexico City on the way to the Ajusco volcano. Its purpose is to promote the forest , the greenhouse floral and agricultural production, and the local recreational and ecotourism activities.

In the national development plans for the tourism sector, don't have a Master Plan with a great vision for a lounge place that show economical and social benefices, like: regulation, preservation and recuperation for the environmental, the product' lines and competitive.

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