

Mexico Case Study

Analysis of National Strategies for Sustainable Development

This document is one of 19 country case studies that form the knowledge base for a synthesis report entitled “National Strategies for Sustainable Development: Challenges, Approaches, and Innovations Based on a 19-country Analysis.” The synthesis report and country case studies are available electronically at:

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Notice to Reader

Information in the country case studies was obtained primarily from publicly available sources (e.g., Internet and literature sources) and, where possible, was supplemented through interviews with government officials. The information was up-to-date as of May 2004. Every effort was made to ensure that official national sustainable development focal point contacts had the opportunity to provide feedback on the research, but such contacts were not successful in all cases. **This case study is in an unedited, working paper format.**

These case studies are made publicly available to add to the national sustainable development strategy knowledge base. The project’s research partners accept responsibility for any inaccuracies or omissions. The views expressed in this working paper do not necessarily represent the views of the funding partners.

The research partners welcome your comments on this country case study. Please e-mail comments to Darren Swanson at dswanson@iisd.ca.

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1 Introduction: Country Description

Mexico is located in North America and is bordered by the United States, Belize and Guatemala. Mexico's population is approximately 104.9 million people, and it has a population growth rate of 1.43% (CIA 2003). Average population density is over 50 people per square kilometer (OECD 2003, p. 156).

Mexico came under Spanish rule for three centuries before achieving independence early in the 19th century. The elections held in July 2000 marked the first time since the 1910 Mexican Revolution that the opposition defeated the party in government, the Institutional Revolutionary Party (PRI).

Economy

Mexico has a free market economy with a mixture of modern and outmoded industry and agriculture. Increasingly the economy has been dominated by the private sector with many State-owned enterprises such as airlines and railways being privatized. Trade with the U.S. and Canada has tripled since the implementation of the North American Free-Trade Agreement (NAFTA) in 1994. Mexico implemented free trade agreements with Guatemala, Honduras, El Salvador, and the European Free Trade Area in 2001, putting more than 90% of trade under free trade agreements (CIA 2003).

The country's GDP is estimated at US \$924.4 billion (purchasing power parity) with a real growth rate of 0.7% and a GDP per capita of \$8,900 (2002 est.). Mexico's predominant industries by GDP include: 69% services, 26% industry, and 5% agriculture (CIA 2003). The country's primary financial asset since the 1970's has been petroleum, with over 70% of Mexico's revenue coming from exporting petroleum to the U.S. (Mexico Online 2004).

Mexico's 39.8 million labour force by occupation is 56% services, 24% industry, and 20% agriculture. The urban unemployment rate was 3% in 2002, however significant underemployment is also prevalent (CIA 2003). Ongoing economic and social concerns include low real wages, underemployment for a large segment of the population, inequitable income distribution, and few advancement opportunities for the largely Amerindian population in the impoverished southern states.

Society

Mexico is a federal republic consisting of 31 states and one federal district. The President is both the chief of state and head of government and is elected by popular vote for a six-year term. The House of Representatives is intended to represent the people, while the Senate represents the 31 states and the federal district. Both houses of Congress propose and pass laws, and the Senate is also responsible for ratifying Mexico's international treaties and agreements (North American Commission for Environmental Cooperation [CEC] 2003, ch. 1). Since the early 1990s, decision-making power has been gradually

devolved to state and municipal governments. States and cities now make policy decisions in key development areas such as the environment.

Spanish is the country's official language, although there are various regional indigenous languages. Mexico's human development index ranked 55th out of 175 countries in 2001 (UNDPa 2003, p. 238). Mexico ranked 13th in the human poverty index of 2001, and just over 30% of the population is estimated to be living below the poverty line (UNDPb 2003, p. 245). The life expectancy at birth is 73.1 years (UNDPa 2003, p. 238). Mexico's crime rate was 1.36 million recorded crimes in 2000 or 13.91 per capita (UNODC 2002, p. 253).

Environment

Mexico has a total surface area of 1,972,550 square kilometers, or 1.3% of world land area. It has 9,330 kilometres of coastline and a terrain that consists of high, rugged mountains; low coastal plains; high plateaus; and desert, of which 13.2% is arable land (CIA 2003). The country's climate varies from tropical to desert.

Mexico is abundant in resources. It is the world's greatest producer of silver, and also produces zinc, lead, gold, mercury, coal and copper, timber and oil and natural gas. The country is also rich in biodiversity and Mexico hosts about 12% of known terrestrial biota and is one of the world's 12 megadiverse countries (OECD 2003, p. 15). Mexico has protected 10.2% of its total land area (World Bank 2003, p. 148) and has an environmental sustainability index of 45.9 (ranked 92nd out of 142) (Yale & Columbia 2002, p. 3). Mexico is the world's ninth greatest greenhouse gas (GHG) emitter. It is responsible for 3% of the world's total GHG emissions. In 2000 its contribution of carbon dioxide (CO₂) emissions was 370 million tonnes (3.8 tonnes per person) (OECD 2003, p. 195).

Mexico's major environmental issues include: Natural fresh water resources scarcity and pollution; raw sewage and industrial effluents polluting rivers in urban areas; deforestation; widespread erosion; desertification; serious air pollution in the capital and urban centers along the US-Mexico border (EIA, 2003). In 2001, only 1.1% of the Federal budgetary expenditure was spent on environment and natural resources (OECD 2003, p. 150).

Note on sources

Research sources for this report are a mix of government and non-government reports. Much of the government-produced materials were in Spanish, limiting access. Some planning documents, and speeches from the President, however, were used. OECD, World Bank and CEC reviews were also used as primary reference materials.

Mexico's Profile by Selected Indicators

Indicator	Value
Human Development Index (and ranking)	0.800 (#55)
Human Poverty Index (and ranking)	8.8% (#13)

Environmental Sustainability Index	45.9 (#92)
GHG Emissions	370 million tones (3.8 tonnes per person)
GDP and GDP per capita	\$924.4 billion (\$8,900 per capita)

2 Content of the National Sustainable Development Strategy

The 2001-2006 National Development Plan represents Mexico's main planning instrument contains not only the government's principles but also its objectives and strategies. It is the central document for the whole federal public administration and is legally approved by Congress. The 2001-2006 National Development Plan establishes sustainability as one of its twelve basis principles (Secretariat of Environment and Natural Resources [SEMARNAT] 2001, p. 61). Sectoral programs from the different Secretariats that also include sustainability elements support the Plan.

Mexico's approach can therefore be categorized as a cross-sectoral strategy related to SD (National Development Plan) complemented by sectoral programs (National Program for the Environment and Natural Resources).

Strategy Content

Mexico does not have a single, multidimensional sustainable development strategy but does have other mechanisms in place that meet some of the requirements of a sustainable development strategy. The National Development Plans are six-year programs established by the Mexican President at the beginning of the presidential term. The Plans are intended to provide systematic and coordinated economic, social, political and cultural development.

The National Development Plan 2001-2006 contains strategies for the achievement of objectives related to the environment and the promotion of sustainable development. Unlike previous plans prepared under other administrations, the current plan provides both, short- and long-term visions, that define the major challenges and characteristics Mexico should hold in the forthcoming 25 years. Democracy, transparency, high quality of life, leadership, dynamism, multicultural pride, human developing opportunities and promotion of human rights as a fundamental value of coexistence, are some of the main elements of this future vision (OECD 2003, p. 123).

Mexico's National Development Plan 2001-2006 has three main objectives:

1. ***Social and Human Development***: improve the well being of the population, develop education, ensure equity, and strengthen human capital and government capacity;
2. ***Growth with Quality***: develop the national economy, increase competitiveness, promote balanced regional development, and create conditions for sustainable development; and

3. ***Order and Respect***: improve co-operation among authorities, make progress towards decentralization, fight corruption, govern with transparency, and guarantee public security and justice (OECD 2003, p. 123 and 126).¹

Every Secretariat develops a national sectoral program consistent with the President's National Plan and based on its own long-term (25-year) strategic outlook. Sectoral programs serve as policy guides, specifying goals and strategies in each sector to be implemented during the next six years. Under the new direction of the National Development Plan, the commitment of sustainable development is shared by the diverse Secretariats and federal agencies in charge of the different sectors of economy. These agencies are responsible for promoting sustainable development in their activities and programs through specific actions and goals. The National Program of the Environment and Natural Resources 2001-2006 is one of the major programs established to forward the concept of sustainable development.

The vision of the National Program of the Environment and Natural Resources is to promote new forms of participation by Mexican citizens to inform the policy-making process for the environment and to maintain an active involvement in the protection of natural resources and the environment generally.

The National Program of the Environment and Natural Resources promotes six main goals:

Integrated ecosystem management - focus on watershed rather than political boundaries in the management of water, land, air quality, forests and biodiversity;

Policy integration - sustainable development should be the shared responsibility of Federal secretariats and agencies;

Environmental management - halt and reverse environmental contamination and degradation of ecosystems;

Provision of environmental services - improve management of natural ecosystems and ensure that those who benefit pay for these services;

Enforcement of environmental legislation - strengthen inspection and compliance; and

Public ***participation and transparency*** - publish environmental information and respond to public demand for environmental protection (SEMARNAT 2001).

A number of strategic programs are explicitly identified, including:

- Halting and reverting pollution of the systems supporting life (water, air and soil);
- Halting and reverting the loss of natural resources;

¹ The National Development Plan was not available in English and therefore further details of the Plan's content cannot be provided.

- Conserving ecosystems and biodiversity; and
- Promoting sustainable development (SEMARNAT 2001, p. 72-73).

The National Program of the Environment and Natural Resources proposes action plans, goals and strategies to effectively manage environmental issues and in many cases the Program sets clear objectives and targets, some of which are time-bound (e.g. SEMARNAT 2001, p. 64-67).

Coordination and Linkages with Other Strategies or Planning Processes

Under an article in the Constitution, the federal government is required to issue a National Development Plan, including a section dedicated to environmental protection, which must be adhered to by all programs that make up the Federal Public Administration. Under this article, problems posed by environmental pollution and the exploitation of natural resources are considered national priorities (OECD 2003, p. 123).

The National Program of the Environment and Natural Resource is the primary program that prioritizes targets in key environmental areas but it also establishes links with the environmental objectives and targets in ten national sectoral programs: agrarian reform (including land tenure reform), agriculture (including rural development and fisheries), economy (including industry, trade and mining), education, energy (including the national oil and electricity companies), finance, health, social development, tourism and transport (including communication).² The Program to Promote Sustainable Development in the Federal Public Administration represents an effort to co-ordinate public policies towards sustainable development by including sustainable development targets and action plans in sectoral planning. “Presidential” targets have been set for all secretariats, including performance requirements in terms of environmental outcomes and public administration (OECD 2003, p. 25 and 128).

This is the first time in the history of Mexico that the various Secretariats and federal agencies have collectively assumed specific commitments related to sustainable development. Each institution works together with the SEMARNAT to make the principle of sustainability outlined in the National Development Plan a reality (SEMARNAT 2001). The various sectoral programs address the three pillars of sustainability.

Integration of Sustainable Development Principles

It has become increasingly evident in Mexico that development at the expense of the environment and natural resources is no longer feasible. It is clear through various reports and Presidential speeches that the Government of Mexico understands the importance of integrating environmental, economic and social considerations and the need to consider future generations. The concept of SD is specifically built into the Constitution and the General Law of Ecological Balance and Environmental Protection (hereinafter Ecology

² See the National Program for Environment and Natural Resources pp. 133-161 for a discussion of other sectoral program commitments.

Law), and therefore there is a legal driver for integrating sustainable development principles into the plans and priorities of Secretariats and government agencies.

3 Institutional and Procedural Aspects of the National Sustainable Development Strategy

3.1 Development and Institutional Aspects

The federal government is required to issue a National Development Plan under the Constitution (OECD 2003, p. 123). The 2001-2006 National Development Plan was adopted in 2001. It is then translated into a set of programs which serve as long-term policy guides and are the basis for much of the public spending.

A key piece of legislation has also influenced the development of environmental and sustainable development principles within the country. The Ecology Law was passed in 1988 and has been the foundation for environmental policy of the country.³ Article 15 of the Ecology Law sets out nineteen broad principles that serve as the basis for national environmental protection policies and goals. The most important goals established under the Ecology Law are: the achievement of sustainable development and ecological balance (Article 3 XIV).

The strategies that guide the country's sustainable development are largely driven from the country's planning process. The President's Office has been a champion of incorporating sustainability into the National Development Plan, but it is the Secretariat of Environment and Natural Resources (SEMARNAT) that is the agency tasked with ensuring the government meets its overall sustainable development objectives.

Mexico has been developing new mechanisms to promote institutional integration of environmental policy, and the intent of these reforms was to centralize and streamline federal policy-making related to natural resource management and environmental protection in an effort to achieve sustainable development (CEC 2003, ch. 2).

The previous lack of integration in environmental and economic policies weakened the country's environmental management and kept it out of the strategic decisions on development matters. As part of the government's approach to achieve greater integration, since 2001, the Secretary (i.e. Minister) of SEMARNAT has been represented on the *three inter-ministerial commissions* (Human and Social Development, Growth with Quality, Order and Respect) of the Federal Executive Power that handle federal priorities. This demonstrates that the environment is no longer a sectoral issue but must be integrated into national priorities. SEMARNAT therefore plays a key role in proposing alternatives that consider the environment in the economic and social planning that takes place within these groups, as well as facilitating the integration among the different sectors (SEMARNAT 2001, p. 93).

³ Go to http://carpetas.semarnat.gob.mx/dgeia/web_ingles/1.shtml#cap1 to see legislation.

Institutional integration of environmental concerns, however, has not been achieved consistently across all sectors. More integration has been achieved in sectors such as energy and tourism, with less integration in others, such as agriculture, where various agricultural and rural development programs have been designed and implemented with little regard for environmental protection (OECD 2003, p. 122).

3.2 *Participation Aspects*

The Mexican Constitution establishes the obligation to organize a democratic planning system. The Planning Law guarantees democratic participation in the formulation of the National Development Plan and its programs. The process of public and open citizen participation for preparing the National Development Plan included comprehensive consultations with society through nine national citizen consultations dealing with important issues, such as: biodiversity, deforestation, pollution, desertification and degradation of soil, besides the macro issue about sustainable development. 6,213 “participations of citizens” were processed and analyzed through these consultations (SEMARNAT 2001, p. 18). Citizen participation was also possible via mailed surveys and the Internet. A total of 117,040 questionnaires were received by the Internet and mailed surveys. (The Commonwealth Network of Information Technology for Development [COMNET-IT] and UNESCO 2000).

Box 1: Public Consultation Issues

Nineteen main issues were analyzed as part of the National Program for the Environment and Natural Resources public consultations, including:

1. Integration of public policies for sustainable development.
 2. Social involvement.
 3. Forests and jungles.
 4. Water.
 5. Soil.
 6. Hazardous waste.
 7. Air quality.
 8. Wildlife and biodiversity.
 9. Ecological regulation of territory.
 10. Maritime-Terrestrial Federal Area.
 11. Natural protected areas.
 12. Environmental legislation.
 13. Decentralized environmental management.
 14. Inspection and surveillance of environmental legislation compliance.
 15. Environmental culture and education.
 16. Climatic changes.
 17. Natural disasters.
 18. Environmental research.
 19. Environmental information systems.
- (SEMARNAT 2001, p. 18)

As part of the sectoral program development process, each secretariat is required to conduct consultations with citizens and other stakeholders to inform the development of their program. Formulation of the National Program of the Environment and Natural Resources 2001-2006 involved 125 citizens’ consultation sessions, with analysis and incorporation of their contributions and comments on a number of environmental policy issues (**see Box 1**) (SEMARNAT 2001, p.18). A brief summary of the stakeholder input received is provided in the Program. In turn, the National Program of the Environment and Natural Resources emphasizes public participation in SEMARNAT’s policy setting and program implementation.

Pursuant to the Ecology Law, SEMARNAT must establish Advisory Councils for implementing and monitoring environmental policies that include the participation of academics, NGOs, business, and local and federal authorities. These Councils are advisory bodies responsible for advising, assessing and following through on environmental policy. They can raise issues that would require SEMARNAT to address as to illustrate a response to society's environmental policy demands (CEC 2003, ch. 6). Citizen participation has been strengthened through such national, regional, state and local Advisory Councils. Examples of SEMARNAT Councils include:

- Consultative Councils for Sustainable Development
- National Nongovernmental Advisory Council of the Cooperation Agreement (NACEC)
- National Water Advisory Council
- Basin Councils
- Advisory Councils on Protected Nature Areas
- Etc. (CEC 2003, ch. 6).

As identified above, Mexico has a National Consultative Council for Sustainable Development, with the participation of representatives from civil society, and the business and academic sectors, both federal and state institutions, as well as governmental and non-governmental organizations. Their role is to ensure participation and shared responsibilities among the people in conserving, restoring and protecting the ecological stability of the environment, and to establish mechanisms aimed to coordinate, persuade and help reach consensus between the parties in environmental matters. The Council was originally created in 1995 and consists of 66 members and is presided by the head of SEMARNAT. Four Regional Consultative Councils for Sustainable Development were also established to co-ordinate with state, regional and national organizations (The National Councils for Sustainable Development [NCSN] Network 1999 and OECD 2003, p. 127).

With the increased emphasis on decentralization that is taking place in the Mexican government, an Office for Strategic Planning and Regional Development within the Executive Office of President has also been created. This new structure aims to facilitate policy-making processes where the federal government is no longer the only actor, as well as facilitate interstate and intersectoral coordination (OECD 2002, p. 3). There is increasing recognition that the transfer of responsibility to states and municipalities must be accompanied by a transfer of resources (i.e. devolution of taxing authority), as well as tools to enhance capacity building, transparency and accountability.

3.3 *Monitoring Aspects*

Beginning in 2002, as part of the Program to Promote Sustainable Development of the Federal Public Administration, each Secretariat/Ministry must report to the President of Mexico at the end of the year on progress in meeting its interim environmental targets. Targets for the following year are then set accordingly. This hopefully will lead to the issuance of a sustainable development report for Mexico, in which both the processes and

projects that promote sustainable development will be documented alongside the barriers and obstacles to sustainable development (OECD 2003, pp. 126-128).

On an annual basis the President presents a report to the Congress discussing the general state of the country's administration.

Individual Secretariats/Ministries have their own reporting mechanisms. Twice a year SEMARNAT publishes a Report on the Outlook Regarding the Ecological Balance and the Protection of the Environment (CEC 2003, ch. 5). The Secretariat also has a section on its web site that identifies the major achievements of the year.⁴ The National Program of the Environment and Natural Resources commits that the results of the Program will be "disclosed to society" (SEMARNAT 2001, p. 172).

The quantity and variety of environmental information available from national authorities (e.g. data, indicators, environmental accounting, Pollutant Release and Transfer Registers) has progressed to an

Box 2: Information Management Systems

Mexico has a National System of Environmental and Natural Resources Information. This system provides access to natural resources inventories, as well as data pertaining to the monitoring of air, water and soil quality, besides providing access to scientific and academic reports and technical papers on environmental issues. This system is to be complemented with the National Accounts System under the National Institute of Statistics, Geography and Information. The National System of Environmental and Natural Resource Information has, until recently, been developing only isolated systems for the analysis, formulation, execution and assessment of environmental policies. These systems operate independently, generally without regard to compatibility or integration to enable effective information sharing, processing, analysis, transfer and reporting. These systems may be accessed via the Internet (CEC 2003, ch. 5).

advanced stage, although statistics from different agencies are not always consistent and some gaps remain (OECD 2003, p. 27). Mexico also recently introduced a new law on transparency of government activities and public access to information. It is difficult to

Box 3: Environmental Performance Indicators

SEMARNAT has developed environmental performance indicators that allow it to measure the progress against committed goals. Examples include:

- 1) Ecological GDP to measure the progress towards sustainability.
[Ecological GDP = (PINE – PIN)/PIN]
Where: PIN = GDP – depreciation of capital,
PINE = PIN – depreciation of natural capital
- 2) Indicators about the shortage and quality of water resource.
[Shortage indicator = # overexploited aquiferous/ total # of aquiferous; Quality indicator = % of the volume of treated waste water which complies 100% with the environmental standards/collected water volume]
- 3) Indicators on forest resource.
[# recovered forest hectares/# lost forest hectares; # forest hectares with a sustainable management program/ # forest hectares unsustainably managed]
- 4) Hazardous waste indicators.
[Tons of hazardous waste sustainably managed/ year]
- 5) Reintroduction and recovery of priority strange species, threatened species or species in danger of extinction.
[# reintroduced species/ year]

(OECD 2003, p. 97)

⁴ See <http://carpetas.semarnat.gob.mx/comunicacionsocial/acciones2002principaling.shtml>

assess whether Secretariats/ Ministries face any consequences for failing to meet stated goals and objectives. The National Program of the Environment and Natural Resources discusses compliance only within the context of regulatory mechanisms to deal with environmental infractions. It does not outline measures for addressing the failure to comply with its own goals and objectives.

The application of strategic environmental assessment to planned policies appears to be inconsistent. A strategic environmental assessment of the tourism sector in 2002 led to the release of a pilot national Agenda 21 that proposes introducing a certification scheme for tourist facilities (sustainable tourism award) partly based on environmental performance indicators. Conversely, no strategic environmental assessment of transport sector policies is carried out (OECD 2003, p. 141 and 144).

3.4 Implementation Aspects and Specific Initiatives

The Office of the President is ultimately responsible for ensuring the National Development Plan is implemented. Each Secretariat is responsible for developing the policies, programs and procedures necessary to meet the sectoral program commitments that in turn support the National Development Plan. A variety of different instruments are used to achieve the government's sustainable development objectives such as: law reform, permit and user fees, ecological taxes, awareness and education programs, etc.

A number of law reforms have taken place that further the government's sustainable development goals such as:

- Federal Transparency and Access for Public Government Information Act - intended to guarantee the right to access information kept by the executive, legislative or judicial branches or by any state, especially with regard to public affairs; and
- Sustainable Forestry Development Act - offers a new forestry model that will help to curb illegal cutting and preserve and strengthen ecosystems.

The government can also use mechanisms such as user fees and administrative costs to obtain sustainability objectives. As a means to promote environmental compliance, Mexico is currently engaged in a pilot study in which water use and discharge fees are waived when the permit holder installs certain clean technologies. Should the project prove successful, it is possible that such fee waiving programs will be also implemented in other areas of environmental protection legislation (CEC 2003, ch. 24).

Ecological taxes are also increasingly used in Mexico. According to the Mexican Health Secretariat, more than a third of Mexico's disease burden is the result of environmental factors, the most serious of which is air pollution (Energy Information Administration [EIA] 2004). The government has recognized the severity of the problem and has proposed innovative solutions such as incentives for using cleaner fuels and smog control measures. Through the Secretariat of Finance and Public Credit ecological taxes on new

automobiles have been incorporated, aimed at fostering technological “up-dating” of the country’s fleet and thereby improving air quality (SEMARNAT 2001, p. 133).

Similar health issues are related to the lack of water and sanitation services. In relation to GDP, Mexico’s pollution abatement and control (PAC) expenditure rate (0.8% GDP) is one and half times less than the average OECD country PAC expenditure (OECD 2003, p. 218).⁵ Progress was made in 2003 as the federal budget for drinking water and sanitation was 350 percent more than the previous year (Fox 2003). Access to basic services such as safe water, basic sanitation and electricity remain inadequate however, particularly in less-developed regions and poorer communities.

With the increased focus on decentralization of power to the states and municipalities, local governments have been empowered to assume full responsibility for areas such as urban planning and development⁶ and environmental services. The decentralization of planning and environmental policy implementation has not been accompanied by adequate capacity building at the state and municipality level. Decentralization of environmental management to states and municipalities must be accompanied by the devolution of powers to tax and charge for environmental services, as well as efforts to build local administrative and technical capacity if sustainable development commitments are to be met.

Given Mexico’s environmental objectives, there is a financing gap: insufficient Federal spending on environmental protection, limited application of the user and polluter pays principles, the limited revenue-raising ability of states and municipalities and low reliance on external financing all explain Mexico’s difficulties (OECD 2003, p. 18).

Box 4: Regional Development Plan - Plan Puebla Panamá

One noteworthy initiative was the launching of a regional and sustainable development plan known as the Plan Puebla Panamá, resulting from recognition that the disparities between the south/south-east of Mexico and the rest of the country have increased and that the problems afflicting the region have spread to the countries of Central America. A joint development effort between Central America and that region of Mexico is essential in order to improve the quality of life of the people of the region.

The objective of the Plan is to give the region’s inhabitants access to a better quality of life. To that end, it proposes a new model of regional development starting from the premise that development is not development unless it involves the development of people, which envisages new public human development policies (giving special attention to the overall development of indigenous communities and peoples), poverty relief and promotion of productive investment and development, and strategic investment in infrastructure (SEMARNAT 2001, p. 102).

⁵ Pollution abatement and control expenditures include water and wastewater. Statistics were calculated using OECD statistics for the latest available year. Varying definitions can limit comparability across countries.

⁶ Stemming from these reforms, a National Network of Cities Towards Sustainability has been established.

Along with decentralization, another priority of the National Development Plan and the National Program of the Environment and Natural Resources specifically considers the needs and requirements of Indigenous Peoples and women (SEMARNAT 2001, pp. 106-107). The creation of a National Commission for the Development of Indigenous People in 2003 illustrated the importance of this issue and the need for cross-coordination among parties. In the last two years, the federal budget for indigenous communities has grown by 55 percent (Fox 2003).

Table 1 highlights some of Mexico's initiatives undertaken to implement sustainable development.

Table 1: Selected Sustainable Development Initiatives

Initiative	Outline
Programs to combat poverty	<p>The Government has various programs to combat poverty, prominent among them being the Program for Education, Health and Food (PROGRESA) and the National Program for Microregions.</p> <p>PROGRESA was designed to address the various causes of poverty through an overall, ongoing and long-term approach, with the objective of reaching all regions with concentrations of families living in extreme poverty so as to improve their conditions with respect to food, health and education, particularly women and children. The objective of PROGRESA is to reach 750,000 more families in 2001, bringing the total coverage to 3.2 million families. The approach of PROGRESA is to provide structural assistance rather than welfare. It seeks to enhance the basic abilities of the individual, reinforcing the benefits of his or her own efforts (UN 2001). The program reportedly now covers 4 million families with a current budget of approximately USD 2 billion. It consists of income transfers to the rural poor on the condition of usage of health, education and nutritional services (OECD 2002, p. 5).</p> <p>The objective of the National Program for Microregions is to address, initially, 250 micro regions (of 5.5 million Mexicans), of which 3.4 million are members of indigenous populations. The intention is to reach the most marginalized municipalities with the objective of overcoming their poverty and promoting their all-round development, focusing efforts and resources for that purpose in a coordinated manner between the three branches of government, with the participation of civil society (UN 2001).</p>
Environmental Health Action Program	<p>Mexico has a relatively high incidence of illnesses that can be correlated with environmental variables, especially among vulnerable groups (e.g. children, pregnant women and the elderly). Such environmental variables include access to safe water supply, access to basic sanitation, and exposure to air pollutants or hazardous substances (e.g. lead). Mexico established an Environmental Health Action Program and has set specific quantitative targets to improve health (e.g. 15% reduction of average population exposure to atmospheric pollutants; guarantee of access to safe drinking water by 70% of the population; etc.). For some of these targets, however, baselines are yet to be established (OECD 2003, p. 159). These targets are in line with objectives adopted at the WSSD. The challenge is that Mexico's expenditure on environmental infrastructure is among the lowest in the OECD and is not keeping pace with needs. In 2001 there were 10.8 million people without access to piped water supply (OECD 2003, p. 160).</p>

Environmental Education	The 2001-2006 National Development Plan includes a strategy to promote environmental protection training, capacity building and social communication, as related to environmental protection and sustainable use of natural resources. The 2001-2006 National Program of the Environment and Natural Resources emphasises environmental education, public awareness and behavioural change. Numerous awareness-raising initiatives exist. One example is a joint effort by the Ministry of Public Education and SEMARNAT (through the Centre for Sustainable Development Education and Training) to strengthen the national curriculum's environmental and sustainable development content. This initiative resulted in about one-third of primary school teachers being trained in environmental education. Within two more years all teachers will have received such training.
US-Mexico Border Program	An innovative bi-national effort between the United States and Mexico to manage natural resources and the environment of the border region. The mission is to achieve a clean environment, protect public health and natural resources, and encourage sustainable development along the border. The Program brings together federal, tribal, state and local entities from both countries to work collaboratively toward achieving set objectives. Five-year objectives are identified for nine bi-national workgroups: (1) water, (2) air, (3) hazardous and solid waste, (4) pollution prevention, (5) contingency planning and emergency response, (6) cooperative enforcement and compliance, (7) environmental information resources, (8) natural resources, and (9) environmental health. Annual Implementation Plans are developed that identify US and Mexico federal funding levels for a given year and, based upon available funds, describe specific projects that will advance the long-term objectives of the Program (US EPA 1999).

3.5 Summary of National SD Strategy

The table below summarizes Mexico's sustainable development strategic initiatives.

Table 2: Summary of Country's National Sustainable Development Strategy

Aspects	Summary
Content of SDS	
- Typology	- No national SD strategy - Cross-sectoral strategy related to SD (National Development Plan) complemented by sectoral programs
- Content	- National Development Plan and sectoral programs developed every six years including goals, objectives and targets for incorporating sustainable development into policies and activities
- Linkages with other strategies and planning processes	- Directly tied to the country's planning process and the National Program of the Environment and Natural Resources establishes links with the environmental objectives and targets of ten national sectoral programs
Development Aspects	
- legal basis, state of process	- Under the Constitution, the government is required to present a National Development Plan; the Ecology Law is the foundation of environmental policy and makes environmental protection a priority
- Institutions, responsible agencies	- SEMARNAT is tasked with ensuring the government meets its overall SD aims and is also the administrative authority responsible for most environmental issues under federal jurisdiction
- Decisions and negotiation	- Consultative process

- External Support	- ?
Participation	
- Coordination	- National Consultative Council for Sustainable Development and four Regional Councils and also the
- Inter-governmental actors	- State and municipal government representatives involved on Councils
- Civil society, NGOs actors	- National Development Plan and Sectoral Program consultative processes involved active participation of the citizenry through consultations, questionnaires, surveys, Advisory Boards and Councils
	- Individual Secretariats also encourage social participation through various mechanisms
 Monitoring, Reporting and Adaptation Aspects	
- Responsibilities & Mechanisms	- Secretariats report progress annually against objectives and targets to the President; a Presidential report is tabled yearly; SEMARNAT publishes twice a year a Report on the Outlook Regarding the Ecological Balance and the Protection of the Environment as well as posting yearly achievements on its website; Data information management system available to the public via the Internet
- Compliance mechanisms	- There are currently no compliance mechanisms to ensure Plan or Program objectives are met
- Learning and Adaptation	- No clear information
- Application of Strategic Environmental Assessment	- Application of Strategic Environmental Assessment is ad hoc
Implementation Aspects	
- Responsibility and coordination	- The President is the champion of the National Development Plan and each Secretariat is responsible for meeting the specific commitments in their sectoral program. SEMARNAT has overall coordinating responsibility
- Financing and capacity	- Each Secretariat/Ministry is responsible for implementing and funding its individual Program (although funds would be allocated to the Secretariat from the federal budget)
- Communication	- The National Development Plan and sectoral programs are posted online and available to the public
 Specific SD Initiatives	
	- law reforms
	- user fees
	- ecological taxes
	- decentralization

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