GOVERNANCE: The Department helps to strengthen environmental laws and institutions, by fostering the exchange of information and experiences among member states regarding environmental challenges and existing-potential legal responses, with a special emphasis on due process, public participation and access to information. Examples of resources available in this area are the database on environmental laws, water legislation and supporting provisions for Payment for Ecological Services (PES). The OAS also serves as a regional platform for policy dialogue and cooperation through the Inter-American Forum on Environmental Law (FIDA) - a network of experts and officials on environmental law and enforcement - as well as through the Senior Environmental Law Advisory Group formed by 10 high level experts and academics of the hemisphere.

Through analytical work focused on the regulatory effects of environmental and socio-economic implications of trade, the DSD provides support to member states in designing sound public policies, engaging key stakeholders, building capacity and addressing the need for coherence among public policies, laws and sustainable development objectives. The Department continues its work with member countries in supporting environmental and sustainability goals through trade agreements at the regional and bilateral levels, including providing support to the Environmental Cooperation Agreement of the DR-CAFTA agreement.

SOUND MANAGEMENT OF CHEMICALS: While the use of chemical products is essential for social and economic development, it can also impair such development if its impacts on human health and the environment are not taken into account. Several international treaties related to the management of chemicals (Rotterdam, Stockholm and others) address different aspects of hazardous chemicals production, use, trade and final disposal. Presently, 23 countries of the American hemisphere have ratified the Stockholm Convention on Persistent Organic Pollutants, and are working to meet the Convention's obligations by 2025.

The OAS/DSD Program for the Sound Management of Hazardous Chemicals, launched in 2006, supports the countries

in meeting national and global obligations, and in adopting the principles of the Strategic Approach to International Chemicals Management (SAICM). To facilitate information gathering and exchanges, DSD launched a Regional Network formed by National Coordinators² selected by the relevant governmental institutions. A key activity of the program is the creation in 2007

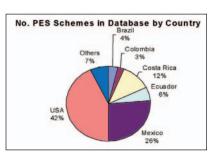


of a Persistent Toxic Substances (PTS) Online Database for the LAC region³ (www.stpla.org). In 2007, the Department worked with member countries and regional organizations as well as UNEP

Chemicals to assess gaps and institutional needs related to the national management of toxic and bio-accumulative substances. Key issues identified for priority action include: *i)* promoting the adoption and enforcement of regulations and norms compatible with health and environmental safeguards (i.e. registration of substances, implementation of GHS for labeling, design of appropriate legal frameworks, implementation of reporting mechanisms, as the Pollutant Release and Transfer Register - PRTR), while strengthening compliance with provisions of major Multilateral Environmental Agreements; ii) implementing a regional strategy for agrochemicals, and the adoption of the FAO International Codes of Conduct; iii) supporting the adoption of a regional Plan of Action for the reduction of the risks posed by the heavy metals, in particular Mercury, Lead and Cadmium; and iv) addressing the final disposal of hazardous chemical wastes and obsolete stockpiles and the management and remediation of contaminated sites, as well as the design of hazardous waste preparedness plans in case of natural disasters, as an adaptation measure to Climate Change.

PAYMENT FOR ECOSYSTEM SERVICES:

The DSD is identifying innovative private sector partnerships in environment-related financing through the compilation of recent and proposed PES transactions and projects in the region as well as trends in investment and pricing (http://ranpa.net/PES/tProjectPES/ShowTProjectPESTablePage.aspx). 13 of 34 member States of the OAS have payment for ecological services programs and data shows case studies are on the rise.



Moreover, the DSD is conducting an assessment of public sector mechanisms required to support such PES systems in 8 countries of the region (Bolivia, Chile, Costa Rica, Colombia, Dominican Republic, Ecuador, Panama, and

Peru). This includes the role of legal and institutional frameworks in areas such as property rights, fiscal and regulatory systems, forestry, water and biodiversity. Gaps and opportunities are being identified in order to assist countries to use PES mechanisms that support environmental conservation and poverty reduction.

For additional information on the structure and programs of the DSD, and for full-text electronic versions of the Office's publications and means of public participation, visit our web page at:



www.oas.org/dsd











January 2008

Sustainable Development and Environmental Management – Organization of American States

CHALLENGES:

Addressing environmental degradation and strengthening sustainable development has assumed greater urgency in recent years. Citizens and their governments face mounting environ-

mental challenges, from assessing the local effects of climate change to ensuring safe drinking water, to reversing the unprecedented loss of biodiversity throughout the



hemisphere. The human costs of environmental degradation are staggering; more than one-quarter of all communicable diseases are triggered by environmental change.

HISTORY OF TECHNICAL ASSISTANCE:

For more than four decades, the Department of Sustainable Development (DSD) of the Organization of American States (OAS) has been working with member countries at the technical and policy levels in support of natural resource management, environmental protection and natural disaster risk reduction. Since the 1950s, the OAS has worked with countries in undertaking among the first geological surveys and mapping of resource endowments, forest species and cover, hydrological characteristics of major basin areas, and soil quality. Today, the Department owns over 1,550 maps, which have multiple uses, including: helping countries establish historical baseline information regarding forest cover and rates of deforestation, and identifying historical patterns of localized precipitation and average river discharge rates. Such data sets will be of critical importance as countries prepare for the next stage of climate change adaptation and mitigation actions which is likely to include carbon sequestration extended to avoided deforestation, and ecosystem remediation. (An inventory of maps held by the DSD can be accessed through www.oas.org/dsd)

POLITICAL MANDATES:

Environmental, sustainable development and natural disaster risk reduction policies have emerged as key priorities within the OAS and have generated mandates adopted through consensus, which have provided the foundation for the work of the Department. More recently these mandates have been set out in the Santa Cruz de la Sierra Declaration and Strategic Plan of Action (2006-2009) adopted by unanimous consent of ministers, vice ministers and senior officials at the first

Inter-American Ministerial Meeting on Sustainable Development, held in December 2006 in Bolivia. Additional mandates have also been reiterated during the June 2007 37th OAS General Assembly hosted by the Government of Panama, during which foreign ministers adopted the Energy for Sustainable Development Declaration.

CAPACITY BUILDING AND HEMISPHERIC FORUMS

A comparative strength of the OAS is their strong commitment of its member states to technical cooperation. The Department's various thematic networks facilitate technical capacity building, in areas such as remote sensing and GIS-related systems, as well as management approaches to support good environmental governance. All networks are fully owned and managed by representatives from each of the 34 OAS member states, as well as hemispheric centers of excellence, research centers and universities. The current system of networks which may all be located at www.oas.org/dsd.org include:

- Inter-American Biodiversity Information Network (IABIN)
- Inter-American Water Resources Management Network (IWRM);
- The Renewable Energy in the Americas Initiative (REIA)
- Inter-American Forum on Environmental Law (FIDA)
- Inter-American Committee on Natural Disaster Reduction (IACNDR)

FROM MANDATES TO ACTION:

The Department of Sustainable Development comprises the following programmatic priorities:

THE SUSTAINABLE USE OF WATER RESOURCES:

Contamination of water basins and aquatic habitats due to urban, industrial, and agricultural wastes, overexploitation and pollution of groundwater aquifers, the impacts of hurricanes, tropical storms and drought and the longer-term prospects of water scarcity triggered by the effects of climate change, are some of the key issues being addressed by Governments.

OAS member states are leaders in advancing integrated and sustainable management of major trans-boundary water basins. Since the early 1960s, the Department has been assisting

^{2.} Up to Dec. 2007, 30 countries are represented.

^{3.} In line with the paragraph 15 of the SAICM Strategy.

January 2008

Governments in identifying and implementing management models to jointly address the common environmental issues affecting their shared water resources.



Early efforts include the wider La Plata basin, the wider

Amazon basin, the Artibonite basin (between Dominican Republic and Haiti) and the San Juan basin in Central America. Since 1995, the Department, in collaboration with the Global Environmental Facility (GEF), the United Nations Environment Programme (UNEP), and the World Bank, has undertaken other important initiatives, including the Bermejo River Basin between Argentina and Bolivia (the first project approved under the International Waters focal area of the GEF in Latin America); the Pantanal and Upper Paraguay; the San Francisco in Brazil; the San Juan River Basin between Costa Rica and Nicaragua; the Guarani Aquifer (comprising the largest aquifer under co-management in the world), the Chaco Regional project, and the Artibonite.

In 2007, the GEF Council approved two new full-sized, multiyear projects to support the management of the wider Amazon

basin and La Plata basin respectively. An important component in these initiatives entails assessing the impacts of climate change on the hydrological basins, as the first step towards climate adaptation geared to help communities, the hydro-electric generating sector and small scale farmers cope with the longer term impacts of climate change. Also in 2007, the GEF approved a multi-year project to continue the sustainable management of the San Francisco basin, with the OAS DSD as the executing agency, in collaboration with UNEP. In collaboration with UNESCO, the first hemispheric assessment that mapped almost 70 major transboundary aquifers located in North, Central and South America and the Caribbean region was released in 2007.

SUSTAINABLE DEVELOPMENT IN THE CARIBBEAN:

Caribbean countries face unprecedented challenges of adjustment and transformation as they seek to establish the conditions



for sustainable and equitable development within the context of social justice¹.

The DSD interprets the major challenges facing the Region as: (a) creating the necessary political, social economic and environmental conditions that

can advance the well-being of the population, while coping with a changing international environment; (b) reducing the pressures on the fragile physical environment created by unsustainable development policies and practices; and (c) reducing the region's vulnerability to natural disasters.

Consequently DSD, through its Caribbean Division seeks to mobilize the requisite technical and financial resources to support

the implementation of programs that will assist the region in vulnerability reduction and resilience building. Early efforts in this regard focused on development planning, parks and protected areas management, coastal and marine resources management water resources management, disaster risk management and climate change adaptation. The Department played a key role in catalyzing the formation of the Caribbean Community Climate Centre through its involvement in the conceptualization and execution of the Caribbean Planning for Adaptation to Climate Change Project (CPACC), funded by the GEF.

The portfolio of programs being pursued by the Division all have a capacity building focus linked to risk management, broadly defined as including risks derived from or associated with human and natural causes and conditions such as: unsustainable policies and practices; natural hazards, including climate variability and climate change, trade-related chemical contamination; land degradation; and risks stemming from external shocks such as energy prices.

The Division works through partnerships and collaborative agreements with key regional institutions such as: The Caribbean Community Climate Change Centre (CCCCC); the Caribbean Disaster Emergency Response Agency (CDERA); the Caribbean Environmental Health Institute (CEHI); the Environmental and

> Sustainable Development Unit of the OECS Secretariat and the CARICOM Secretariat.

NATURAL HAZARDS **RISK REDUCTION:**

A major priority for counties is to anticipate, plan and where possible reduce the risks associated with natural disasters. Between 2000 and 2007, the costs of climate-related disasters has skyrocketed, with the worst affected

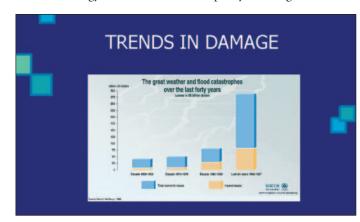
being the poorest and most vulnerable in developing countries. Climate change represents a critical development issue for all countries of the Americas. The challenges may be characterized as both cause (climate change mitigation) and effect (climate change adaptation).

The Department supports a multidisciplinary approach to identifying and reducing vulnerabilities and associated costs of natural hazards affecting OAS Member States. The Department supports the implementation of the Inter-American Strategic Plan for Policy on Vulnerability Reduction, Risk Management and Disaster Response (IASP), and the International Strategy for Disaster Reduction through three main instruments:

- projects and activities for the development of practices, knowledge and information;
- an Inter-American Network for Disaster Mitigation for the sharing and exchange of practices, knowledge and information; and
- a Policy advisory/technical Group, responsible for translating practical experience and information into policy papers.

The IASP seeks to: (i) reduce the loss of human life and property; (ii) improve emergency preparedness and response; (iii) strengthen financial protection from catastrophic loss; and (iv) strengthen the resilience of economic and social infrastructure.

The Natural Hazards Risk Reduction program emphasizes good governance, community organization, information dissemination and accessibility, resilient housing, health, education communication and energy infrastructure, and capacity building.



SUSTAINABLE ENERGY: Energy sustainability is acknowledged as one of today's most pressing challenges. The DSD provides policy guidance, technical assistance and capacity building support to OAS member states aimed at increasing the sustainability of the energy sector. The DSD works with OAS member states to address the mandates from the General Assembly and the Strategic Plan to increase energy sustainability via a strategy that includes: (a) the diversification of energy resources (including the use of both renewable energy and conventional energy sources); (b) increasing the efficiency of the energy sector (including energy efficient technologies and demand-side management); and (c) strengthening regional energy cooperation and integration.

The DSD sustainable energy program has been known for nearly ten years as the Renewable Energy in the Americas Initiative (REIA). In response to the burgeoning energy crisis and the growing acceptance of renewable energy alternatives, the DSD launched in early 2008 a new partnership, the Sustainable Energy Partnership of the Americas (SEPA), that promotes a more holistic approach for the energy sector, supporting a diverse mix of technologies and practices to increase energy sustainability and security. Currently this includes:

- Providing assistance for the preparation of clean energy plans, policies and regulations (active in Guatemala, Argentina, Dominican Republic, Ecuador, Brazil, St. Kitts & Nevis, and Mexico).
- Managing and/or liaising global and regional energy networks such as the Renewable Energy and Energy Efficiency Project (REEEP), the Global Village Energy Partnership (GVEP), and the Caribbean Renewable Energy Development Program (CREDP) to facilitate the exchange of best practices, knowledge, and expertise.
- Delivering technical assistance and resource assessment activities of geothermal, biomass, solar, wind, and hydro resources (active in Dominica, St. Kitts & Nevis, Brazil, El Salvador, Haiti, and the Dominican Republic).

BIODIVERSITY AND SOUND FOREST MANAGEMENT:

The region's biodiversity faces significant and growing threats. The rate of habitat destruction is alarming and growing. As examples, the region has one of the highest rates of deforestation

of any region in the world, and all indications are that these rates are increasing, not decreasing. One-third of the coral reefs in the region are considered to be highly degraded and critically threatened. The DSD's four main activities:



- Inter American Biodiversity Information network (IABIN)
- Western Hemisphere Migratory Species Initiative (WHMSI)
- AAPAD (Andes Amazon Protected Areas Database)
- RAMSAR High Andean Wetlands Project (HAW)

In response to country-driven demands and following recommendations of the Millennium Ecosystem Assessment and other critical reports, these programs gather scientifically valid information at the hemispheric levels, thereby helping institutions within countries access real time data to improve decision-making. For example, IABIN is strengthening environmental governance and could play an important role in helping to analyze tradeoffs for ecosystem services in the Americas, promoting the adoption of some of the response options and improving policy by making it science-based. The databases provide the data necessary to improve ecosystem services that allow verifiable data and demonstrate additional, measurable conservation outcomes such as:

- Strengthening ineffective protected areas
- Addressing underlying causes of biodiversity loss across countries
- Establishing biological corridors
- Zoning terrestrial and marine areas
- Improving forest management through certification systems
- Improving land tenure and socio-economic stability

These Internet-based and capacity building forums generate technical and scientific cooperation that promote greater coordination among Western Hemisphere countries in the collection, sharing, and use of information relevant to decision-making and education. Information and communication technologies promote democracy by connecting decision makers, NGOs and civil society. Government has had the opportunity to become more accountable and transparent, and to build the trust of citizens because access to information becomes easier.



Central America, a hot spot that forms a land bridge between North and South America, combines cloud and lowland forests and marine ecosystems through biological corridor brograms.