

environmentally - responsible actions. Some countries such as Belize and Jamaica have established Trust Funds. Environmental issues are further addressed in the main sectors as follows:

- Trade

The potential use of trade agreements to induce foreign companies to pay greater attention to environmental management remains to be explored. Most agreements between CARICOM countries and major trade partners are collectively negotiated by the Caribbean Regional Negotiating Machinery (CRNM), guided by WTO directives and rules. Because the WTO has taken no position on the environmental aspects of trade, the CRNM has not addressed environmental issues in its negotiations with WTO. However, particularly given the harmful effects of intensive tourism development on the environment, the need to do so is seen by CRNM staff as a priority and in some cases new trade agreements such as DR-CAFTA between the Dominican Republic and Central America include an environmental policy component and the recent CARIFORUM/EU EPA, signed in October 2008, includes environment issues in its chapter four.

- Agriculture and land use

The most recent articulation of regional agricultural policy in the Caribbean is outlined in the Revised Treaty of the CARICOM Single Market and Economy (CSME). Specific environmental goals are included in Article 56 of the Community Agricultural Policy that states that Policy's goal includes the efficient management and sustainable exploitation of the Region's natural resources, including forests and the living resources of the exclusive economic zone.

Key areas under the sustainable use, management and conservation of land resources, include land use planning, protected areas management, sustainable agriculture, forestry, watershed management, environmental protection and mining (Belize, Guyana and Jamaica). These areas are being addressed by a variety of programmes and projects with major outputs being the production of National Action Plans (NAPs) to Combat Desertification; National Biodiversity Strategies and Action Plans and a plethora of country -specific policy documents. Countries are at various stages of developing NAPs. Jamaica and Belize have recognised the need for integrating economic, social and physical planning activities related to these areas and along with Dominica have provided mechanisms for a participatory community input for natural resource management.

Many countries are addressing institutional strengthening and capacity building for sustainable land use management and some territories have either set up Committees or Secretariats to address critical land use issues or have revised their institutional framework for more effective land use management. Of note is the creation of the Ministry of Lands and Environment in Jamaica in 2000. In addition, most territories are in the process of reforming land use policies and are updating their legislative policies. Some countries, such as the Bahamas, Jamaica and Saint Lucia require Environmental Impact Assessments (EIAs) for large developments.

A wide spectrum of creative initiatives aimed at both broadening opportunities for sustainable rural livelihoods and diversifying agricultural products. These include promoting organic farming; the use of ethno-botanical products for the herbal and cosmetic markets; the strengthening of linkages between agriculture and tourism including through food festivals. The Fair Trade System is established within the Banana Industry and intended to have positive effect on the environment (e.g. protection of ecosystems of high ecological value and the protection of water sources from chemical pollution).

- Forestry

In the past decade, the forestry sector in the region has undergone significant changes and many countries have developed new forestry legislation that tends to promote the integration of sustainability principles into forest management, the use of planning tools such as sustainable management plans, and the decentralisation of management responsibilities, not only within forestry administrations, but also through devolution to local communities and the private sector. Recent efforts focus towards reforestation and restoration of degraded lands, the protection of watersheds and integrated ecosystem management. National forest programmes (NFPs) have become a major framework for policy and institutional development at the national level. The Code of Forestry Practices in several countries (p. ex. Guyana) establishes environmental management requirements for forest operations and some countries have introduced forestry certification programmes.

However, although many Caribbean countries have adequate forestry legislation focusing on sustainable forest management, the laws are often neither applied nor sufficiently enforced. Public forestry institutions lack the capacity, including the human and financial resources for effective enforcement and control. Encroachment, for agriculture and settlement, occurs on forest reserves in many countries, along with other unregulated use. Links with other sectors, especially in policy development, legislation and land use planning are still weak.

Several initiatives towards a 'Regional Strategy of Sustainable Forestry' within the Latin American and Caribbean region or at sub regional level (Regional Strategic Programme for the Management of Forest Ecosystems, adopted 4/2008 for Central America including the Dominican Republic; regional exchange on issues related to governance in the forest sector in the Amazon countries including Suriname and Guyana) are ongoing and several regional environment programmes address forestry issues in the Caribbean.

- Fisheries

CARICOM Regional Fisheries Mechanism (CRFM) (created 2002, headquartered in Belize) is a regional initiative funded by CARICOM Governments to sustainably manage fisheries resources especially straddling stocks of pelagic fish. The CRFM has a mission 'to promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region'. The CRFM is the core of a complex interactive network of a wide variety of stakeholders in fisheries. CRFM has addressed the major challenges and priority needs within the region in the Strategic Plan for the Caribbean Regional Fisheries Mechanism. Other regional initiatives in the sector are:

- A Common Fisheries Regime (developed at the CARICOM level).
- Common fishing zone provisions are being pursued at the sub-regional level through the Environment and Sustainable Development Unit of the OECS.
- Caribbean Fisheries Unit: Fisheries data collection on resource exploitation is ongoing and analysis is being undertaken in reference to resources of the Wider Caribbean)
- The Caribbean Conservation Association (CCA) is managing a Coastal Resources Co-Management Project which seeks to develop guidelines for successful co-management. It addresses the natural resource and human institutional aspects of co-management.
- A successful database on marine resources developed by CFRAMP for CARICOM.

CFRM is actually mandated to establish a Common Fisheries Policy and Regime to modernise fisheries and marine resource use and management. The CFP bases on the principles of regional cooperation and integration, sustainable development, integrated ecosystems approach, and the precautionary principle.

- Mining

Most countries have made efforts to mitigate the negative environment impacts of mining development through instruments such as land-use regulations and EIA legislation. Most countries are moving forward a sustainable mining policy and have already a clear mining policy and strategy, complemented by strict mining laws and regulations like Environment Management Plans (Guyana, Trinidad and Tobago, Cuba). Jamaica has drafted a new Mineral policy including strong environmental provisions in 2008. Environmental considerations are today obligatory elements in mining ventures and those countries with modern regulations and competent environmental regulatory agencies have an advantage in the attraction of new investment.

However, capacity to implement and to control the new provisions is limited and political interference in favour of constituents and powerful economic interests is common. Environmental and social concerns of offshore hydrocarbon exploration (Guyana) are of a lower order of priority than those of mining. Control especially of small scale gold, sand and quarry industries remains a major challenge. Further shortcomings in the application of new Mineral Acts include conflicts with existing environmental legislative provisions, inappropriate legislative mechanisms, institutional weaknesses and absence of enforcement measures. Only very few countries (Trinidad and Tobago) are planning SEA (Strategic Environmental Assessment) in the mining sector.

Initiatives to develop a Regional Strategy for Sustainable Mining in the Latin American and Caribbean Region (with World Bank support) focus on the major mining countries of the Latin American continent and are only partly appropriate for SIDS.

- Water

The Caribbean Water Partnership (CWP) was developed in response to the priorities established by the BPOA, and motivated by the Global Water Partnership. The objectives of the CWP are to establish a framework for collaboration in integrated water resources management (IWRM), within the context of a network of institutions, agencies and stakeholders that will promote IWRM and assist in technology transfer; best practice replication; institutional strengthening; information dissemination and sharing; public awareness programmes and policy formulation. The Interim Secretariat (the Caribbean Council for Science and Technology) and Steering Committee of the CWP have been established and the CWP was launched in June 2004.

Over the past decade, several countries have sought to improve the legal, policy and institutional framework for water resources management. Barbados, Jamaica, Saint Lucia, and Trinidad and Tobago have designed national water policies and are seeking to streamline water laws and institutions. Planned and current measures in support of sustainable watershed management in the Caribbean include internalisation of all water production and watershed management costs into water rates; development of a water-pricing structure that rewards conservation and eliminates cross-subsidies; establishment of a surcharge on water rates to finance the purchase of critical upper watershed areas for conservation; and metering for agricultural users to encourage conservation and efficiency.

However, the efforts being made are still some distance away from the idea for Integrated Water Resources Management. In nearly all countries, there are multiple institutions and agencies involved in water resources management, but there is no effective institutional mechanism in place to coordinate the inputs of these entities. Jamaica (through its National Environmental and Planning Agency) and Trinidad and Tobago (through its Environmental Management Authority) are examples of two countries where some degree of coordination takes place, not only within the water sector, but between the water sector and other areas of the environment and the economy. Decision Support Systems (DSS) within the water sector are grossly inadequate, as reflected in the paucity of data on water resources generally and on water and climate in particular. Generally, regular water resources assessments are not undertaken. Where these are done, they do not include: Demand Assessment (which examines the competing uses of water with the physical resource base and assesses demand for water); and Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) (which examine how social and institutional structures affect water use and management) and risk and vulnerability assessment (which examines the likelihood of extreme events, such as floods and droughts as well as the vulnerability of the society to them and the appropriate mitigation strategies to deal with these events).

- Energy

CARICOM countries committed themselves in the Johannesburg Programme of Implementation (JPOI of 2002) to increase the contribution of alternative source of energy to at least 10% of the energy mix by 2010. Key regional energy initiatives include: The Caribbean Renewable Energy Development Project (CREDP) (financed in part by GEF and GTZ), Task Force on Regional Energy Policy to develop a comprehensive Regional Energy Policy (established in February 2003), Brasilia Platform on Renewable Energies (adopted at the Regional Conference for Latin America and the Caribbean in Brasilia, October 2003), Development of Energy Efficiency in the Caribbean Project, Caribbean Energy Information System (CEIS), Regional Energy Initiative (REI) to implement activities that are not being undertaken within the context of CREDP or the Task Force on Regional Energy Policy.

At national level some countries, including Barbados, Cuba, Dominica, Jamaica and St. Lucia, promote the use of alternative and renewable sources of energy, including solar, hydroelectric, biomass and biogas. Jamaica has attempted the use of wind energy, and biomass has been utilized in the sugar cane industry in Cuba and Jamaica. Barbados, Guyana and Jamaica have attempted to promote efficient renewable energy technologies through the application of economic incentives and policies. Most governments have been actively promoting the efficient use of non-renewable energy sources. Some countries have also adopted energy saving targets and some have introduced cleaner energy technologies and demand side management

programmes. Only a few countries (Barbados, Saint Lucia, Curacao, Cuba) have adopted (or are in the process of adopting) National Energy Policies and Action Plans. Grenada has completed a draft energy policy, which was reviewed and adopted by Cabinet.

However, with few exceptions consumers have not been offered sufficient inducements. Lack of progress in adopting alternative energy sources is attributed in part to costs – which are currently higher than traditional sources – and in part to the lack of public information about energy-efficient technologies and renewable energy options, although this is being addressed in some instances through public awareness programmes.

- Urbanisation

Much of the planning and development legislative framework for urbanisation throughout the Caribbean Region is inappropriate and unwieldy. Several countries still function under the 1947 Town and Country Planning Act of the United Kingdom, or others have modelled their legislation in the 1960s and 1970s on the same basis. Some countries in the region have looked to the United States of America and created Zoning and Development Acts more aligned to urban America than the Caribbean. Planning legislation in most countries has only recently started to incorporate environmental assessment and controls as an integral part of urban development. Previous legislation has been silent on policies of environmental protection and environmental sustainability. However, several Caribbean governments have created urban development corporations as a mean to address the environment and development challenges posed by rapid urbanisation, and recent funding requirements of international finance institutions like the Caribbean Development Bank demand environment considerations and the integration of natural disaster risks in urban development projects. But generally, public/private planners and developers do not give yet high priority to the principles of sustainable development, due to limited knowledge and an unwillingness to depart from traditional development approaches. Exceptions are Barbados, which has incorporated the Caribbean Unique Building Code into national legislation, and Cuba, which has been chosen as one of the pilot countries for the implementation of the joint Urban Environment Strategy (UN- Habitat/UNEP) for Latin America and the Caribbean since 2004.

- Infrastructure, construction and transport

EIA are a requirement for all large development projects in the transport and construction sector in most of the Caribbean countries. The land resource needs of these important development sectors, especially in coastal areas, compete with other sectors and most of the countries try to address these environmental issues through better land use planning tools. Since the United Nations Conference on Environment and Development in 1992, national and regional Transport policies (i.e. chapter 6 of the revised treaty of Chaguaramas (2002) for the CARICOM countries) include environmental issues like energy efficiency, environmentally sound and efficient transportation, pollution reduction and control and the use of safe technologies.

But up to now sea level rise and prevention of natural disasters are very few taken into account in infrastructure/transport and physical planning, although they are foreseen in the Caribbean Disaster Management Plan. Strategic instruments, like Strategic Environmental Assessments (SEA), are not yet used to imbed infrastructure and transport development in sustainable integrated development planning.

- Industries and private sector

The potential of economic instruments to protect the environment and to promote sustainable development has been recognised by decision-makers in the Caribbean. Most countries agreed to pursue and promote sound environmental practices, in part through the establishment of innovative means of generating public and private financial resources by means of fiscal incentives and market-based instruments and to provide economic incentives to encourage the adoption of sound environmental technologies and practices. The application of the polluter pays principle and EIA are the major instruments in the industries and private sector.

The region has a few examples of private conservation. PETROTRIN in Trinidad has devolved the management of 25 ha of wetland within its petrochemical complex as a nature reserve. The Asa Wright Nature Centre in Trinidad and the Springfield Guest House/Archbold Tropical Research and Education Centre in Dominica are also privately owned and managed for research and conservation. Several countries have prominent private sector environmental “champions” who promote the need for sustainable practices

and natural resource conservation, but the concept of Corporate Social Responsibility is not yet well developed. But it is coming to the region with the entry of foreign businesses. For example, the BHP Billiton, an international corporation involved, in Trinidad, in oil and gas exploration and which recently established a subsidiary in the northeastern part of the country, is emphasising its interest in community outreach and good corporate citizenship by assisting a local network of community organisations to develop a turtle conservation and ecotourism business plan for the area.

- Tourism

Important steps have been taken at national and regional levels to strengthen tourism planning and management to include environmental concerns and maximise social and economic benefits. A wide range of laws have been enacted to strengthen environmental management, including the establishment of standards for land use in tourism development and the adopting of integrated watershed and coastal area management systems.

A regional Caribbean Tourism Strategic Plan has been developed in July 2004 which addressed issues such as sustainable development including national environment, community development and health; human resource development; product development, institutional strengthening; investment; air access, airport safety and security; marketing; and information management.

But presently only few Caribbean states have converted the Caribbean Tourism Strategic Plan into National Sustainable Tourism Master Plans to ensure that the economic and social benefits of tourism are distributed as equitably as possible and that the environmental impacts of tourism are addressed. Some countries such as Jamaica and Barbados have formulated Tourism Master Plans with links to National Development Plans. Others, such as Grenada and Barbados have established National Sustainable Development Councils. Dominica has a number of tourism related initiatives including the Dominica Nature Island Standard of Excellence. The Caribbean Tourism Organisation (CTO) and the Caribbean Hotel Association (CHA) convene systematically each year, a Regional Sustainable Tourism Conference. The Caribbean Blue Flag Programme (implemented in 2000) is a voluntary certification scheme for beaches and marinas which includes criteria on safety, management and environmental awareness. The programme, which is being jointly coordinated by the CCA, the CTO and the Caribbean Alliance for Sustainable Tourism (CAST), is being implemented in Antigua and Barbuda, The Bahamas, Dominican Republic, Jamaica, Martinique, Puerto Rico and Venezuela. Further CAST has promoted the Green Globe tourism certification programme, which now counts more than 50 members in 12 countries.

Nevertheless these efforts of environment mainstreaming in the different economic sectors, the implementation remains still poor. Main challenges are the problems mentioned in chapter 3.2: lack of priority of environment issues in national planning, coordination / institutional challenges, lack of a holistic view and environment/economy linkage.

4 EU and other Donor Co-Operation with the Region from an Environmental Perspective

4.1 EU Co-operation from an environmental perspective

- Political framework and relevant financial instruments available for its implementation

Over the last decade, the Caribbean ACP States and the EU have clearly demonstrated a political will to strengthen their relationship, e.g. through enhanced political dialogue and the establishment of a strategic partnership which forms the basis for further cooperation agreements. This strengthened EU-Caribbean partnership also needs to be seen in the context of the wider EU-LAC partnership forged between the EU, Caribbean and Latin American States at their 1st Joint Summit in Rio in 1999.

The current political framework for the EU-CARIFORUM relations is mainly provided by (1) the EU-Caribbean Partnership for Growth, Stability and Development (2006) and by (2) the outcomes of the 3rd CARIFORUM-EU Troika Summit (2008).

(1) The *EU-Caribbean Partnership for Growth, Stability and Development (2006)* is generally based on the policy agenda of the CARIFORUM States and on the principles of the EU Development Policy, the European Consensus on Development (2005) and the ACP-EU Partnership Agreement ("Cotonou Agreement" 2000, revised in 2005). The document stipulates that future cooperation between the two regions will focus on 3 dimensions: (1) Shaping a political partnership based on shared values; (2) Addressing economic and *environmental opportunities and vulnerabilities*; and (3) Promoting social cohesion and combating poverty. With respect to "addressing environmental opportunities and vulnerabilities", the EU committed itself to continue and strengthen its support to the sectors of Environmental Management and Natural Disaster Management, with emphasis on climate change adaptation and mitigation, early warning, prevention, recovery and rehabilitation.

(2) In the Joint Communiqué of the *CARIFORUM-EU Troika Summit (2008)*, environmental issues are addressed in the following way:

- Both sides agreed to engage in renewed dialogue on issues related to food security and to explore avenues for enhanced collaboration within the framework of new and existing mechanisms for cooperation, including the appointment of a Joint Task Force. *The Task Force would address immediate, medium and long term issues of climate change, energy and food security and agricultural productivity and diversification, with a view to ameliorate the problems in CARIFORUM states and to contribute to their sustainable development.*
- CARIFORUM recalled the *high degree of vulnerability of the wider Caribbean Basin to natural disasters, the increased occurrence and severity of these phenomena as well as the fact that the Caribbean has been internationally regarded as being among those suffering most from the impact of climate change.* In this context, CARIFORUM welcomed the various activities launched recently under the 9th EDF in the area of natural and man-made disasters, including a contribution to the Caribbean Catastrophe Risk Insurance Facility (CCRIF), support to the Caribbean Disaster Emergency Response Agency (CDERA) and the creation of a € 22m standby facility on disaster preparedness and rehabilitation. Also the new ACP/EU Natural Disaster Facility under the 10th EDF was welcomed and the need to ensure its prompt implementation was emphasized.
- The Heads of State and Government welcomed the recent *EU Global Climate Change Alliance (GCCA)* with developing countries, which is designed to help LDCs and (SIDS) to increase their capacity to adapt to climate change and pursue sustainable development strategies. The GCCA is to provide a platform for dialogue and exchange as well as practical cooperation in support of the international negotiations on an ambitious post-2012 climate change agreement and of effective measures at national and regional level.
- A *CARIFORUM-EU Declaration on Climate Change and Energy* (annex 6.2.8) was adopted.

For the implementation of the above mentioned policies and cooperation agreements, several financing instruments are in place. Under the current aid programming cycle (2008-2013), the following instruments are relevant for environment-related cooperation with the Caribbean region:

The *10th European Development Fund (EDF)* (2008-2013), financing the EC's geographic cooperation with ACP countries and OCTs. The EDF consists of grants managed by the Commission and risk capital and (concessional) loans managed by the EIB under the "Investment Facility". The 10th EDF also includes the FLEX mechanism, established to assist countries in remedying the adverse effects of instability of export earnings. The FLEX mechanism is of considerable importance to several countries in the region. The EDF finances national, regional and intra-ACP programmes and initiatives.

The *Development Cooperation Instrument (DCI)* which includes an environmental thematic programme "*Environment and sustainable management of natural resources, including energy (ENRTP)*". ENRTP is contributing to the UNEP-managed Caribbean Biological Corridor with an amount of appr. 2,8 mio €. The DCI also covers the programme "*Accompanying measures for ACP countries affected by the EC's sugar reform*". Under this programme, the ACP Sugar Protocol countries can receive support for their efforts to adjust to the new conditions on the sugar market. Assistance is provided in the frame of the concerned countries' adaptation strategies, amongst other things to *address impacts generated by the adaptation process*, related to employment and social services, *land use and environmental restoration*, the energy sector, research and innovation and macro-economic stability. ACP Sugar Protocol countries in the Caribbean region are: Barbados, Belize, Guyana, Jamaica, St Kitts and Nevis and Trinidad and Tobago.

The *Instrument for Humanitarian and Emergency Assistance* managed through DG ECHO. Of particular relevance is the specific programme for disaster preparedness which was launched in 1996: *Disaster Preparedness ECHO – DIPECHO*. The regional DIPECHO Office for the Caribbean is situated in Santo Domingo, the Dominican Republic.

Before 2007/08, *some additional financing instruments* were of relevance:

- The *Special Framework for Assistance (SFA)* (1999-2008), created in 1998 as an instrument for the provision of financial and technical assistance to the ACP countries considered as traditional suppliers of bananas to the EC and whose economy was seriously affected by amendments in the EU banana regime at the time. Assistance was provided on the basis of an approved long-term strategy for the restructuring of its banana industry or/and economic diversification. To illustrate the relevance of the SFA in our context: The Natural Resource Programme in Saint Lucia was financed under the SFA (8 mio €). SFA eligible countries in the region include: Belize, Dominica, Grenada, Jamaica, St Lucia, St Vincent and the Grenadines and Suriname.
- The predecessors of the ENRTP: the programmes "Tropical Forests and other types of forests in developing countries" (1991-2006) and "Environment in developing countries" (1992-2006).
- The predecessors of the FLEX mechanism: Stabilisation of Export Earnings (Stabex) and System for mineral products (Sysmin) were established to protect export earnings of ACP countries from the effects of world market fluctuations due to market operations and/or production vicissitudes. Stabex was to provide an answer to primary products problems; Sysmin was to restore and maintain the viability of the mining sector.

In order to give an idea of the scale of financing, Annex 6.2.9 provides an overview of the EC development assistance budgets in the Caribbean (1) over the period 1975-2001 and (2) over the period 1986-2007.

- Past, present and envisaged EC cooperation in the field of environment

The *RSP/RIP related to the 9th EDF* (2003-2007) (modified in 2005 following a mid-term review) focused on regional integration including transport infrastructure, cultural cooperation and the implementation of the EPA process. 90% of the total budget of 98 mio € was allocated to this focal sector. However, considerable environment-related assistance was included in the non-focal sector. 6% of the total budget was allocated to "*Environmental protection, fight against major vulnerabilities and disaster management*". "Environment" was also explicitly mentioned as a cross-cutting issue in the support strategy: "A systematic and preventive approach on the basis of the precautionary principle will promote environmental sustainability".

The clear concern for environmental vulnerabilities and challenges embedded in the above-mentioned guiding policy papers is not really reflected in the *Caribbean Regional Strategy Paper for the current programming cycle (2008-2013, 10th EDF)*. The primary focus of the strategy is to provide support for regional integration and cooperation among CARIFORUM countries, taking into account the objectives of

the region and the needs related to the implementation of the Economic Partnership Agreement (EPA), which is considered to be a vehicle for regional integration. On that basis, the Regional Indicative Programme (RIP) (165 million €) is anchored in one single focal sector "Regional Economic Integration and Cooperation and EPA priority areas including Capacity Building" which is indicatively allocated 85-90% of the available 10th EDF resources. The non-focal sector of the RIP addresses vulnerability and social issues having the potential to negatively impact on the development efforts of the region. In that regard, particular attention will be paid to crime and security including the fight against illegal drugs, empowering non-state actors and capacity development. Indicatively, 10-15% of the RIP is allocated to activities in the non-focal sector.

In relation to the environment, the RSP merely stipulates:

- Cooperation in the areas of climate change and natural disasters will be established in the frame of the Global Climate Change Alliance (GCCA) and the implementation of the EU Strategy for Disaster Risk Reduction.
- Overall environmental mainstreaming must be guaranteed in the different priority and non-priority programmes of the strategy. For each sector, a screening will be made in order to determine what type and what level of environmental impacts could be expected. This will help decide whether a Strategic Environmental Assessment (SEA) is needed or not. If needed, SEAs will be undertaken and their conclusions will be integrated in the design of the proposed actions.
- Areas such as natural disaster preparedness, environment, health, SPS compliance, energy, science and technology, migration, education and biotechnologies are to be covered by Intra-ACP programmes and EC budget lines other than EDF.

As the RIP for the 10th EDF, also several of the National Indicative Programmes (NIPs) of the Caribbean ACP countries are oriented towards activities linked to the EPA: five programmes will target competitiveness, three programmes will contribute to governance and public administration reforms, and another three will focus on infrastructure. In total, this concerns 454 mio € out of some 600 mio, hence about 75% of the national programmes.

Specific cooperation programmes in the environment sector are :

- The *Caribbean Regional Environment Programme (CREP)*. CREP is an EDF assisted programme (9,15 mio €), arisen out of the recognition that communities and policy makers in the Caribbean region were not sufficiently alarmed about the rate of environmental degradation and how this impairs future development opportunities in the region. The CREP was launched in 2000 and received external funding until June 2006. CREP was meant to be sustained by regional and national environmental stakeholders under different funding regimes.
- The *Cross-border Environmental Programme in Haiti and the Dominican Republic (PET – Projet Environnement Transfrontalier)*, which forms part of a range of EDF supported bi-national Haiti/DR initiatives, probably leading to a general bi-national development strategy for the entire Quisqueya Island. PET has been allocated a budget of 4,4 mio € and aims at reinforcing the capacity and bi-national cooperation in sustainable development of the vulnerable lakes area. Currently, terms of reference are being developed for the identification study of a new bi-national project (budget 7 mio €) that will address watershed management, renewable energy, reforestation, forest management, eco-tourism and biodiversity.
- In the area of natural disaster relief and management substantial support has been provided:
 - The *Disaster Prevention Programme (DIPECHO)* of the ECHO. Since 1996 the ECHO Office in the Dominican Republic has been active in disaster prevention and preparedness. The 1st DIPECHO Action Plan for the Caribbean was launched in 1998 and currently the 6th DIPECHO Action Plan is under implementation. DIPECHO has been contributing to the improvement of capacity in the protection and preparedness of communities at risk, with focus on the interrelationship of the various levels of action (local, provincial, national and regional). ECHO also coordinates most of the disaster-related EC assistance and has been leading international responses to natural disasters in the region.

Some concrete examples of DIPECHO interventions: flood relief activities in Guyana at the beginning of 2005; combating effects of the floods of 2006 in Suriname; rehabilitation activities after passage of

Hurricane Dean in 2007 in Jamaica; relief efforts in Haiti and the DR associated with Hurricanes Noel and Olga at the end of 2007; operations during the floods of 2003 in the DR and the ones of 2004 in both the DR and Haiti; small-scale initiatives on disaster preparedness in the DR.

- The *Radar Warning System*, a regional project funded under the 8th EDF with a total budget of 13,2 million € and implemented in the period 2003-06. The Radar Network for Severe Weather Warning is coordinated from Trinidad. The project has contributed to mitigate the economic, social and environmental losses arising from adverse weather conditions, to improve weather data for sensitive productive activities and to develop early warning and public awareness systems.
- The *EDF B-envelope allocations (regional and national levels) set aside for unforeseen needs are in practice most often used for disaster relief and management*. For instance, 8 mio € of B-envelope funds were channelled to the Caribbean Catastrophe Insurance Facility, 7,5 mio € were provided to the DR following hurricane Noel, 14 mio € were allocated to the Disaster Stand-by Facility, 0,7 mio € were provided for assistance to victims of the volcano eruption on Montserrat, 6,5 mio € to the project Strengthening the National Capacity for Disaster Prevention and Preparedness in the DR, etc.
- The 9th EDF funded the *rehabilitation of the Nelson Dockyard seawall* who was badly damaged by hurricanes in 1995-1999 in Antigua and Barbuda.
- The *Sea Defences Programme* in Guyana (8th, 9th and 10th EDF) which included support for policy development on coastal management with SEA preparation, institutional capacity building and infrastructure construction.

Related to natural resources management, the following interventions should be mentioned:

Fisheries: The 7th EDF funded *CARIFORUM Agriculture and Fisheries Programme (CAFT)* with its component of "Fisheries Institutional Development" which was allocated 2,85 million € and implemented from 1998 to 2004. This component included initiatives in the areas of fisheries data information system, resource assessment, resource development and management, human resource development, strengthening of fisheries departments and organisations, strengthening of the legal and regulatory framework, public education and awareness building.

Also the intra-ACP *Programme to Strengthen Fishery products Health conditions* (42 mio €, 8th EDF) supports a number of Caribbean countries to improve market access of fisheries products to the world market, by strengthening the export health controls.

Natural Resources: A *Natural Resources Management Programme* in St Lucia is funded under SFA 2003 (8 mio €); its implementation is ongoing. The Haitian project *Programme d'Informations Territoriales pour le Développement Durable* has received EDF support for several subsequent phases. In the frame of this support, the Centre National de l'Information Géo-Spatiale (CNIGS) was created.'

Water resources:

- ✓ Water supply initiatives have been carried out during several years in Dominica under successive SFA allocations (2006, 2007, 2008);
- ✓ The *Water Supply Project* in Southern Grenada (8th EDF);
- ✓ Also Jamaica has received ample support for water supply and sanitation (8th and 9th EDF): the *Rural Water Supply Project Phase II* (10 mio €, completed in 2007), the *Water and Sanitation Project* under the Poverty Reduction Programme in Whitfield Town, Kingston; *Institutional Strengthening of the National Water Commission* (1,1 mio €), and the *Rehabilitation of the Negril Wastewater project/ Waste Stabilisation Ponds* (3 mio €).
- ✓ 8th EDF support of 21,8 mio € for the *Environmental Health Programme in the Santo Domingo Shanty Towns (SABAMAR)* in the DR (infrastructure, legislation, solid waste management)

Mining: Under the 7th EDF, Sysmin has provided the DR with very valuable instruments and studies in the mining and geological fields. A 9th EDF funded project is under preparation; this project will address the environmental legacy of the Pueblo Viejo gold mine, launch the National Geological Institute and support small artisan, mining enterprises.

Biodiversity and ecotourism: The EU has supported the establishment and management of protected areas such as the *Iwokrama Project* in Guyana and the establishment of national parks in Grenada. In Dominica, almost 6 mio € from the 8th EDF was allocated to the *EcoTourism Development Programme (ETDP)* which

includes the construction of the Waitukubuli National Trail. (2002-2007)

The European Invest Bank (EIB) has provided several loans to the region for the following environment (+renewable energy) - related investments: to the OECS for a waste management project (in collaboration with the WB); to the Bahamas Electricity Corporation to expand the reach of their services of water supply and sewerage; and to Dominica for the construction of an hydroelectric facility. The bank is also exploring operations in the energy sector in the DR, two of which are in the renewable energy sector (ethanol and wind power).

A good number of projects in the region are implemented under the EC-programmes for *tropical forests and environment* (budgetline 21 02 05).

Environmental mainstreaming, heavily promoted by the general EC development policy, is often mentioned in the regional as well as in the national Strategy Papers. Still, it is very difficult to trace to what extent this mainstreaming is effectively implemented. For instance, in the performance grid for internal EC evaluation, not one single environment-relevant indicator is included. Generally, the consultations of resource persons during the country visits revealed that environmental mainstreaming is mainly done on paper. During implementation, environmental mainstreaming is rarely put in practice.

Some (paper) examples of environmental mainstreaming are:

- In Barbados: the *Tourism Support Programme* (8 mio €; 8th EDF) and the *Skills Development Sectoral Support Programme* (10th EDF);
- The Jamaica component of the regional *Integrated Development Programme for the Caribbean Rum Sector* (8th EDF) as it includes “plant modernisation and meeting environmental needs”;
- The programme for *Support to the Sugar Cane Sector in Jamaica – 2007* (25 mio €) as it emphasises environmental sustainability and envisages the elaboration of a SEA for the sector. At the moment, the SEA is ongoing.

Most important perspectives for future environment-related EC cooperation are the Global Climate Change Alliance (GCCA) and the recently approved Intra ACP Natural Disaster Facility.

- EU Member States (MS) cooperation in the region

Only a few EU MS provide substantial assistance to the environmental sector in the region. Most support is thereby going to bilateral interventions; only DFID is running a genuine regional programme for the Caribbean and Germany supports some bi-national projects in Haiti/DR. Another important trend consists in the allocation of larger budgets to multi-donor programmes and initiatives (including to the EC budgets).

United Kingdom: In the recent past, DFID has implemented programmes at regional and sub-regional (OECS) levels providing a.o. support in the field of environment: natural resources management, support to the Caribbean Natural Resources Institute (CANARI), and solid waste management.

DFID's present Regional Development Strategy for the Caribbean (2008-2013) states that the UK will spend up to £3 mio a year to help prepare for natural disasters and to aid post disaster recovery. Further, they will also support the development of alternate energy sources. Specifically, the Strategy includes support to reduce vulnerability of communities most under threat and to reduce the losses caused by disasters; to improve prediction and coordinated responses to disasters through the CDERA and the CCCCC; to the multi-country catastrophe insurance; and to help the region deal with climate change, energy efficiency and environmental protection. DFID also implements a State Forest Management Project in *Grenada*.

France: The Agence Française de Développement (AFD) has no regional interventions in the Caribbean but supports environmental projects in different Caribbean countries. In the *Dominican Republic*, for instance, AFD's intervention strategy includes an important component for protection and development of the country's natural resources (environment and biodiversity): improving water quality in urban areas, combating deforestation and management of water resources in rural areas. In this respect, AFD currently supports the implementation of the Sierra Development Plan which entails support for reforestation, water supply and microfinance development. In *Haiti*, AFD focuses a.o. sectors on water supply and waste management. Environment-related projects under implementation in Haiti are: (1) an urban development project in Jacmel: flood prevention, drainage, support to the municipality; and (2) a drinking water project to supply the disadvantaged neighbourhoods of Port-au-Prince and to implement the emergency rehabilitation

of the drinking water network. In *Grenada*, France finances operations aiming at marine park protection and trail development in selected sites for tourism. Finally, in *St. Vincent and the Grenadines*, AFD provides support for the enhancement of the tourism sector and for the improvement of the water supply and quality on St. Vincent.

Current trend: allocation of larger contributions to multilateral cooperation (EU, UN,...); the budgets that remain for bilateral cooperation are steadily decreasing.

Germany: Environmental protection and climate change, as well as urban water supply and sanitation are priorities for the German cooperation (BMZ) with Latin America and the Caribbean. Recent cooperation initiatives in the field of the environment are:

- a Natural Resource Management project in the *Dominican Republic*;
- a project designed to Combating Desertification in the Caribbean/Central America;
- a binational project in *Haiti and the Dominican Republic* for Poverty Reduction through sustainable use of Natural Resources in the cross-border Catchment Area of the Río Artebonito;
- another binational project in *Haiti and the Dominican Republic* for Reconstruction and Disaster Risk Management in the border area.
- the OECS secretariat in St Lucia receives technical assistance for the strengthening of the Natural Resources Monitoring Unit (NRMU).

Additionally, a programme for Emergency Aid Measures in Gonaïve, *Haiti* is under preparation.

GTZ is interested in – and has funds available for – (co-)financing regional programmes in the environment-related areas of renewable energy and NRM. GTZ is prepared to engage in larger multi-donor initiatives. For example, they are currently considering to contribute to the UNEP-managed *Caribbean Biological Corridor*.

The Netherlands: are providing sector-wide support to *Suriname* amongst others to the sector of environment.

Spain: Spain finances a project for “Access to Potable Water and Basic Environmental Health” in the *Dominican Republic*. Further, in the frame of its overall Araucaria programme (currently Araucaria XXI), the Spanish cooperation implements since 2007 a range of activities in *Haiti*. The objective is to contribute to improving the environmental conditions in the South-East Department of the country and to strengthen the local capacity and competence for environmental management. Among the envisaged results are: the elaboration of a Management Plan for the South-East Catchment; conservation of biodiversity in the National Park “La Visite”; support to the establishment of a Man & Biosphere Reserve comprising lake Azuëi, the mountain range of La Selle (National Park “La Visite”) and the districts Belle Anse and Jacmel; and a pilot reforestation project of 100 ha in the NP “La Visite”. Besides this environmental component, the project includes a number of livelihood improving activity lines. Total budget for Haiti: 1,8 mio €.

4.2 Co-operation funded by other agencies from an environmental perspective

Though the EU (EC + MS) can be considered as the main provider of development assistance (in grants) to the region, a range of other donor agencies and funds supporting initiatives in the field of environment and/or natural disaster management do exist. A summary of the environmental activities of these main donor agencies and international organizations is provided in the subsequent paragraphs as well as in Annex 6.4.

The Global Environment Facility (GEF)

Being the designated financial mechanism for the main MEAs (UNFCCC, UNCCD, UNCBD) and hence assisting countries in meeting their obligations under the conventions that they have ratified, the GEF finances many environmental projects in the Caribbean region. In practice, the GEF provides grants to projects that address one or more of the following 6 focal areas: biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants (POPs).

The GEF-funded projects and programmes are implemented through “GEF Agencies”. These agencies assist eligible governments and NGOs in the development, implementation and management of the projects. Besides, they participate in the GEF governance as well as in the development of GEF policies and programmes. The main GEF Agencies involved in projects in the Caribbean are UNEP and UNDP; also IBRD is well represented and just a few projects are managed through the IDB.

The 16 CARIFORUM countries are benefiting from 14 global, 32 regional and 122 national projects. Annex

6.4 provides a full list of these past and ongoing GEF-financed projects in the region as well as some summarising tables: (1) the coverage of countries by the regional projects; (2) the coverage of countries by the global projects; (3) the allocated budgets by country (for the 122 national projects); and (4) the distribution of the 168 projects over the 6 Focal GEF areas.

Together the 46 (44 approved and 2 under preparation) regional and global GEF projects have been allocated GEF grants for a total amount of 220,331 million US\$. The amount of their co-financing being 698,421 million US\$, the total budget for these 46 projects is 918,752 million US\$. Regarding the national countries, the total GEF grant comes to 118,515 million US\$, what – the co-financing part being 303,052 million US\$ - adds up to a total cost of 421,567 million US\$. In relation to the focal areas, it is obvious that “Biodiversity” and “Climate Change” are the best covered areas. Still, as for the regional projects “International Waters” becomes an important area as well.

During the country visits, resource persons reported that GEF projects are generally very well designed but characterized by very long approval procedures so that the period between formulation and implementation can last for several years (up to 7 years).

Apart from the above mentioned projects, the GEF portfolio includes a huge number of smaller projects funded through the “Small Grants Programme”. The Caribbean region as well as the 16 individual countries constituting the region are beneficiary of an important number of such smaller projects.

The Organisation of the American States (OAS)

Over the past years, OAS’ Department of Sustainable Development has focused on assisting Caribbean States in anticipating and/or mitigating real or potential threats to their social, economic and environmental security such as: natural hazards; energy price shocks; food scarcity; land degradation; chemical contamination; loss of biodiversity and water scarcity. Concrete measures and efforts have been deployed in the areas of (1) Management of natural hazards risks (the Inter-American Network for Disaster Mitigation, the Caribbean Emergency Legislation projects, the Grenada Hurricane Resilient Home Reconstruction projects); (2) Renewable energy (support via the Global Sustainable Energy Islands Initiative – GSEII and the Eastern Caribbean Geothermal Project – GEO-Caraibes; beneficiary countries are St. Kitts & Nevis, Dominica and St. Lucia); (3) Sound management of chemicals (awareness raising, identification of toxic chemical stockpiles posing a serious hazard, regional strategy development, and development of innovative financial arrangements such as Payment for Ecological Services schemes); (4) Integrated Water Resource Management (support to design of national and regional policies, facilitating the Inter-American Dialogue on Water Management); (5) Management of the coastal and marine resources of the Caribbean Sea (Following the adoption of the UN Resolution on the Caribbean Sea and the establishment of the Caribbean Sea Commission, OAS/DSD is seeking to promote a collaborative approach to the design and implementation of a comprehensive Ocean Governance Programme for the Caribbean Sea. In this regard, collaboration has begun, with the UWI (in the context of the Caribbean Large Marine Ecosystem Project (CLME); and with the Cropper Foundation (in the context of the Caribbean Sea Ecological Assessment (CARSEA).); (6) Environmental law, policies and economics (capacity building, database development on environmental legislation, support in facing new challenges resulting from economic integration and trade liberalisation); and (7) Sustainable land management (GEF-funded project for Prevention of Land Degradation through Sustainable Land Management in 7 countries).

The Inter-American Development Bank (IDB)

Environment is one of the IDB’s priority thematic areas. Two region-wide (LAC) IDB initiatives are under implementation:

- The Sustainable Energy and Climate Change Initiative (SECCI). This initiative seeks to support the LAC region in its urgent challenges to find economically and environmentally sound energy options. Core objectives are to expand the development and use of renewable energy sources, energy efficiency technologies and practices, and carbon finance in the region, as well as to promote and finance climate change adaptation strategies that reduce the regions climate vulnerability.
- The Water and Sanitation Initiative (WSI). Under this initiative, strategic guidelines, specific targets and special financial products have been developed to support solutions tailored to each country’s needs.

The IDB has offices in all 26 LAC countries where it finances programmes and projects; concerned Caribbean countries are: the Bahamas, Barbados, Belize, the Dominican Republic, Guyana, Haiti, Jamaica, Suriname and Trinidad & Tobago. For the OECS countries, the IDB channels its funds through the CBD. Belize, Jamaica and Guyana have bilateral arrangements with the IDB and lending is done on a stand-alone basis. The most relevant IDB supported projects in the Caribbean countries mentioned above are included in

annex 6.4.

The World Bank (WB)

As stipulated in its Country Assistance Strategy for the OECS, the WB supports (granting assistance) regional integration through regional interventions, amongst others in the area of catastrophe risk insurance. Further, one of the two main pillars of the WB's lending strategy focuses on "reducing vulnerability, by promoting greater social inclusion and strengthening disaster risk management". The main regional initiatives receiving WB-support, include:

- The *Environmental Management Project*: To remain competitive in the tourism sector, the OECS countries need to enhance the management of their natural environment. This includes (i) strict enforcement of environmental policies for land use planning, urban-rural zoning regulations and landscaping; (ii) conservation and expansion of natural areas; (iii) monitoring of the quality of coastal waters and beaches; and (iv) additional efforts in solid waste management, waste water treatment and water and air pollution control. Moreover, to reduce vulnerability to natural disasters, measures to reduce erosion and promote reforestation are also necessary. To improve environmental management, the project focuses on policy reforms, region-wide monitoring of critical ecosystems and water quality, regional and national institutional strengthening, infrastructure investments and increasing public awareness. Cooperation with the private (tourism) sector and communities and participation in international environmental certification schemes are an integral part of the programme.
- The CARICOM-wide *Catastrophe Risk Insurance Project (CRI)*, institutionalising a comprehensive risk management approach. The concerned project strives to deepen insurance markets to allow for the improved sharing of insurable and uninsurable risks among the public sector, private sector, international insurance industry, international capital markets, and the domestic 'self-insured' population. The leveraging of scarce capital to diversify and better spread risks, as well as to significantly increase the efficiency of risk transfer mechanisms, requires a subregional risk pooling mechanism. The CARICOM countries indicated their commitment to increase their limited leverage while exploiting the best terms for reinsurance protection through shared risk diversification and faster accumulation of domestic insurance reserves. The project is designed to ensure that the "productive purposes" test is satisfied and efforts are made so that reporting mechanisms are in place to fully ensure that reconstruction of productive capacity is the primary target for such funding under a pre-planned risk mitigation approach, and used to reimburse the government for budgets displaced toward reconstruction due to emergencies.
- The *Mainstreaming Adaptation to Climate Change project* seeks to assist in the incorporation of climate change concerns in sector and regional planning for the OECS nations and to identify critical vulnerabilities.

Annex 6.4 presents some more (mainly national) WB-supported projects that address environmental issues in the region.

The Japanese International Cooperation Agency (JICA)

JICA is represented in the region through its Regional Support Office for Central America and the Caribbean located in Mexico and through national offices in Belize, Dominica, the Dominican Republic (also covering Haiti), Jamaica, St. Vincent and the Grenadines and St. Lucia. Subsequently, an overview is provided of JICA's support to the Caribbean region per relevant thematic line:

- *Water Resources and Disaster Management*: JICA is providing assistance to CDERA since 1997. The ultimate goal is to ensure that CDERA attains the ability to develop its own disaster-prevention plans. JICA programmes have included support for institutional capacity building, the establishment and strengthening of a system for flood hazard map creation, enhancing the regional disaster management planning capacity of member states, and increasing the functions of communication bases. JICA is currently concluding a technological cooperation project with the Regional Team composed of CDERA, the Caribbean Institute for Meteorology and Hydrology, and regional universities. Project topics include meteorological observation, flood analysis, creation of flood hazard maps, and the utilization of maps to prepare local disaster-prevention plans.

Besides disaster management, JICA is also very active in disaster relief. Though its activities in this respect date back to the late 1970s, disaster relief became a priority on the agenda with the revision of the JICA law which involved the addition of emergency relief supplies and led to the establishment of Japan's Comprehensive Emergency Disaster Relief System, also benefiting the Caribbean.

- *Fisheries*: JICA supports a Project for the Promotion of Sustainable Marine Fisheries Resource

Utilization in Trinidad & Tobago. To address problems of fishery resources depletion in the coastal waters, JICA embarked in 1996 on a project for training supervisory personnel, who subsequently conducted training sessions for fishing households. Currently, a second fishery project is under implementation including activities such as collection and analysis of data on resources, research on the introduction of appropriate fishing equipment and methods, and training in extension activities, all with a view to promoting an understanding of sustainable use of fishery resources.

JICA provides no assistance to the region in other relevant areas such as *Natural resources and energy, Natural environmental conservation, and Environmental management*. Still, JICA's recent cooperation strategy for the Dominican Republic includes "environment and natural resources" as a priority thematic area. A number of concrete actions are being implemented with the State Secretariat for Environment and Natural Resources (SEMARN): rehabilitation of degraded forest areas and the establishment of a reforestation system; training of technicians in management of protected areas; and improvement of techniques and practices for watershed areas management. Further, the Santiago Corporation for Water Supply and Sewerage (CORAASAN) is supported to establish and improve the sewerage system and the National Institute for Drinking Water (INAPA) receives assistance for the rehabilitation of the aqueducts.

The Canadian International Development Agency (CIDA)

At the regional level, CIDA provides assistance to the Caribbean through a new regional support programme, jointly developed with CARICOM. It was launched in 2008, will cover a period of 10 years and has been allocated CDN\$ 600 million. Environment / NR management / Natural disasters do not figure as focal areas in this programme. Nonetheless, it includes a major new project to increase the capacity of national governments and local communities to manage natural disasters such as hurricanes and flooding and thus reduce their impact on the people of the region. This project builds on Canada's \$20 million contribution to the World Bank's Caribbean Catastrophe Risk Insurance Facility, where Canada is the largest contributor.

Further, comprehensive bilateral programmes are carried out in Haiti and Cuba but neither in these programmes environmental issues are given high priority.

Most countries of the region do benefit from important disaster relief assistance provided by CIDA (Jamaica, Haiti, the Dominican Republic, Grenada, Cuba). In Cuba, in addition to coordinating international aid efforts in response to the damage and hardship caused by hurricanes and other natural disasters, CIDA has established the Post Hurricane Reconstruction Fund under the Canada-Cuba Community Development Fund (CCDF). Important reconstruction projects have already been approved and carried out under this Fund.

Though not being a priority area in the strategic cooperation agreements, CIDA does provide assistance to a number of environmental regional and national projects. They are listed in annex 6.4. Some examples: development of the forestry sector in Cuba, watershed management in Haiti/DR, Trees for Tomorrow in Jamaica, the Caribbean Regional Oceans and Fisheries Project, etc..

The Caribbean Development Bank (CDB)

Since 1974, the Caribbean Development Bank (CDB) has been responding to requests from its member countries for assistance in post-disaster rehabilitation. The preparation of the Natural Disaster Management Strategy and Operational Guidelines in 1998 laid the foundation for a more comprehensive approach. The CDB's Project Services Division is responsible for leading the Bank's work programmes on disaster risk management, climate change, environment, gender, governance, regional public goals, procurement and social development. Disaster risk management and environmental sustainability are identified as cross-cutting themes in CDB's 2005-2009 Strategic Plan, having direct impact on the Bank's four externally focused strategic objectives: broad based economic growth, inclusive social development, good governance, and regional cooperation and integration. Supporting environmental sustainability and advancing the climate change agenda has been identified as a core theme for the Seventh Cycle of the Special Development Fund (2009-2012). CDB also manages the regional multi-donor Biodiversity Fund, operational in 8 CARICOM countries.

The United States Agency for International Development (USAID)

USAID conducts cooperation programmes in the OECS subregion (operating from Barbados), Cuba, the Dominican Republic, Guyana, Haiti and Jamaica. Most of the programmes include environment- and/or natural disaster- related activities, though at the moment the environmental sector is not longer a priority in USAID's cooperation strategy:

- OECS sub-region: high priority is given to collaborating with government and civil society to target

activities that support biodiversity conservation and related policy development (mitigation of human impacts, institutional framework for managing protected areas).

- The Dominican Republic: USAID's work includes a component of safeguarding biodiversity and natural ecosystems. The related objectives are to be achieved through strengthening capacity to develop and enforce national environmental and natural resources legislation; through increasing public sector capacity at both the national and municipal levels to identify and implement activities that promote environmentally sustainable economic growth; and through assisting civil society groups that advocate for and contribute to a cleaner environment and greater biodiversity protection.
- Haiti: USAID supports the National System for Disaster and Risk Management through the provision of training. Further, new watershed management programmes are under preparation.
- Cuba: Environmental mainstreaming in agricultural production projects is prominent.
- Jamaica: The USAID-Jamaica Rural Development programme clearly recognises the crucial importance of effective and sustainable natural resources management for development and economic growth. As a consequence, the programme include expected outcomes such as (1) improved management of ecosystems; (2) institutional capacity to manage natural assets increased and (3) more environmentally sustainable rural enterprises.

USAID also financed/carried out assessments of tropical forests and biodiversity conservation needs in the Dominican Republic (2002), Guyana (2008), Haiti (2006) and Jamaica (2003).

The United Nations Development Programme (UNDP)

UNDP Caribbean operates from Barbados (OECS sub-regional office), Jamaica (office covering 5 SIDS, amongst which Jamaica and the Bahamas), Cuba, Guyana and Haiti. The latter three offices are country-based offices. All these offices include "energy and environment" and "disaster risk reduction and disaster management" as focal themes in their respective cooperation strategies.

In relation to "energy and environment", most UNDP's initiatives and programmes are part of the GEF portfolio, including the Small Grants Programme, whereby UNDP acts in its capacity of GEF agency. (see annex 6.4 for further details)

Also in the area of disaster risk reduction and disaster management, many different initiatives are under implementation, most of them in the frame of coordinated multi-donor funded programmes. Worth mentioning here is the "Caribbean Risk Management Initiative (CRMI)" launched by the UNDP's Bureau of Crisis Prevention and Recovery (BCPR) and the Regional Bureau for Latin America and the Caribbean (RBLAC) in 2004 as an umbrella programme designed to build capacity across the Caribbean region for the management of climate-related risk. The CRMI is led by the Cuba and Barbados/OECS UNDP Country Offices, in close collaboration with partners and other UNDP country offices in the region.

The United Nations Environment Programme (UNEP)

UNEP is one of the main GEF agencies in the region and has as such an important stake in the formulation and management of the above-mentioned GEF-funded projects. The Regional Office for Latin America and the Caribbean (ROLAC) (based in Panama) mainly focuses its efforts on development and implementation of environmental law (including MEA) and policy; on environmental information, assessment and early warning; and on the understanding and knowledge of environmental issues related to industrial and urban development and to the use of natural resources and of chemicals.

Specifically for the region, UNEP administers the Caribbean Environment Programme (CEP). UNEP's Caribbean Regional Coordinating Unit (CAR/RCU) is located in Kingston, Jamaica and serves as the Secretariat to the CEP. The programme aims at promoting regional cooperation for the protection and development of the marine environment of the Wider Caribbean Region. The CEP is managed by and for the countries of the Wider Caribbean Region through the Caribbean Action Plan (1981) outlining regional environmental challenges. The Action Plan led to the 1983 adoption of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention), which provides the legal framework. The Convention has been supplemented by 3 Protocols addressing specific environmental issues, namely oil spills, specially protected areas and wildlife and land-based sources and activities of marine pollution. The CEP provides the programmatic framework for the Cartagena Convention. CEP has 3 main sub-programmes:

- Assessment and Management of Environment Pollution (AMEP)
- Specially Protected Areas and Wildlife (SPAW)
- Communication, Education, Training and Awareness (CETA)

Other relevant current and future activities are:

- Update of the Regional Environmental Outlook for the Caribbean
- Caribbean Biological Corridor in Haiti, Dominican Republic and Cuba (with EC funding)
- The Caribbean element of the 9th EDF Intra ACP Capacity Building Programme for the Multilateral Environmental Agreements.

United Nations Food and Agriculture Organisation (FAO)

Relevant FAO core activities/departments include: FAO and Emergencies, Global Information and Early Warning System, Fisheries & Aquaculture, Forestry, and Natural Resource Management & Environment. Apart from activities directly framing in and contributing to FAO's global programmes such as the Global Forest Resources Assessment, the National Forest Programme Facility, the Land-Water linkages in Rural Watersheds, Code of Conduct for Responsible Fisheries, Organisation of Regional Fisheries, the State of World Fisheries, etc... the region also benefits from specific cooperation projects implemented through the Technical Cooperation Department (TCD):

- FAO currently implements emergency response operations in Cuba, the Dominican Republic and Haiti;
- Emergency and post-crisis management projects are ongoing in most of the countries in the region;
- Haiti is receiving support for a NRM-related project; and
- Belize, together with some other Central American countries, is beneficiary of a regional fishery project.

World Wide Fund for Nature (WWF)

WWF's largest programme in the Region is situated in Suriname and Guyana and managed from the WWF Guianas Regional Office (Paramaribo, Suriname). Relevant projects are listed in annex 6.4. The WWF Central American Programme (office in San José, Costa Rica) develops some activities in Belize in the frame of the regional project: "*Conservation of the Mesoamerican Reef (MAR)*". This project aims at improving the management of protected areas and at influencing regional development in support of the conservation of the MAR.

Finally, Cuba has been receiving support from WWF-Canada for over two decades. WWF's involvement in Cuba has evolved from pilot projects to full-scale, national initiatives that are greening Cuban tourism, promoting sustainable fishing practices, and building a network of marine protected areas. With financial support from CIDA (400000 US\$) WWF-Canada currently implements a project for the conservation of the Hawksbill turtle. Thanks to the joint efforts of the Cuban Ministry of Fisheries and WWF/CIDA, Cuba decided to phase out the marine turtle fishery in its territory.

World Conservation Organisation (IUCN)

So far, IUCN's involvement in the region has not been very intensive. Until recently, IUCN's most relevant programme for the Caribbean was the Global Marine Programme (actively involved in the International Coral Reef Initiative and its operational framework the "Global Coral Reef Monitoring Network"). However, in September 2008, IUCN launched a new and important regional programme: the *Initiative for the Caribbean Region*. This programme includes a range of interventions aimed at improving the management of the region's major ecosystems by increasing knowledge, improving governance and empowering stakeholders at all levels (government, civil society and community) to be more effective in their natural resource management roles and responsibilities. The main components are: the preparation for a Caribbean Red List of Threatened Species; a programme on renewable energy; work in integrated planning, ecosystem management and sustainable livelihoods; and climate change adaptation.

Nature Conservancy (NC)

The Nature Conservancy (NC) is a North-American leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. In the Caribbean region, the NC is active in the Bahamas, Grenada, St. Vincent and the Grenadines, Jamaica, Belize, and the Dominican Republic. Their activities include a bi-national fishery programme for artisanal fisherman in Belize and Jamaica and lots of conservation work in national parks and protected areas, e.g. Parque Nacional del Este in the DR. In Grenada and St. Vincent & the Grenadines – an area new to NC – they are working with a local partner to survey the area, to identify threats and conservation strategies, and map priority sites in need of protection.

Major support is however going to the programme: *The Caribbean Challenge*:

NC has pledged US\$20 million to support The Caribbean Challenge, a programme based on the

unprecedented commitment by the Caribbean governments to support and manage new and existing national parks and protected areas throughout the region. The Bahamas, the Dominican Republic, Jamaica and St. Vincent & the Grenadines are already fully involved in the project; Antigua & Barbuda, St. Lucia, St. Kitts and Nevis and Dominica are considering the initiative and are reported as likely to sign on. The overall goal is the protection of at least 20 percent of the Caribbean marine and coastal habitats by 2020. The Conservancy's participation in the challenge differs from its conservation efforts in the Caribbean in the past, which have primarily focused on protecting individual sites.

In view of creating a long term financial sustainability for conservation in the region, the NC is also pledging US\$8.6 million to seed national-level protected area public-trust funds in countries that are part of the challenge. More than US\$40 million will be endowed in these trust funds (e.g. also KfW is contributing to these trust funds).

- Donor Coordination

The previous chapters 4.1 and 4.2 and annex 6.4 clearly demonstrate the presence of a vast range of donor agencies in the region as well as the multitude of environment-related initiatives they (have) support(ed). Unfortunately, proper coordination among donors and hence optimisation of the efficiency of all these donor investments and contributions in addressing environmental issues, remains to be a difficult point. The practical outcomes of the support initiatives are still limited due to concentration on policy development and capacity building, and few support for field implementation. The fact, that donors' regional offices are in different countries in the region and that the CARICOM HQ is not in the easiest of countries to access, does not help. Donor coordination has improved over the past years but there is still room for further improvement and steps need to be taken to avoid overlapping funding.

Hence, a good number of donor and/or thematic coordination groups exist but for various reasons they do not seem to achieve significant improvements. Some of the main reasons include:

- many cooperation groups only operate at a national - sometimes sub-regional (OECS) - level but there are very few coordination mechanisms established at the Caribbean level;
- few cooperation groups have a long life: creation and dissolution rates are too high;
- many groups are not "complete" in the sense that important stakeholders are not participating;
- the cooperation does not operate beyond the political level; participants meet and draw up minutes and other documents but when it comes to the establishment of genuine cooperation, parties stick too much to their own agenda;
- regional institutions such as for instance CDERA and CCCCC, who have a clear regional coordination mandate, lack the institutional capacity to perform well in this capacity;
- though in the end aiming at an increased efficiency of donor assistance, the operational cost of a well-functioning Caribbean coordination group is quite high.

Some examples of existing donor cooperation initiatives and mechanisms:

- The donor community in the Eastern Caribbean has coordination groups under the umbrella of UNDP. The group on disaster management, climate change and environmental management is led by CIDA.
- Initiatives aimed at developing closer cooperation are being promoted through the setting up of CARIFORUM/DOM/OCT/EU Task Forces, amongst others in the area of Disaster Management.
- In the DR, EU MS conduct annual coordination meetings. The Secretariat of Environment and Natural Resources presides an Interinstitutional Technical Group for Environment where all important stakeholders – at national level – are represented. This coordination mechanism was established under a GTZ-financed project and hence continues operating under the concerned Ministry.
- In Haiti, there is a close coordination among the different UN Agencies present in the country. Amongst other things, they developed the "UN Master Plan for Development Aid" in Haiti. A coordination platform also exists for the thematic area of "Watershed Management". Finally, USAID organizes monthly stakeholder/donor meetings for issues related to land use planning and natural resource management. Apart from USAID, the participants include IDB, EU, UNDP, WB, CIDA, French Cooperation and the Spanish cooperation.

5 Conclusions and Recommendations

5.1 Conclusions

The main conclusions of the precedent analyses can be summarised as follow:

Conclusion 1:

Environmental degradation and the unsustainable use of natural resources have continued in the Caribbean SIDS and LLCS, with negative consequences for social and economic development. The key economic sectors such as tourism, agriculture, fisheries and forestry depend heavily on more and more stressed natural resources. The ability of the Caribbean to reverse the trends of increasing environmental vulnerability and degradation is one of the key factors that determine whether or not development in these countries will be sustainable

Conclusion 2:

The key environment concern of all countries in the region is adaptation and preparation for climate change and natural disasters. Although the contribution of the Caribbean countries to this global phenomenon is very low, the potential impact is enormous. Other high ranked concerns, which originate from the countries own activities and policies are: land use management in a holistic way (water, forest etc), especially for coastal areas and watersheds; marine environment (important economic role of tourism, important fragile ecosystems), renewable energy/ energy effectiveness (to reduce deforestation/climate change and to reduce high expenses for energy) and waste/waste water management. Depending on the sub-regional specific situations (population density, economic activities, and development level of the countries) the ranking of environment problems after climate change and disasters varies as follows:

- Guyanas' sub - region: marine flooding, water drainage, avoid deforestation/protect standing forests, establishment of protected areas
- OECS region: waste from cruise ships (marine pollution), waste and waste water management, renewable energies
- Greater Antilles: water/watershed management, deforestation (energy supply), soil management/ erosion, renewable energies to reduce deforestation

Conclusion 3:

The Caribbean SIDS and LLCS have begun to take action towards achieving sustainable development at national and regional level and the countries have made significant progress in establishing comprehensive policy, institutional and legal frameworks for environmental management. But limited capacities and coordination difficulties – at national and regional level - are still major challenges in implementation/enforcement of existing policies/regulations and effective sustainable environmental management.

Conclusion 4:

Integration of environmental concerns into the main economic sectors is very varies between the countries and the sectors. Significant efforts have been made the last years in most sectors and countries, but up to now sea level rise and prevention of natural disasters are very rarely taken into account in urban development, infrastructure/transport and physical planning. The use of strategic instruments, like Strategic Environmental Assessments (SEA), environment/economic growth modelling and mainstreaming of climate change in national development agenda remain poor due to low priority of environment issues in decision making on national development planning.

Conclusion 5:

The importance given to the environment in the EU-CARIFORUM policy statements is not reflected in the current Regional Indicative Programme. Indeed, initially planned environment and disaster management components were left out of the 10th EDF RIP, since numerous complementary programmes in favour of the environment and climate change are currently on-going or in the pipeline, including the Global Climate Change Alliance (under which the region stands to benefit from €8 million), intra-ACP programme on

Disaster Risk Reduction for a total amount of €180 million, and the intra-ACP programme on renewable energies (under which the region stands to benefit from €1,5 million).. The same – though to a lesser extent – goes for the respective National Indicative Programmes (2008-2013). Only in a few cases is environment addressed as a focal sector and environmental mainstreaming in the selected focal areas is generally reported to be deficient. Further, the environmental initiatives (CARIFORUM Regional Task Force, GCCA, intra ACP-EU Natural Disaster Facility) referred to in the EU-CARIFORUM Troika Summit Agreement are not yet known by most of the EC Delegations and Ministries of Environment. Most are not put in place yet. The upcoming mid-term review is a key occasion to assess the validity of the RSP/NIP and the complementary environmental programmes ongoing and planned taking a holistic view of overall EU development assistance at regional level.

Conclusion 6:

The region accommodates an important donor community active in the environmental sector supporting a multitude of recently concluded and ongoing programmes and interventions addressing environmental issues. Priorities for donor assistance are the natural disaster-related programmes, ranging from relief and rehabilitation to management and preparedness. Adaptation to climate change – which is a very broad subject – is rapidly gaining importance. Donor coordination has improved over the last decade but still remains a difficult point. In general, the donor community displays a certain tendency towards contributing to multi-lateral and multi-donor initiatives rather than investing in smaller bilateral programmes.

Conclusion 7:

Authorities in the visited countries have a clear preference for national or sub-regional (Bi-national Haiti/DR, OECS, ...) field projects and programmes. The benefits from regional (pan-Caribbean) initiatives are perceived to be significantly less than those that are generated through national or sub-regional projects.

5.2 Recommendations

A code (1, 2 or 3) is attached to each recommendation to separate the recommendations addressed to Caribbean National Governments (1), the regional structures/institutions (2) and the donors (3). Recommendations which concern especially the EC cooperation are indicated (*) and linkages to the conclusions of the mission are shown below each recommendation. Performance indicators are proposed for thematic recommendations related to environment mainstreaming and management which involve EC and which are of relevance especially in the next RSP/CSP reviews and future planning / financing cycles of EC - Caribbean cooperation.

The most important key environmental priorities for future EC - Caribbean cooperation are high - lighted (written in bold) to facilitate future priority ranking and decision making concerning financial support of EC to environmental concerns in the Caribbean.

Preliminary remark:

Previous recommendations from UNEP Outlook 2004 and review of the Barbados Plan of Action 2005 are still considered valid. (see details in annex vol. 3 of this report, workshop report)

General and transversal recommendations

- As a regional priority EC/donor support should go to the implementation of existing regional policies and strategies coordinated by regional institutions, to multi-donor programmes (basket funding in a medium to long term) and to the implementation of MEA-related action plans (incl. harmonisation of these action plans at regional level). Within this priority framework for cooperation and based on the availability of significant budgets, the EC should put emphasis on the larger investment components such as infrastructure, construction, etc. Furthermore should a certain percentage of regional and national funding from EU be used for the implementation of measures proposed in chapter 4 of the CARIFORUM/EU EPA (2, 3)*
(Conclusion 2, 5)

- The close inter-linkages between environment and development have since long been recognised by the global community. In the context of the present study, this leads to the recommendation that environmental aspects should be part and parcel of all development programmes. Further, it should be taken into account that the implementation of predominantly socio-economic development programmes can be very effective in preventing further environmental degradation (e.g. programmes that focus on poverty reduction or employment creation and therefore reduce the pressure on natural resources).
(1, 2, 3)*
(Conclusion 1, 2, 5, 6)
- Environmental and natural resources are very important assets in the further development of the Caribbean region. A focus on the opportunities that are provided by these assets rather than on environmental problems could lead to a more positive attitude towards environmental management and to an increased environmental awareness both at decision-making and general public level. This positive opportunity approach should also be reflected in the regional development programmes. (1, 2, 3)*
(Conclusion 1, 4)
- Countries have to improve interdisciplinary coordination / harmonisation between technical ministries / institutions in order to increase effectiveness of the provided donor assistance. This includes simplification of the institutional framework for environmental management and clarification of the mandates. (1)
(Conclusion 3)
- The role of civil society as well as private sector in development processes should be enhanced.
(1, 2, 3)*
(Conclusion 3)

Specific recommendations per thematic areas:

NATURAL DISASTER RISK REDUCTION AND PREPAREDNESS, CLIMATE CHANGE ADAPTATION

- **Support the implementation of regional strategies to prepare and respond to CC (“Adaptation to Climate Change”, ‘Enhanced Comprehensive Disaster Management Strategy and Framework (2007-2012)’) as a central issue for development of the region incl. especially ‘Support significant infrastructure investments in the key sectors of the countries for adaptation to the expected climate changes’ (3)***
(Conclusion 2, 3, 4, 5, 6)
Indicators:
 - Damage in % of GDP / victims as % population from natural disasters.
 - Level of risk reduction achieved
- **Support countries in making use of funds available from the clean development mechanism (CDM) , Adaptation Fund (UNFCCC) and GCCA (2, 3)***
(Conclusion 2, 5, 6)
Indicators:
 - Number of initiatives and projects in the region funded by the mentioned mechanisms
- **Support assessments of climate change/hurricane impact on the economies (2, 3)**
(Conclusion 1, 2, 4)
- **Include natural disaster/climate change risk assessment in procedures for funded projects (3)***
(Conclusion 5, 6)
Indicator:
 - % of damage in donor funded project outputs
- **Support regional cooperation initiatives for preparation of human resources, update of technology and**

equipment, to improve early warning systems. (2, 3)*

(Conclusion 2, 3)

Indicator:

- % of population evacuated in time

- Strengthen the institutional capacity of existing monitoring and observation centers for early warning of natural disasters and support regional networking among these. (2, 3)
(Conclusion 2)

FOOD, WATER AND ENERGY SECURITY

- **Support energy efficiency and alternative/renewable sources of energy such as waste-to-energy initiatives (landfills, biogas), wind, solar, geothermal, (bio)fuels making use of existing alternative energy technologies in the region. (1, 2, 3)***

(Conclusion 1, 2)

Indicator:

- % of renewable energies in the national energy balance

This should include:

- * **Contribute to the Caribbean Renewable Energy Development Programme (3)***

(Conclusion 1, 2, 4)

Indicator:

- % of renewable energies in the national energy balance

- Support employment programmes in order to reduce poverty and reduce environmental stress Incl ecotourism, fishery programmes, sugar cane energy), (1)
(Conclusion 1, 2)

- Support the implementation of regional water management strategies, as currently under development by CARICOM and the implementation of food security strategies ("Promoting CARICOM/CARIFORUM Food Security, Jagdeo Initiative, Common fisheries policy for CARICOM countries) (3)*

(Conclusion 1, 2, 5)

Indicators:

- Damage in % of GDP / victims as % population from flooding
- Level of achievement of the objectives of the strategies
- Number of specific actions supported under these strategies

- Support water use, saving, drinking water supply (loss prevention through better maintenance, in particular of main water distribution systems) (3)(* CSP, facility)
(Conclusion 1, 2, 5, 7)

Indicators:

- Effectiveness of water use (% of water loss)
- % of population connected to safe water supplies

WASTE WATER AND WASTE MANAGEMENT

- **Support significant investments in waste water treatment, sewerage systems and waste disposal/treatment (3)(*CSP, water facility)**

(Conclusion 1, 2, 5, 7)

Indicators:

- % of population connected to sewerage systems
- % of water treated
- Quality of discharged treated water
- Quality of receiving surface water

- **Support infrastructural and management support for reception and treatment of ship generated waste (1, 2, 3)***
(Conclusion 1, 2, 5)
Indicators:
 - Amount/capacities of reception facilities installed
 - % of ship generated waste received and treated on – shore
 - Water quality in the coastal waters
- **Support institutional strengthening with respect to waste and waste water treatment (1, 2, 3)**
(Conclusion 2, 3)

INTEGRATED ECOSYSTEM MANAGEMENT

- **Continue/increase support to sub - regional environment initiatives which address shared resources in similar eco - regions (Caribbean Biological Corridor Initiative; bi-national Haiti-Dominican Republic Programme, with focus on NRM, watershed management; transformation of Dominica into an “organic island” (regional relevance) within the Caribbean SIDS programme) (3)***
(Conclusion 2, 5, 7)
Indicators:
 - Surface of intervention areas (marine/terrestrial) taken into account in sub - regional environmental projects
 - Income generated from sustainable use of biological resources
- **Establish partnership with Caribbean Environment Programme (as part of the UNEP Sea Programme) with special focus on treatment and management of marine ecosystem via the Caribbean Sea Commission (3) (*)**
(Conclusion 5, 6)
Indicators:
 - Existence of a formal cooperation contract EC – UNEP
- **Support the implementation of national Coastal Zone Management programmes (2, 3)(*CSP)**
(Conclusion 1, 2, 3, 4)
Indicator:
 - Level of achievements of the national programmes’ objectives
- **Design and support a regional programme on indigenous knowledge on biological resources, including protection of intellectual property rights and improvement of management, processing and commercialization of these products. (3)**

REGIONAL AND DONOR COORDINATION / PROGRAMMES

- **Develop a mechanism for better exchange of information between donors and regional agencies (including civil society organisations) on current priorities, specific projects planned and under implementation, etc. (2 CARICOM)**
(Conclusion 3, 6)
- **Set up a Caribbean-owned fund or a facility allowing exchange of human and technical expertise among countries of the region (added value: develop South-South cooperation, strengthen regional expertise, establish a database of country thematic experts, country focal points and key institutions).(2 CARICOM, 3)***
(Conclusion 3, 4)
Indicator:
 - Number of exchange programmes realised by CARICOM

GOVERNANCE AND DECISION MAKING

- **Support the implementation and the enforcement of existing environmental regulations (1, 3)***
(Conclusion 1, 4)
Indicators:
 - Number of control entities operational
 - Number of violations recorded and sanctioned
- Encourage SEA for the strategic economic sectors and make SEA a precondition for EC sector budget support to those sector with a high potential environmental impact (1, 2, 3)*
(Conclusion 1, 4)
Indicators:
 - % of sectors subject to SEA
- Develop environmental 'core' indicators for National/Regional Development Plans (1, 2)
(Conclusion 4)
- Support countries to develop a 'green economy', to show that environmental integration is not only a supplementary expense (2 CARICOM)
(Conclusion 1, 4)

INSTITUTIONAL STRENGTHENING/CAPACITY BUILDING

- Support capacity building on Environmental mainstreaming with emphasis on SEA, indicators, EIA environment screening) (2, 3)*
(Conclusion 1, 3, 4)
Indicators:
 - Number of people trained, % of programmes adequately mainstreamed

This has to include:

* **Reinforce capacity within EC delegations to ensure proper environmental mainstreaming in the RIP/NIP implementation and inclusion of environmental indicators in the 'internal evaluation grid at EC delegation levels'. (*EC Delegation/Helpdesk Environment)**
(Conclusion 5)
Indicators:
 - Level of inclusion of environmental mainstreaming in the programming
 - Number of EC staff trained by Environment Helpdesk
- Strengthen technical (new technologies energy, waste, water sector) and methodological (management, approaches) capacity of existing regional, national and local organisations and institutions involved in environmental management and control varying strongly per institute and per country;(1, 2, 3)
(Conclusion 1, 4)
- Support training/capacity building of the private sector in environmental management and cleaner production, technology and promote PPP and private sector international cooperation (1, 2, 3)*
(Conclusion 1, 4)
Indicators:
 - Existence of PPP agreements
 - Environmental initiatives undertaken by the private sector
 - Amount of international PP exchange initiatives realized
- Support regional cooperation initiatives that contribute to better preparation of human resources and update of technology and equipment with the view to improve the countries' early warning systems and

made regional funding available for capacity building (2, 3)*

(Conclusion 2, 3)

Indicators:

- % of population evacuated in time
- Number of people trained in this specific area
- Number of institutions well equipped

- Facilitate exchange and cooperation between the Caribbean Sea Commission (ACS) and other regional sea commissions, especially the Baltic Sea Programme (3)*

(Conclusion 5)

Indicators:

- Number of meetings/agreement between the ACS and other regional sea commissions

- Provide equipment to government institutions for emission control, environmental inspection (3)
(Conclusion 1, 4)

INFORMATION/COMMUNICATION/SENSIBILISATION/MONITORING

- Increase public knowledge on environmental regulations (1)
(Conclusion 1, 4)

- Provide information to interested parties and facilitate their access to EU funding opportunities (*)
(Conclusion 5)

Indicators:

- Number of new proposals submitted

- Increase access to information technology and improve capacity to apply it (e.g. GIS, remote sensing, IT, videoconferencing) (1, 2, 3)
(Conclusion 1, 4)

- Support programmes for the exchange and dissemination of existing knowledge and experience between countries (2, 3)
(Conclusion 3, 4)

- Support the CNIGS in Haiti to develop regional services throughout the Caribbean in satellite data collection and interpretation. The CNIGS would as such take on the mission of an Environmental Observatory for the Caribbean (3)*

Indicators:

- Number of services provided to structures in other countries within the region

Constraints to preparing the profile

During the mission the following practical problems were experienced:

- since the amount of mission days did not allow visits to all countries, the level of information per country varied substantially;
- since for Cuba a special 'cooperation' visa was required, a serious delay occurred with respect to this field mission;
- response to the invitations sent out for the workshop was around 50% . However, it was felt by the workshop participants that for this reason the WS conclusions do not correctly reflect the vision of the

region.

- support of EC-delegations during the fact finding, Workshop organisation was sometimes poor in terms of identification of adequate contact persons, logistical support like support for money transfer for the organisation of the Workshop