# TRADE AND ENVIRONMENT REVIEW

2003

**Article 3** 



# **ARTICLE 3:**

# Environmental goods and services: Challenges and opportunities for central american and caribbean countries

# Luis Barria<sup>®</sup>, Catherin Cattafesta<sup>®</sup>, Raul Garrido<sup>®</sup>, Maria Pia Hernandez<sup>®</sup> and René Vossenaar<sup>®</sup>.

- <sup>①</sup> Director, Technical Cooperation Division, National Environmental Agency, Panama
- <sup>2</sup> Consultant, Ministry of the Environment and Natural Resources of the Dominican Republic and UNCTAD
- <sup>3</sup> Economic Specialist, Environmental Directorate, Ministry of Science, Technology and Environment (CITMA), Cuba
- <sup>(4)</sup> First Secretary, Permanent Mission of Nicaragua to the United Nations and Other International Organizations in Geneva
- (§) Head, Trade, Environment and Development Branch, Division on Trade in Goods and Services, and Commodities, UNCTAD secretariat

# A. Background

UNCTAD is providing assistance to five Central American countries (Costa Rica, Guatemala, Honduras, Nicaragua and Panama)¹ and two Spanish-speaking Caribbean countries (Cuba and the Dominican Republic) with a view to enhancing their ability to participate effectively in the World Trade Organization (WTO) negotiations on trade and environment and address key trade and sustainable development linkages. These countries have identified the examination of implications of trade liberalization and strengthening of domestic capacities in environmental goods and services (EGS) as a priority issue to be addressed under the project "Building Capacity for Improved Policy Making and Negotiation on Key Trade and Environment Issues".²

There is wide recognition of the important role of EGS in promoting the sustainable development process. This is reflected in paragraph 31(iii) of the Doha Ministerial Declaration (DMD), which calls for negotiations, with a view to enhancing the mutual supportiveness of trade and environment, on "the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services". However, a number of important issues must be addressed to ensure that developing countries in Central America and the Caribbean can participate in negotiations with prospects for the best possible outcome vis-à-vis their trade and development objectives. Among the issues are:

- What are environmental goods and services and how are they defined in the context of the WTO negotiations?
- What are the benefits (and risks) of trade liberalization in EGS for Central American and Caribbean countries?
- Does the region have export potential in certain segments of the EGS industry?
- What classification of EGS best suits the trade and sustainable development interests of the region?
- What are the implications of trade liberalization for the development of domestic EGS sectors?
- What should be the negotiating objectives of countries in the region?
- What conditions should be attached to specific commitments, if any?

Environmental goods and services play a key role in the sustainable development process • What are the capacity-building needs of countries in the region relating to EGS, in particular in the context of their participation in the WTO negotiations?

A major concern for countries in the region is how to overcome the lack of access to critical information about EGS, their lack of a common understanding of key concepts and classifications, their institutional weaknesses and the poor coordination that exists at the national level relative to negotiations involving EGS — all of which make it difficult to effectively prepare for, and participate in, negotiations. The project will help to eliminate these constraints by helping countries in the region to (a) fill in existing information and research gaps; (b) strengthen policy coordination; and (c) explore issues of regional interest. The project also promotes national studies, national and regional policy dialogues, and inputs from Central American and Caribbean countries to WTO discussions relative to EGS.<sup>3</sup>

National studies feature prominently in the project, Building Capacity for Improved Policy Making and Negotiation on Key Trade and Environment Issues National studies feature prominently in the project. They provide in-depth clarification of both technical and substantial issues relative to EGS and WTO negotiations in this area. They include a focus on (a) the structure and characteristics of the environmental services sector in given countries; (b) relevant national legislation; (c) preliminary assessments of present and potential EGS markets; and (d) possible approaches, from a national perspective, to WTO negotiations on EGS trade liberalization. To date, Cuba, the Dominican Republic, Honduras, Nicaragua and Panama have prepared (preliminary or final) versions of national studies, funded largely by the Governments of the countries concerned (see annex I). Further analysis is being carried out with the help of research institutes or consultants recruited under the project (see annex II). This includes a study on Guatemala.

Thus far, several meetings have already been organized in the region with a view to improving the level of understanding of EGS issues and related negotiations. The secretariats of UNCTAD and the Economic Commission for Latin America and the Caribbean (ECLAC) jointly organized a workshop on EGS in Havana, Cuba, in March 2003.6 National workshops were also held in Nicaragua and Panama in June 2003,7 and a national workshop for the Dominican Republic is scheduled to take place in early 2004. The regional meeting in Cuba gave rise to constructive discussions regarding the preliminary results of the national studies, and allowed the exchange of national experiences relating thereto. Participants also explored issues of regional interest and benefited from the opportunity to plan future activities under the auspices of the project. The national workshops in Nicaragua and Panama brought together officials from trade, environment and other ministries, suppliers of environmental services, and other stakeholders for similar discussions and activities. These workshops allowed participants to clarify concepts and engage in constructive coordination at the national level. This was the first time that government officials from relevant ministries and government agencies had come together for a structured and comprehensive discussion of EGS liberalization. The regional and national meetings were particularly beneficial because they allowed interaction between capital-based policy makers and Geneva-based trade negotiators. This interaction has encouraged the sharing and dissemination of information with capital-based policy makers, as well as clarification of the kind of information and analysis that trade negotiators expect and require from project activities.

National and regional workshops help to clarify concepts and to promote policy coordination

Several experts presented their national experiences on the basis of activities carried out under the project in a recent UNCTAD Expert Meeting on Definitions and Dimensions of Environmental Goods and Services in Trade and Development held in Geneva, from 9 to 11 July 2003, back to back with the Special Session of the WTO Committee on Trade and Environment (CTE). The agenda of the meeting featured presentations by

several regional experts who relayed their national experiences on the basis of activities carried out under the project. It provided an opportunity to bring the national experiences of Central American and Caribbean countries to the attention of the international community, thereby contributing to the international debate on EGS. The discussions also provided useful insights for future activities under the project.

The activities carried out thus far have provided valuable lessons learned that are reflected in this article. Section II summarizes discussions concerning definitions and classifications. Section III analyses progress made in national studies on the environmental services sector. Section IV examines how countries in the region have been approaching WTO negotiations on liberalisation in environmental services. Section V describes the implications of negotiations on environmental goods for countries in the region. Section VI discusses the possible orientation for further capacity-building work on EGS to help countries in the region to participate as effectively as possible in the WTO negotiations. The conclusions are contained in section VII. Annex 1 analyses the Central American Free Trade Agreement (CAFTA).

#### **B.** Definitions and classifications

# 1. Concepts

The results of the meetings and the conclusions of the country studies offered important lessons learned regarding the need to distinguish between the different concepts relative to environmental services and environmental goods. For example, environmental services have been defined both as services provided by ecosystems<sup>8</sup> (e.g. carbon sequestration) and as human activities (e.g. wastewater management) to address particular environmental problems. While ecosystem services themselves are not currently being negotiated in the WTO, this paper will show that a growing number of projects dealing with certain ecosystem services, for example in the area of carbon sequestration and the Clean Development Mechanism (CDM), are an important driver of demand for environment-related consultancy services.

Different concepts of environmental services and environmental goods are used in the region

Trade negotiators are familiar with the concept of environmental services currently used in the WTO. However, many environment and other ministries in Central American countries are more familiar with the concept of ecosystem services, owing to their rich biodiversity endowments. These countries possess great potential for the commercial exploitation of environmental services provided by their ecosystems to support sustainable development objectives. Costa Rica and Nicaragua have already generated significant revenue from this kind of activity. In most cases, however, the economic value of such services has still not yet been well established. Many studies and projects are therefore carried out in the region on valuation techniques and the design of instruments to enable the commercialization of such services. In the context of the formulation and implementation of these projects, many environment ministries and other relevant institutions in the region have formally adopted a definition of "environmental services". The growing awareness of the potential economic benefits of ecosystem services (formally labelled "environmental services") has contributed greatly to the popularization of this concept in the region.

In the **Dominican Republic**, for example, the Commission on Environmental Services was created in 2001 within the Ministry of Environment and Natural Resources (*Secretaria de Estado de Medio Ambiente y Recursos Naturales*, SEMARN), as mandated by Law 64-00 on Environment and Natural Resources. The law recognizes the

concept of environmental services and the need to estimate their value and to incorporate them into the National Accounts System. **Honduras** is creating a Unit for Environmental Goods and Services, within the Ministry of Natural Resources, which will aim to strengthen national capacities to address EGS issues, and which will be supported by a National Commission on Environmental Goods and Services. The objective is to provide a forum for discussion and exchange of information at the national level. This Unit is expected to focus on ecosystem services<sup>9</sup>.

Several countries have created special entities to deal with environmental services provided by eco-systems

In **Nicaragua**, the Ministry of Environment and Natural Resources (MARENA) has an Office of Environmental Services that is in charge of identifying the potential that environmental goods and services of the national ecosystem have to offer, and their potential to be used commercially at the national and international levels. At the Central Bank level, satellite accounts have been included in the system of national accounts. These are currently in the process of being completed on the basis of the definition of indicators that allow for an assessment of the economic value of the country's natural resources. The Office of Climate Change is located within MARENA and is in charge of the certification of payments for carbon sequestration as an environmental service.

A working group has also been created in **Cuba**, but its focus is more on environmental services currently being negotiated in the WTO (see below).

It has been noted that the classification of (trade in) "environmental" services in the WTO context is based on the concept of human activities, such as sewage or wastewater management, and that it would be more appropriate to describe them as "environmental management" services. 10

Beneficiary countries participating in the project have agreed to initially focus project activities on EGS sectors covered by the WTO negotiations. Thus, work on services will focus on environmental services based on classifications used in requests and offers in the negotiations.<sup>11</sup>

Similarly, there is a need to carefully focus project activities on "environmental goods". Many experts in the region understand these to include a rather broad range of products derived from the sustainable use of biodiversity. Countries in the region could use the negotiations to seek to remove obstacles to certain categories of such products, for example in the area of certification. However, certain categories of environmentally preferable products (EPPs) could be problematic in the context of the WTO negotiations concerning paragraph 31(iii). These issues are examined in section IV.

# 2. Classification of environmental services in the WTO

The classification of environmental services in the WTO context has been addressed at length in project activities, and some attention has been drawn to the fact that proposals on environmental services submitted thus far to the Council on Trade in Services (CTS) generally reflect the view that the current classification contained in the Services Sectoral Classification List (W/120)<sup>13</sup> does not properly reflect the manner in which industry currently operates, and that it needs to be modernized.<sup>14</sup>

The European Communities, Switzerland and others have proposed a new classification for "core" environmental services that would better reflect current trade and sector-specific realities. <sup>15</sup> The European Union, <sup>16</sup> for example, is proposing a reclassification of "core" environmental services, which includes a larger number (seven) of environmen-

Different classifications of environmental services are used in bilateral requests in the WTO negotiations tal sub-sectors (see table 1).<sup>17</sup> In addition, attempts have been made to take account of environmental "end-use" services or services with an "environmental component" in order to secure commercially meaningful commitments.

W/120		Pro	Proposal			
A	Sewage services (CPC 9401)	A	Water for human use and wastewater management (CPC 9401)			
С	Refuse disposal (CPC 9402) Sanitation and similar services (CPC 9403)	В	Solid/hazardous waste management (CPC 9402)			
D	Other	С	Protection of ambient air and climate			
		D	Remediation and clean-up of soil and water			
		Е	Noise and vibration abatement (CPC 9405)			
		F	Protection of biodiversity and landscape (CPC 9409)			
		G	Other environmental and ancillary services (CPC 9403)			

Independent of the determination of which classification would be used in the negotiations, there is a need for classification systems that are well understood and agreed upon by environmental authorities and services providers. It is noteworthy that several countries have already developed their own classification. In **Cuba**, for example, the national classification of environmental services is based on the life cycle concept, and takes into account the fact that environmental services are closely related to consulting services that appear under Central Product Classification (CPC) division 86 (professional services).<sup>18</sup>

In **Honduras** and **Nicaragua**, basic environmental services such as sewage, potable water, hazardous waste treatment and others are included under one single sector — "water and sanitation" — with a common set of policies, institutions and legal framework, which attests to a lack of specificity in the classification system.

Close cooperation between trade and environmental authorities is a prerequisite to developing structured classification systems that provide concise information. A balance has to be found between the need for a modernized classification of environmental services as a means to allow for commercially relevant commitments on the one hand and developing countries' concerns about the implications of reclassification exercises and a broadening of the environmental services sector under the General Agreement on Trade in Services (GATS) on the other. In this regard, it is widely agreed that classification issues should be resolved multilaterally rather than through the request-and-offer process.

It would be preferable to resolve classification issues multilaterally rather than through the requestand-offer process

#### C. National studies on environmental services

Country studies have thus far largely focused on sectors for which a certain amount for information was available, notably water and wastewater services, waste management, recycling and professional services. <sup>19</sup> In the subsequent phases of implementation of the project, these sectors will be further analysed and the sector coverage will gradually increase to include other sub-sectors (including, where possible, those for which information is currently very scarce).

Environmental services differ greatly in market structure and behaviour, regulatory frameworks and technological development. It is therefore useful to distinguish between (a) environmental infrastructure services which relate mainly to water, sanitation and waste management; (b) non-infrastructure, commercial environmental services, comprising most of the activities in CPC Division 94,<sup>20</sup> for example site clean-up and remediation, cleaning of exhaust gases, noise abatement, nature and landscape protection; and (c) related services with environmental end-use as classified under different divisions in the CPC, for example construction or engineering services. This section focuses primarily on (a) environmental infrastructure services and (b) professional environmental services.

### 1. Environmental infrastructure services

Most studies highlight the need to improve the efficiency and quality of basic, infrastructure-related environmental services such as water and sanitation. In most cases, however, this requires large investments and access to technology and management practices. In general, countries in the region acknowledge the potential benefits of private sector participation, including through foreign direct investment (FDI), but they stress the need to develop adequate regulatory frameworks to ensure that national environmental, social and developmental objectives are respected. In the light of these concerns, some studies note that it would be useful to examine the experiences of developing countries that have already liberalized certain environmental services sectors for guidance on the best manner to proceed. There are also concerns about the social implications of the eventual privatization and liberalization of basic environmental services, such as potable water, and about access by the poor to such services at affordable prices. Experience has shown that Central American and Caribbean countries lack the resources and capacity to subsidize basic environmental services once they have been privatized.

In **Cuba**, basic environmental services such as drinking water and wastewater management, hazardous waste management and recycling are well developed. Around 95 per cent of the population has access to water and 95 per cent has access to sanitation services. However, large investments are needed to maintain and upgrade existing infrastructure, as well as to develop new facilities. The collection and disposal of solid urban waste as well as recycling activities are carried out entirely by State-owned companies. The main constraints facing these sectors are lack of equipment, technology and finance.

The Government of Cuba attaches high priority to resolving environmental problems and in that regard, real investment in the environment has increased significantly. Cuba has a very comprehensive environmental legal framework, but it is not sufficiently complete to regulate services activities, which had a non-market character before the 1990s. The Government has determined that increased levels of FDI can be directed to the environmental services sector through the creation of joint ventures. Joint ventures with foreign capital have already been established in the water, recycling and other sectors.

Private sector participation, including through FDI, can be beneficial but adequate regulatory frameworks need to be developed However, in order to ensure sustained levels of FDI inflows into these sectors, it will be necessary to improve and strengthen their respective regulatory frameworks.

Several associations and joint ventures with foreign capital have been created to provide environmental services in different sectors of the economy, including the iron and steel industry; construction; science, technology and environment; tourism; basic industry; and hydraulic resources. In the aqueduct and sewage system sub-sector, the joint venture "Concessionaire Society for the Management and Promotion of Sewage, Cleaning, and Pluvial Drainage Services" (Sociedad Concesionaria para la Gestión y Fomento de los Servicios de Alcantarillado, Saneamiento y Drenaje Pluvial S.A.) is particularly important because of its size. Other joint ventures are Aguas Habana, with participation of the Spanish "Company Specialized in Engineering, Geographical and Environmental Solutions" (CESIGMA S.A.), and CUREF S.A., which is a joint venture between the Netherlands company CUREF SA and the "Union of Enterprises for the Recovery of Raw Material" (La Union de Empresas de Recuperación de Materias Primas, UERMP), which processes and trades non-ferrous scrap for the export market.<sup>21</sup>

In Cuba, several joint ventures with participation of foreign capital have been created to provide environmental services in different sectors of the economy

In the **Dominican Republic,** water and sanitation services, as well as the collection and management of hazardous waste are largely handled by the public sector, as determined by existing legislation. Decentralized corporations manage water services, and the private sector is playing an increasingly important role in the administration and collection of charges. Although in some municipalities the provision of services is efficiently managed, serious problems in potable water supply are predicted if existing inefficiencies in administration and resource management are not resolved. The adoption of a more modern legal framework is considered necessary to improve coordination between the institutions involved, and to increase efficiency at all levels. Nevertheless, it is necessary to carry out a social impact assessment, in particular with regard to the poorest segments of the population, prior to possible privatization. Lack of progress in adopting the Framework Law (Ley Marco) can in part be attributed to difficulties experienced in the privatization of the electricity sector, where no significant improvements in the supply of this service were observed despite notable increases in electricity prices. However, to the extent that existing draft legislation will eventually be adopted without major changes, water and sanitation services are expected to be open for privatization. The level of revenue that will be generated from the commercial development of these services will depend on the capacity of the authorities to regulate and control eventual concessionaries and ensure that social criteria are not sacrificed.

Foreign services suppliers play a significant role in the collection and management of solid waste in the Dominican Republic.<sup>22</sup> Recycling activities are carried out entirely by private companies. Foreign firms also participate in a number of services with environmental end-use, including construction services related to basic infrastructure services such as potable water and wastewater treatment. There is a very large foreign participation in the professional services sub-sector (see below).

In **Honduras**, the major constraint on private investment in environmental services is the absence of an institutional and regulatory framework. Although new legislation has been enacted to end State monopolies and create possibilities for private participation, it has not always been possible to effectively implement such legislation. In the case of water and sanitation, for example, the regulatory framework has yet to be completed. The existing legislation was enacted 40 years ago when a State enterprise was created with the mandate to supply basic water and sanitation services to all locations with over 500 inhabitants. A law adopted in 1999 authorizes the National Aqueducts and

Foreign services suppliers play a significant role in the collection and management of solid waste in the Dominican Republic Sewage Service (*Servicio Nacional de Acueductos y Alcantarillados*, SANAA) to grant concessions to private operators, but no concessions have been granted so far.

Waste management falls under the responsibility of municipal authorities in Honduras. However, municipal legislation authorizes the outsourcing of approximately 50 of such services, in particular waste collection, to private services providers. Waste collection has been privatized in the 22 largest municipalities, and there are also small services providers, such as community groups and natural persons that operate in the informal sector. In some cases, international concessions have been granted for the treatment and final disposal of solid and organic wastes.

**Nicaragua** has legislation in place that allows the issuance of concessions and licences to local and foreign firms as well as natural persons to supply services. In practice, however, basic environmental services are supplied largely by public companies.<sup>23</sup> The public sector in Nicaragua remains largely responsible for the provision of the majority of environmental services, particularly those associated with sewage, the treatment and disposal of wastewater, garbage collection and the monitoring of vehicle emissions. In general, these services are deficient and there is a need for more modern infrastructure and wider coverage of services, which represent high economic and political cost for both the investor and the host country. These are some of the reasons that make private investment in environmental infrastructure services somewhat unattractive.

Moreover, the public administration and private enterprises in Nicaragua tend to possess limited knowledge about the classification of different services they offer the population. This is the case, for example, with the monitoring of vehicle emissions. This service is seen more as an obligation or legal requirement that the citizen must fulfil if he/she owns a vehicle rather than an environmental service. This lack of understanding of the classification of environmental services also affects statistics and professional registrations as these do not faithfully reflect the existence of professional services of an environmental nature, and they are not registered as such – which makes it difficult to evaluate available statistical data.

In **Panama**, with the exception of Panama City, solid waste management services have been privatized in all of the largest municipalities. The largest factor contributing to this development is the lack of efficiency of public services.

Non-governmental organizations (NGOs) play an important role in improving sanitation services. The association for the promotion of environmental sanitation in communities (*Asociación para la Promoción del Saneamiento Ambiental en Comunidad, APROSAC*), for example, is implementing various projects aimed at promoting improved sanitation services.<sup>24</sup> A solid waste project, supported by the Inter-American Development Bank (IDB), aims to implement a strategy to decentralize waste collection to municipalities and enable them to grant concessions to micro and small enterprises in beneficiary communities to deliver such services. The project seeks to strengthen the technical and financial capacities of micro and small enterprises, create employment, decrease the volume of waste that is improperly disposed of in communities, promote environmental awareness, and improve health conditions in beneficiary communities.

NGOs promote the role of communities in providing environmental services in Panama

Legislation requiring environmental impact studies for new investments creates demand for environment-related professional services in several countries in the region

#### 2. Professional services

Several Central American and Caribbean countries are developing or strengthening capacities in environment-related professional services. In the **Dominican Republic**, this sub-sector emerged as a result of Law 64-00, which created a legal obligation to carry out an environmental impact study, including the elaboration of an environmental management and adjustment programme (*Programa de Manejo y Adecuación Ambiental, PMAA*), before any new investment could be authorized, thereby creating a market that did not exist before. Thus, a new category of professionals emerged, representing different disciplines (almost 30 per cent are civil engineers, with different specializations).<sup>25</sup> Services suppliers are considered to fall under the category of environmental services if they are registered by SEMARN. Around 350 consultants and consultancy firms are currently registered, although it is estimated that only one third of them have actually carried out environmental impact studies since 2000. Around 25 per cent of the consultants are foreigners.

It was originally considered that environment-related professional services could and should be included under CPC 94090. A detailed analysis of the services suppliers registered by SEMARN shows that all of them have professions that belong to CPC division 85.<sup>26</sup> SEMARN and SEREX (*Secretaria de Estado de Relaciones Exteriores*) have created a working group of environmental services suppliers with a view to undertaking an analysis to ascertain whether and to what extent there are possible overlaps in the services registered by SEMARN and other services, as well as to issue an opinion on the possibility of making commitments in the context of the GATS. So far the group seems to favour the view that environmental and other services should be negotiated separately, although negotiations should be consistent with offers already made with regard to CPC division 85.<sup>27</sup> An exhaustive analysis is needed of immigration, labour and fiscal regulations before any offer can be made. The transfer of know-how is also an important concern. The sub-sector is quite open, but the 1992 Labour Code (*Codigo de Trabajo*) determines that foreign personnel of any company located in the Dominican Republic should not exceed 20 per cent of total personnel.

The register of the College of Civil Engineers of **Honduras** includes providers of professional services related to water and sanitation. The Ministry of Natural Resources and the Environment keeps a register of professionals and institutions that provide services such as consultancies, environmental impact assessments and environmental auditing. However, the ministry does not possess a registry of providers of services of environmental management services. Data collected under the project indicate that approximately 80 companies provide design services and 30 companies provide construction services related to water and sanitation. In addition, there are some 158 individual consultants that are also qualified to provide design services.

Multilateral aid agencies, such as the IDB and the World Bank support the creation or strengthening of domestic capacities for the design and maintenance of sanitation services. These activities are carried out in the context of the modernization of the sector, prior to liberalization. It is to be noted that liberalization triggers resistance if it is not accompanied by efforts to consolidate and strengthen domestic capacities. It is expected that over a period of approximately two years domestic capacities will have been sufficiently strengthened to provide maintenance of sanitation services, either individually or through joint ventures.

The Labour Code of **Nicaragua** limits the number of foreign staff employed by legally established enterprises in the country to 10 per cent of total staff. The Ministry of

Several countries in the region keep registers of companies and natural persons providing environment-related professional services, e.g. environmental impact studies

Labour is authorized to increase this limit if the enterprise can prove that the specialized skills it requires do not exist in the local labour market.<sup>28</sup> The Ministry of Finance (*Ministerio de Hacienda y Crédito Público*) has therefore established a mandatory register of service providers for enterprises and individuals that seek public contracts with the Government. However, the register in force in July 2003 contained no information on existing providers of environmental services in Nicaragua.

In the light of the aforementioned limited amount of national data, a survey was carried out as part of the project to obtain information reflecting the availability of professional environmental services in Nicaragua. The data obtained to date from the Nicaraguan Association of Sanitation Engineers demonstrate that there are approximately 20 enterprises that offer design services for water and sanitation and about 15 enterprises that provide construction services for water and sanitation. In addition, there are approximately 45 consulting companies qualified to offer design and consulting services in the area of water, sanitation and environmental engineering.

In Nicaragua, the official national register of professionals that lists both natural and legal persons that offer environmental services does not adequately reflect, in exact figures, the degree of professional environmental services that are on offer in the country. Therefore, before making any decisions regarding negotiations, it is vital to know the existing supply for that sector in Nicaragua.

In **Panama**, the National Environmental Authority (ANAM) has registered some 85 companies and 500 natural persons qualified to carry out environmental impact studies. Some 70 natural persons have been registered as environmental auditors, in addition tosix6 companies.

# 3. Demand for environmental services

There is a large need for environmental services in the region

One of the objectives of the country studies is to assess the demand for environmental services, as it has been observed that there is a strong need for environmental services in several countries in the region. In **Nicaragua**, for example, only 54 per cent of the population has access to potable water. The potable water coverage ratio is 79 per cent in urban areas and 20 per cent in rural areas. <sup>29</sup> Only 19 per cent of the population has access to sanitation services. It is estimated that in Nicaragua only 49 per cent of solid waste is recollected. Solid waste management is therefore one of most important urban environmental problems. Municipalities collect less than 50 per cent of waste and the rest is disposed of illegally. As much as 98 per cent of waste is disposed of in open-air waste sites and 13 per cent of these deposits do not comply with the standards of the Ministry of Health. The degree to which these needs are translated into demand for environmental services depends on several factors, such as availability of finance as well as existing regulations and their enforcement.

In addition to the services mentioned above, large infrastructure projects, environmental regulations for a variety of public services, environmental requirements affecting industrial sectors and projects in areas such as climate change also contribute to creating demand for different categories of environmental services.

In **Cuba**, funding from the Japan International Cooperation Agency (JICA) has made it possible to implement a project to clean the harbour of Havana. This has in turn created demand for environmental services for the remediation and the treatment of oil spills as well as for systems to treat residual waters from the domestic and industrial

Infrastructure projects, environmental regulations for public services and industrial sectors as well as MEAs create demand for environmental services activities that are spilled into the bay and surrounding areas. Activities falling within the framework of the CDM will also generate demand for a range of environmental services.

The study on the **Dominican Republic** notes that investors also generate demand for local professional environmental services such as environmental impact assessments, which are legally required when they initiate procedures to obtain an environmental licence for activities in sensitive sectors.

In **Nicaragua**, the demand for environmental services at the municipal level (both rural and urban) is high. There is a general vacuum in waste collection related to changes in the way people dispose of household waste and lack of infrastructure. Also, the collection of black and grey waters is a priority for local governments as in most towns these waters are emptied directly into neighbouring water bodies (crater-formed lagoons, lakes, lagoons and the ocean). In addition, activities associated with coffee, dairy and tannery industries, and others, create a high volume of waste, demanding not only services but also user-friendly environmental technology.

To date, Nicaragua imports plastic and paper waste used to meet the needs of recycling plants in the country. This creates a need for environmental services and is also a way to provide an incentive for the environmental service market by stimulating short-term economic benefits, such as the ability to use waste (plastic, steel, aluminium, etc.) for commercial purposes.

Moreover, in Nicaragua there is a need to utilize environmental professional services to carry out impact and evaluation studies that are required by law. Impact and evaluation studies are a necessary prerequisite for obtaining a licence from the appropriate authority to undertake any private or public project that could modify the environment or the country's natural resources.

Also, in the light of the ratification of various multilateral environment agreements (MEAs), there are programmes and projects that are being implemented in Nicaragua that also require environmental services, both at a professional and an infrastructure level. Examples of this include the following: the implementation of the CDM as a result of the ratification of the Kyoto Protocol, and the need to manage hazardous wastes in accordance with obligations under the Basel Convention (BC) on the Control of Transboundary Movement of Hazardous Wastes and their Disposal.

In **Panama**, the Panama Bay sanitation project (*Proyecto de Saneamiento de la Bahía de Panamá*), one of the most important public works, is expected to create a large demand for environmental services, including sewage services, clean-up of water and land to decontaminate lakes, coasts and coastal water, and related consultancy services.

The Panama Bay sanitation project creates a large demand for environmental services

Regulations governing public services also generate demand for environment-related professional services. One example, referred to above, includes the requirement for companies to conduct environmental impact assessments prior to obtaining certain licences. The main regulatory authority for public services (*Ente Regulador de los Servicios Públicos*), created in 1996, is charged with ensuring that public services providers comply with existing regulations relating to the management of natural resources and the protection of the environment. Its mandate specifically covers services relating to potable water, sanitation, electricity, telecommunications, radio and television, and transmission and distribution of natural gas. Regulations require companies that provide water and sanitation services to present environmental impact studies and environmental plans prior to the development of new projects. Of particular importance is Law 6 of

1997, which regulates the electricity sector,<sup>30</sup> and has as its main objectives to secure the efficient supply of various sources of energy while respecting social, economic and environmental conditions, and to ensure financial viability.

Another project that is likely to generate demand for environmental services is the Programme of Instruments for Environmental Management and Enterprise Participation in Clean Production (*Programa de Instrumentos de Gestión Ambiental y Participación Empresarial en la Producción Limpia*). This project is the result of a formal agreement between the Government and the private sector, and aims to improve competitiveness and environmental performance through clean production systems. To effectively implement the project, time schedules have been established to monitor and ensure that companies comply with environmental standards, in accordance with the environmental impacts of their activities.

Finally, the Panama study lists carbon sequestration certificates as another potentially important factor that increases demand for environmental services. In fact, the electricity company *Fortuna* has successfully completed a process that has generated sales of carbon certificates. While carbon trading is not covered under the GATS services classification or within any of the proposals circulated so far, it is expected that national efforts to derive benefits from opportunities provided by the CDM will generate demand for environment-related professional services.

# 4. Export potential in environmental services

In most cases, strengthened national capacities in environmental services are expected to result in improvements in the coverage and quality of services available in the domestic market.<sup>31</sup> Some countries may have good potential to export professional services, in particular in cases where demand for such services is being created in the domestic market, as is the case in Panama. Export success will, however, to a large extent depend on quality assurance and the removal of possible obstacles to the "mode 4" provision of services in external markets

In **Cuba** the most developed segments of environmental services are in the area of studies, assessments and consultancy services (CCP division 83).<sup>32</sup> Environmental consulting and studies constitute the most developed sub-sector. Given the high levels of education, Cuba has good export potential in this sub-sector. Cuba has exported such services to Brazil, the Dominican Republic, Haiti, Mexico, Nicaragua, Spain and Venezuela. However, there is a need to better assess potential export markets in the Caribbean.

In addition, there may be options for expanding regional trade in environmental services, including by incorporating "mode 4" provisions in the context of regional trade agreements. This issue has received relatively little attention in the country studies.

#### D. Trade liberalization in environmental services

#### 1. WTO negotiations

Prior to Doha, two countries in the region - **El Salvador** and **Panama** - had already made liberalization commitments in certain segments of the sub-sector "other environmental services". The schedule of El Salvador covers cleaning services for exhaust gases

(94040); noise abatement services (94050); nature and landscape protection services (94060); and other environmental protection services (94090).

Since the Doha Ministerial Conference, Central American countries, Cuba and the Dominican Republic have received several bilateral requests to liberalize their environmental services sectors. Different classifications have been used in these requests, including classifications proposed by the European Communities. In general, countries have been requested to make horizontal commitments with regard to mode 4, as well as market access and national treatment commitments with regard to modes 1 (where technically feasible), 2 and, in particular, mode 3.

**Cuba** has proposed that market access negotiations should provide appropriate guarantees with respect to: <sup>33</sup>

- A real transfer of technologies on a favourable commercial basis to ensure that developing countries can enhance competitiveness;
- A transfer of associated know-how;
- The creation of national technical capacities, both human and institutional, to promote subsequent national development of these services; and
- Specific commitments concerning modes of supply of interest to developing countries.

This proposal indicates the importance that Cuba attaches to special and differential (S&D) treatment for developing countries in the EGS negotiations. In addition, it takes into account the fact that there is an intrinsic relation between trade in goods and trade in services, in particular because an important part of the imported services requires the importation of related environmental goods. Therefore, S&D treatment should be granted for environmental goods that are imported in conjunction with trade liberalization in certain environmental services. Examples of S&D conditions include commercial credits with "soft" conditions and long grace periods, as well as preferential conditions when developing countries export "mode 4" environmental services. One factor that makes it difficult to reach agreement on S&D in environmental services negotiations is the fact that conditions of trade in goods are largely determined by the private industry that dominates the international markets.

**Guatemala** has made an initial offer concerning market access and national treatment commitments in the sub-sector "nature and landscape protection services" (CPC 94060), including all modes of supply, provided that the provision of these services is consistent with national policies on the development and maintenance of natural resources and biodiversity; mode 4 commitments are subject to horizontal limitations.

#### 2. National consultations

The authorities responsible for the trade negotiations of several countries organized consultations with other ministries and with services suppliers to determine how best to ensure the consistency of any new liberalization commitments with national policies. The factors taken into account included the specific sectors under consideration for liberalization, the modes of supply of possible commitments, and in particular, what specific conditions should be included in commitments, if any, to support the national development of environmental services.

In **Cuba**, studies were initiated in 1999 to provide support for national participation in WTO negotiations on environmental services. The studies have since been discussed

The authorities responsible for trade negotiations of several countries organized consultations with other ministries and with services suppliers

in a working group under the Subgroup on Trade in Services of the National Group on WTO (*Grupo Nacional de Atención a la OMC*). The Ministry of Science, Technology and Environment (CITMA) and The Ministry of External Trade (MINCEX) have held consultations with other ministries and providers of environmental services with a view to examining the implications of trade liberalization in EGS and proceeding with the development of a national study on environmental services. This analysis focuses on the structure of the environmental services sector; the export potential of firms operating therein, and in particular, the state of development reached by firms within the various sub-sectors.

Possible offers have not yet been fully assessed and little progress has been made thus far in evaluating the demand for environmental services. It is therefore important to further examine the sector and to obtain more insights concerning requests received from trading partners.

In the **Dominican Republic**, the principal concerns of SEMARN are to ensure the effective regulation of, and control over, environmental services. In the light of deficiencies in regulatory frameworks, information gaps and the experience acquired in recent years, the study makes the following recommendations:

An evaluation is required of several subsectors — solid waste, hazardous waste and recycling — to assess their characteristics and needs. There is also a need to determine the possible content and scope of coverage for an effective regulatory framework for the sector. Such a framework is expected to be implemented gradually. This would also provide baseline information to enable the monitoring of the impact of future actions (there are already initiatives underway with regard to hazardous waste).

# **Environmental services: Need for special protection in the GATS context**

The study of **the Dominican Republic** notes that, in accordance with GATS Article XIX:2,<sup>34</sup> negotiations must respect national objectives and the level of development of individual WTO Members. This allows developing countries to safeguard the sectors and modes of supply considered to be sensitive within the context of the national economy, as has been done by the Dominican Republic. Addressing specific national conditions and overcoming the limitations within the existing legal frameworks are factors that have been taken into consideration in the Government's efforts to protect the environment. Similarly, the study on **Nicaragua** emphasizes that the environmental services sector, which supplies services related to basic needs of the population, should receive special protection and needs to be well regulated. Therefore, public-sector companies play an essential role in the provision of such services and foreign services suppliers are subject to a system of licences and concessions, as well as regulations and environmental impact assessments. The Government has the sovereign right, in accordance with the Constitution and GATS Article XIX.2, to subject foreign services suppliers to performance requirements and additional commitments, consistent with GATS Article IV.<sup>35</sup>

The liberalization and regulation of sub-sectors with regulatory gaps, such as sewage, hazardous waste and recycling, should be approached cautiously in the negotiations.

Before adopting any far-reaching strategy concerning the liberalization of the environmental services sector, a working group should be established comprising representatives from the sector, who, together with the negotiators, can assess the potential impact of trade liberalization on the various sub-sectors.

In summary, SEMARN considers that a cautious and gradual strategy would be appropriate in the context of the negotiations. More in-depth studies and the provision of technical assistance would be most useful in helping the Government to make more informed decisions in this regard.

The study by **Honduras** indicates that a thorough analysis of the potential advantages and disadvantages of market-opening measures in the water and sanitation sector has not yet been performed. A more profound dialogue among different national actors (trade and environment ministries and services providers) is therefore needed to evaluate the implications of liberalization of basic environmental services. There is also a need to create awareness of the potential benefits of liberalization among stakeholders and to convince municipal corporations that options for privatization already provided by existing legislation can be equitable and socially positive. The national study also emphasizes that it is important to strengthen local capacities in order to take advantage of trade in EGS, and that the process of liberalization should be gradual.

In **Nicaragua**, the Ministry of Development, Industry and Commerce (MIFIC) has held technical consultations with different sectors involved in the supply of environmental services, in particular sewage and wastewater treatment, waste collection and treatment, cleaning of exhaust gases, and emissions control. During the course of the consultations, a number of liberalization requests by Nicaragua's trading partners were examined. Discussions focused on possible market access and national treatment commitments for each mode of supply, environmental services that are not currently classified under the CPC, and national concerns in the area of environmental services.

National services suppliers, in particular in the water, sewage and waste management sectors, emphasized the importance of strengthening existing regulations and adopting new ones for the future development of an efficient sector. The consultations stressed the potential benefits of liberalization, such as (a) increased investment in environmental services and (b) transfer of technology, know-how and best practices, in particular when liberalization is accompanied by a strengthened regulatory framework, social policies and strategies aimed at supporting the national development objectives in each sector concerned. However, liberalization should be managed properly to ensure that it results in improvements in the quality of services provided, technology and environmental conditions, and that national policies are respected. In addition, foreign services suppliers should meet non-discriminatory performance requirements in accordance with GATS Article IV.

Further studies are required in order to assess the national situation and to formulate appropriate legislation before any commitment can be considered with regard to noise abatement services (CPC 94050), nature and landscape protection services (CPC 94060) and other environmental protection services (CPC 94090).

SEMARN considers that a cautious and gradual strategy would be appropriate in the context of the GATS negotiations As previously mentioned, the national study of Nicaragua also recommends that an assessment of the potential supply of professional services in the country be performed.

In **Panama**, services represent 80 per cent of the gross domestic product (GDP), a small part of which corresponds to environmental services. Since services are the motor of the national economy, Panama's position in multilateral and regional negotiations tends to favour liberalization of trade in services. In the area of environmental services, prior to the Doha Ministerial Conference, Panama had already undertaken some commitments regarding specific activities falling under the sub-sector "other" environmental services, in particular cleaning services for exhaust gases (CPC 94040), noise abatement services (CPC 94050), and nature and landscape protection services (part of CPC 94060).

Panama's preliminary offer in the current negotiations broadens the scope of its existing commitments by including other sectors, namely sewage, elimination of hospital waste, and clean-up of water and land to decontaminate lakes, coasts and coastal waters.

## E. Trade in environmental goods

At the time of writing, the project had completed relatively little work on environmental goods. However, it has taken into consideration the lists of "environmental goods" developed by the Organisation for Economic Co-operation and Development (OECD) and the secretariat of Asia-Pacific Economic Cooperation (APEC). In particular, a study has been carried out in Nicaragua.<sup>38</sup> An initial analysis of certain EPPs has also been performed in order to shed further light on this issue.

In many cases, environmental goods, for example equipment for the management of wastewater or waste, are used in conjunction with environmental services. The integrated nature of many environmental activities has led some analysts to believe that liberalization of trade in environmental goods should take place in parallel with liberalization in environmental services. Separate studies on environmental goods are nevertheless relevant, because of the differences in trade barriers (tariff and non-tariff barriers in the case of goods and restrictions with respect to national treatment and market access in the case of environmental services). However, in the context of the negotiating process, it is necessary to make an integrated assessment of environmental goods and environmental services.

#### 1. WTO negotiations

In the context of the WTO, there is no agreed definition for environmental goods. Nevertheless, Ministers agreed at the Doha Ministerial Conference to start negotiations on certain aspects of the trade and environment linkage. The DMD specifically calls for the liberalization of trade in environmental goods. Negotiations on environmental goods take place in the Negotiation Group on Market Access (NGMA) for Non-Agricultural Products, and the Committee on Trade and Environment plays a role in clarifying the concept of environmental goods. This is of particular interest to countries in Central America and the Caribbean, because of their interest in EPPs.

A number of relevant policy questions are raised in the context of the WTO negotiations on trade in environmental goods, including: (a) whether to grant special treatment (such as a "zero-for-zero" agreement) and (b) to which goods such treatment would be

granted. The DMD provides guidance in addressing these questions. First, in order to benefit from special treatment, environmental goods should be selected "with a view to enhancing the mutual supportiveness of trade and environment" (paragraph 31). This, in turn, raises the question of how to address the problem of "multiple-use" products. Second, negotiations on environmental goods should take into account the overall objectives of market access negotiations and should therefore also be guided by paragraph 16 of the DMD. Thus, the negotiations should pay particular attention to "products of export interest to developing countries"; take full account of the special needs and concerns of developing countries; require "less than full reciprocity in reduction commitment" from developing countries; and promote capacity building. The relative importance of tariffs and non-tariff barriers should also be considered.<sup>39</sup>

WTO Members seem to have chosen to focus on a possible list of "environmental goods" rather than seeking to agree on a definition. It should also be noted that according to a recent US proposal two lists of environmental goods could be developed. A *core* list would comprise products on which there was consensus that they constituted environmental goods, and a *complementary* list could be developed for additional products that could have significance for environmental protection, pollution prevention or remediation, and sustainability.

## 2. Relevance of APEC and OECD lists for Central American countries

It is difficult to assess trade in goods on the OECD and APEC lists in particular because (a) these lists include many "multi-use" products that also have non-environmental use and (b) the problem of "ex-items", which cannot be uniquely defined at the 6-digit Harmonized Commodity Coding and Description System (HS) level. Consequently, available statistics tend to overestimate trade in environmental goods. 40 Even with these caveats in mind, three conclusions can be drawn. First, the trade of Central American countries in "environmental goods" (as defined by OECD and APEC lists) is very small, both in value terms and as in relation to their overall trade in non-agricultural products (i.e. products covered by the NGMA mandate). Second, Central American countries are

Central American trade in "environmental goods" as defined by OECD and APEC lists is very small

Table 2 Central America, 2000: Trade in "environmental goods" (OECD and APEC lists) (US\$ millions)

	OECD list				APEC list			
	Exports	Imports	Balance	X/M	Exports	Imports	Balance	X/M
Costa Rica	81.6	265.5	-183.9	30.7	91.8	264.8	-173.0	34.7
El Salvador	30.9	111.3	-80.4	27.7	4.0	68.2	-64.2	5.8
Guatemala	35.7	155.5	-119.8	23.0	4.8	98.3	-93.5	4.9
Honduras	5.5	77.5	-72.0	7.1	1.1	53.0	-51.9	2.1
Nicaragua	3.9	45.2	-41.3	8.6	0.2	27.1	-26.9	0.9
Panama	18.3	89.0	-70.7	20.6	0.9	64.8	-63.9	1.4
Total	175.9	744.0	-568.1	23.6	102.8	576.2	-473.3	17.8

X/M = value of exports as a per centage of the value of imports.

Source: UNCTAD on the basis of COMTRADE

net importers. Third, with the exception of ethanol, the key products in terms of trade values are basket items, which normally implies that they are "multiple-use" products.

Even considering that trade data are highly inflated, the estimated value of exports of goods on the OECD and APEC lists was not more than US\$ 176 and US\$ 103 million respectively in 2000 (see table 2). The value of exports on either list amounted to US\$ 220 million. Apart from ethanol, 2000 exports of Central American countries exceeded US\$ 10 million in only five other 6-digit HS codes on either the APEC or OECD list. They all appear to be "multiple-use" products that may or may not have an environmental end-use. Only three of these items are on the APEC list and all are "ex-items" (see annex III).

Available data for Central American countries show a positive trade balance in only very few cases (at the 6-digit HS level). For example, Costa Rica has a positive trade balance in only 8 out of 122 products and there are even fewer products in the case of other Central American countries. The APEC list does not include a single product with a positive trade balance for El Salvador, Honduras, Nicaragua or Panama (see Table 3).

Table 3
Central America, 2000: "Environmental goods" of export interest on the OECD and APEC lists (number of 6-digit HS codes)

Country	Number of HS codes with export values			Number of HS codes with positive trade			
	> US\$ 500,000			balance			
	OECD or OECD APEC		OECD or	OECD	APEC		
	APEC			APEC			
Costa Rica	17	14	12	8	7	3	
El Salvador	9	9	1	2	2	0	
Guatemala	11	11	3	5	5	1	
Honduras	2	1	1	2	1	0	
Nicaragua	2	2	0	3	3	0	
Panama	3	3	1	1	1	0	

# 3. Products of interest to Central American and Caribbean countries

The analysis above shows that the OECD and APEC lists include very few products of export interest to Central American countries. Several proposals have been made, including at the recent UNCTAD expert meeting, aimed at achieving a more balanced approach in the negotiations, in particular by (a) identifying products of export interest to developing countries; (b) excluding "multiple-use" products that may have little environmental application; and (c) addressing technology and capacity-building needs. As mentioned earlier, most of Central America's already very modest trade in products on the APEC list consists of "basket products". Thus, if multiple-use products were excluded, trade flows would be very small indeed.

There is a broad convergence of views that the negotiations should pay greater attention to products of export interest to developing countries. In this context, Central American countries, which are exporters of agricultural products, face two problems in particular. First, the NGMA does not cover agricultural products. Second, most products of

Most products of export interest to the region belong to the category of agricultural environmentally preferable products

export interest to the region belong to the category of EPPs. While there is a broad consensus that certain categories of EPPs could be included in the EGS negotiations, the majority of WTO Members have argued against the use of criteria based on non-product-related production and process methods (PPMs) to select products for the negotiations.<sup>42</sup>

## **Environmental goods: The case of Nicaragua**

A case study, carried out in Nicaragua, on products on the APEC and OECD lists indicates that in the period 2000-2002 the value of imports into Nicaragua of products on those lists was around US\$ 25 and US\$ 45 million per year respectively. Whereas import values were more or less stable, export values were growing quickly, although remaining very small (less than US\$ 4 million and US\$ 9 million for respectively the APEC and OECD lists in 2002). In Nicaragua, ad valorem rates for non-agricultural products are bound at 40 per cent. Applied rates, however, are much lower. The vast majority of products on the APEC and OECD lists have zero applied rates (86 per cent of corresponding tariff lines and 69 per cent in terms of import values). Most remaining products have applied rates of 0 to 5 per cent and only some have tariffs of between 10 and 15 per cent. This is in line with Nicaragua's policy of applying zero tariffs to products that are not produced in the country (a 5 per cent tariff is applied to products that, while not being produced in Nicaragua, are produced in other countries which are members of the Central American Common Market). The study also contains a section on EPPs, focusing almost exclusively on organic agricultural products.

The study argues that in the light of the current low level of imports and the fact that applied rates are already very low, Nicaragua could offer to bind current applied rates for environmental goods at zero per cent. It also calls for the elaboration of a list of environmental goods of interest to Nicaragua. The study makes a number of other recommendations, such as notification by exporting countries of non-tariff barriers facing environmental goods in export markets, and preferential access to developed countries' markets for organic agricultural products and other EPPs.

One product of export interest to various countries in the region (Guatemala, Costa Rica, El Salvador, Panama and Nicaragua) is ethanol (HS 220710). This product is included in the OECD list, but not in the APEC list. Ethanol (which is an agricultural product) does not fall under the mandate of the NGMA. Some, however, have expressed concern about the environmental impacts of ethanol.

Central American and Caribbean countries are competitive in a range of products that could be considered inherently environment-friendly. Guatemala, for example, is an important exporter of natural rubber, as well as raw vegetable materials of a kind used in dyeing (140410). Central American countries also export other natural products, although on a much smaller scale. For example, El Salvador exports turpentine gum (HS 130190), twine (HS 5608), and jute bags (HS 630510). Nicaragua also exports twine. However, other countries in the region are also net importers of such products and trade seems to be largely intra-regional.

Countries in the region have identified trading opportunities for organic agricultural products as an important theme to be addressed by the project

There is a need to cre-

ate networks to effec-

tively address issues

that arise in the nego-

tiating process and de-

sign

It is notable that countries in the region have identified trading opportunities for organic agricultural products as an important theme to be addressed by the project (under the market access cluster). One issue of concern is trade barriers resulting from the existence of a large number of standards, as well as regulations and procedures in importing countries. At the Cuba meeting, some participants suggested that non-tariff trade barriers facing exports of organic agricultural products from developing countries could be addressed under the EGS negotiations.<sup>43</sup> One participant suggested that since the NGMA does not deal with agricultural products and since it might be undesirable to bring up new issues in the context of the agricultural negotiations, organic agriculture could be addressed in the CTESS.

In preparing national positions on environmental goods it is important:

- To identify a list of environmental goods of national interest, taking into account supply capacity.
- To identify tariffs and non-tariff barriers in external markets for products with export potential. As the supply potential of Central American and Caribbean countries may consist largely of EPPs, there is a need to pay special attention to non-tariff barriers (NTBs) affecting those products. There may be merit in designing a broad illustrative list of products and then proceeding with their examination to determine whether trade liberalization is best pursued within the context of paragraph 31(iii) or through other means such as via trade facilitation measures.
- To assess the possible losses in tariff revenues and compare them with potential environmental benefits from trade liberalization. The treatment of "multiple-use products" is more important to developing countries that maintain relatively higher tariffs as it could involve a significant loss of tariff revenues without necessarily generating environmental benefits. In a number of Central American countries, such as Costa Rica, tariffs are already quite low.
- To identify capacity-building needs.

# F. Orientation of further activities

# 1. Capacity-building needs

Activities carried out so far have provided insight into the type of capacity-building efforts that need to be supported. National workshops in Nicaragua and Panama have been useful for clarifying the concepts of environmental goods and environmental services. Participants in those workshops emphasized the need to create networks of government ministries and other stakeholders that can effectively address issues that arise in the negotiating process and that can also design policies aimed at strengthening domestic EGS capacities. It must be taken into account that Central American countries are simultaneously involved in several negotiating processes at regional and multilateral

policies strengthening domestic EGS capacities levels.44

National consultations are particularly useful for examining linkages between national policies and the negotiations, and to determine whether linkages exist between different negotiating processes. The project supports such national consultations by facilitating information gathering and strengthening research capacities. National consultations and studies assist countries in the design of national policies and regulatory frameworks aimed at ensuring that, as much as possible, liberalization in environmental services strengthens national capacities, promotes the transfer of technology and enhances efficiency and competitiveness. National consultations and regional dialogues also assist beneficiary countries in identifying policies that allow them to preserve or create space for the domestic environmental services sectors, in accordance with provisions in GATS Articles IV and XIX:2.

The project has played an important role in promoting the exchange of national experiences between countries in the region, in particular regarding domestic regulations and linkages between regulatory frameworks and the expected outcomes of liberalization. The project also strongly promotes interaction between Geneva-based negotiators and policy makers in capitals as well as between different countries in the region, to help explore issues of common concern.

One of the main challenges faced in implementing the present project is being able to determine and extract the specific kind of information that trade negotiators require from that which has been gathered and analysed under the project. This includes information on sub-sectors to be excluded from liberalization commitments<sup>45</sup> and conditions to attach<sup>46</sup> to possible liberalization commitments that may be scheduled under the GATS. Similarly, trade negotiators need information on sub-sectors with export potential, and information relating to obstacles to such exports in external markets. With this information to hand, negotiators will be in a better position to elaborate more specific and well-defined requests to trading partners. It is therefore important for environmental officials to enhance their understanding of the scope and objectives of the WTO negotiations and provide relevant information to trade negotiators. To facilitate this process, trade officials should brief environmental officials on relevant WTO negotiations as well as the limitations of the WTO in addressing environmental issues.

One of the main challenges is to determine and extract the specific kind of information that trade negotiators require

#### 2. Priorities

On the basis of the preliminary results of the national studies, the discussions in meetings held so far, and the analysis presented in this article, it is suggested that immediate action be taken based on the following priorities:

- Development of a methodology for national (and regional) studies on EGS to assist countries in their participation in the WTO negotiations.
- In the area of environmental services:
- Revision and completion of draft national studies on environmental services, taking into account the implications of CAFTA (where applicable);
- A comparative analysis of national experiences;
- Further national and regional consultations;
- Identification of issues of common regional interest in the services negotiations;
- In the medium term: discussions on certain ecosystem services.

#### In the area of environmental goods

- Consultations on national and regional ("core" and "complementary" lists) of environmental goods;
- Discussions on criteria for selecting EPPs that could be included in the negotiations on paragraph 31 (iii);
- Discussions on how organic agriculture could be linked with the Doha work programme, if at all;
- Discussions on ways to promote markets for environment-friendly goods and services from the region, beyond the context of the EGS negotiations. This concerns products that could be considered EPPs on the basis of PPM-related criteria in particular.

To ensure sustainability, the project should pay particular attention to the creation of national and regional networks of government ministries and other stakeholders.

#### **G.** Conclusions

Trade liberalization in environmental services has potential benefits for Central American and Caribbean countries, such as increased investment, the dissemination of best practices and easier access to technology and know-how. Countries in the region are net importers of environmental services and the potential benefits of trade liberalization will largely be achieved through an increased supply of better and more efficient services in their own domestic markets. However, liberalization should be accompanied by a strengthened regulatory framework, including its effective implementation and enforcement, as well as social policies and strategies aimed at supporting the national development in each of the sectors. Countries in the region may have potential in exporting professional services, but the degree of market potential they possess still has to be assessed.

Liberalization should be accompanied by a strengthened regulatory framework, including its effective implementation and enforcement

Some countries in the region have liberalized certain sub-sectors and allow foreign direct investment, although no commitments have been made in the GATS context. The exercise of caution and a gradual approach to liberalization commitments is needed in view of the insufficiency of regulatory frameworks and institutional capacities in these countries. Their situation is also characterized by difficulties in assessing demand and supply as well as an insufficient understanding of the implications of liberalization, in particular in sub-sectors for which data are largely unavailable.

Developing countries should use bilateral consultations in which liberalization requests by developed countries are discussed, in order to explore opportunities to link the negotiations and discussions on EGS with a range of issues to "level the playing field", including with regard to special and differential treatment, access to, the transfer, and use of environmentally sound technologies (ESTs), standards and market entry barriers for EGS.

The project envisions further work aimed at helping beneficiary countries to become better informed and to participate more actively in the WTO negotiations on EGS. These efforts should focus on filling information/research gaps, in particular by completing national studies and strengthening policy coordination. The project should pay particular attention to creating national and regional networks of government ministries and other stakeholders to follow up on the results of its activities. The project should also explore issues of common regional interest and support a stronger voice of developing countries in general, and Central American and Caribbean countries in particular, in the WTO negotiations.

The project should assist beneficiary countries in the development of illustrative lists of environmental goods that reflect their national interests

In the area of goods, the project should assist beneficiary countries in the development of illustrative lists of environmental goods that reflect their national interests and, where appropriate, sustainable development and trade interests at the regional level. It is important that countries which benefit from the project consider the results obtained from the studies on environmental goods that are currently underway. This will assist them in defining their export interests and improving their access to different markets, as well as in identifying and working towards overcoming potential existing tariff and non-tariff barriers for trade in EPPs.

There is a great demand for environmental services in the countries that participate in, and benefit from, the UNCTAD-FIELD project. It usually brings with it certain needs related to the use and acquisition of ESTs, as well as in relation to the creation and modernization of infrastructure. This demand creates high economic, political and social costs that in most instances these countries cannot meet. This can in part be attributed to the need for more political will and economic support. Awareness at the national and international levels is therefore essential in order to achieve progress as intended by the DMD.

The authors gratefully acknowledge the assistance of Cristobal Felix Diaz Morejon, Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA) Cuba, Alejandro Mercedes, consultant to SEMARN, Dominican Republic, Margarita Nuñez, consultant, Nicaragua, Hugo Rivera Santana, Director, External Trade and Administration of Trade Agreements, Dominican Republic and Luis Abugattas, UNCTAD secretariat.

#### **POST SCRIPT**

# Implications of the Central American Free Trade Agreement for trade liberalization in environmental goods and services

The recent Central American Free Trade Agreement (CAFTA) has important implications for liberalization of trade in goods and services, including environmental services. Negotiations on CAFTA between the United States and five Central American countries started in January 2003. Negotiations with El Salvador, Guatemala, Honduras and Nicaragua culminated in the announcement of the agreement on 17 December 2003. Costa Rica has also participated in the negotiations from the beginning, but was not part of the December agreement, largely because it needed more time to consider the implications of services liberalization for monopolies in its telecommunications and insurance sectors. On 25 January 2004, the United States and Costa Rica concluded negotiations to finalize Costa Rica's participation in CAFTA. Negotiations aimed at integrating the Dominican Republic into CAFTA began in January 2004. In addition, the United States will initiate Free Trade Agreement (FTA) negotiations with Panama during the second quarter of 2004.

CAFTA is expected to result in far-reaching liberalization in services trade. The Central American countries will have to accord substantial market access across their entire services regime, subject to "very few" exceptions. It is important to note that CAFTA has adopted the "negative list" approach and not the GATS "positive list" approach. This means that all services sectors are presumed to be open, unless explicit reservations are entered in specified areas. However, like the GATS, CAFTA excludes services provided by the public sector. Market access commitments apply across all services sectors, including environmental services, as well as energy services and professional services. Consequently, Central American countries need to carefully examine in which subsectors of environmental services they want to consolidate existing market access restrictions in accordance with national sustainable development objectives through explicit reservations. There is also greater urgency to develop and effectively implement regulatory measures to accompany trade liberalization.

CAFTA also contains provisions on investment and government procurement that may have implications for trade in certain environmental services. <sup>49</sup> In the area of investment, CAFTA establishes a secure, predictable legal framework for US investors operating in Central American countries. <sup>50</sup> US investors will enjoy "in almost all circum-

stances<sup>751</sup> the right to establish, acquire and operate investments on an equal footing with local investors, and investors of other countries, unless specifically stated otherwise. With regard to government procurement, US suppliers are granted non-discriminatory rights to bid on most contracts from Central American government ministries, agencies and departments. Government procurement provisions cover purchases of most central (as defined by each country) government entities, including key ministries and Stateowned enterprises, excluding low-value contracts. <sup>52</sup>

At the time of writing it is not entirely clear for which sub-sectors of environmental services CAFTA countries plan to take reservations and what, if any, would be the impact of CAFTA on the provision of certain environmental services that are currently managed largely by the public sector. Legitimate civil society concerns in the area of basic environmental services may weigh significantly, in particular in the light of the importance CAFTA attaches to public submissions to ensure that views of civil society are appropriately considered (see below). Testimony by the US service industries indicates an interest in liberalization in services for environmental clean-up, remediation, prevention and monitoring.<sup>53</sup>

CAFTA does not contain specific provisions on environmental goods. However, tariffs on environmental goods will fall as a result of across-the-board tariff reductions. Under CAFTA more than 80 per cent of US exports of consumer and industrial products to Central America will be duty-free immediately upon the entry into force of the Agreement, and 85 per cent will be duty-free within five years. All remaining tariffs will be eliminated within 10 years. CAFTA trade flows in environmental goods are very small and consist largely of CAFTA imports of US products. Thus, CAFTA further reduces the relevance of tariff revenues from imports of environmental goods for Central American countries.

Two other noteworthy areas of CAFTA provisions relate to trade capacity building and environmental cooperation. CAFTA will include a Committee on Trade Capacity Building, in recognition of the importance of such assistance in promoting economic growth, reducing poverty and adjusting to liberalized trade.<sup>54</sup> This includes capacity building in the area of trade in environmental services. An example is a study on the potential for exporting environmental services in Nicaragua.<sup>55</sup>

According to the United States Trade Representative (USTR), commitments and cooperation in the area of environmental protection go beyond environment-related provisions in earlier FTAs with Singapore and Chile through provisions seeking to develop a robust public submissions process to ensure that views of civil society are appropriately considered, as well as benchmarking of environmental cooperation activities. It is also noteworthy that environmental obligations are part of the core text of the trade agreement. CAFTA contains an environmental cooperation agreement that provides a framework for undertaking environmental capacity building in the CAFTA countries and establishes an Environmental Cooperation Commission. The environmental cooperation agreement identifies a number of priorities:

- Strengthening the capacity to develop, implement and enforce environmental laws;
- Promotion of incentives to encourage environmental protection;
- Protection of endangered species;
- Promotion of clean production technologies; and
- Building capacity to promote public participation in the environmental decision-making process.

It is not sure when CAFTA will enter into force. At the time of drafting, the text of the agreement was yet to be released. Under the Trade Act of 2002, the US Administration must notify Congress at least 90 days before signing the agreement. The Administration expects to notify Congress in early 2004 of its intention to sign the CAFTA. It will also continue to consult with Congress on the agreement to pave the way for eventual consideration. <sup>56</sup> CAFTA also has to be ratified by the Central American countries.

# ANNEX I List of (draft) national studies

#### Cuba

Raúl Garrido Vázquez Evaluación Nacional sobre Servicios Relacionados con el Medio Ambiente. Estudio de caso de Cuba

# **Dominican Republic**

Catherin Cattafesta, *Diagnostico preliminar, República Dominicana*. Study prepared for the Ministry of Environment and Natural Resources of the Dominican Republic.

#### **Honduras**

República de Honduras, Secretaría de Recursos Naturales y Ambiente, Secretaría de Industria y Comercio, *Estudio sobre los Servicios Ambientales en Honduras con Vistas a la Formulación de Posiciones Nacionales de Negociación post-Doha* 

# Nicaragua

Permanent Mission in Geneva, Ministry of Foreign Affairs and Ministry of Development, Industry and Commerce (MIFIC), *Estudio Preliminar de la Situación de Servicios Ambientales en Nicaragua*.

# **ANNEX II**

# List of additional studies commissioned

#### Cuba

Cristobal Felix Diaz Morejon, National study on environmental goods and services in Cuba.

# **Dominican Republic**

Catherin Cattafesta and Alejandro Mercedes, Environment-related services and environmental goods in the Dominican Republic: Characteristics of supply.

#### Guatemala

Evelio Alvarado, National study on environmental services in Guatemala.

#### Honduras

Nelson Trejo, National study on environmental goods and services in Honduras.

# Nicaragua

Margarita Nuñez, National study on environmental services in Nicaragua.

Guillermo Lopez, National study on environmental goods in Nicaragua.

# Panama

Aristides Iván Hernández Pérez, Estado de los Bienes y Servicios Ambientales en Panamá en el Marco de la Apertura Económica. July 2003.

**ANNEX III** 

Central America (2000): key exports of environmental goods, as defined by **OECD** and/or **APEC** lists.

Table 4 (Export values of over US\$ 10 million at the 6-digit HS level)

6-digit HS code	Description Additional product specification (APEC)	Environmental end-use	Exports in 2000 (US\$ millions)	
392690ex	Other articles of plastics and articles of other materials of headings 3901 to 3914; other  Bio-film medium that consists of woven fabric sheets that facilitate the growth of bio-organisms.  Rotating biological contactor consisting of stacks of large (HDPE) plates that facilitate the growth of bio-organisms.	Wastewater management	Costa Rica 25.8 El Salvador 2.6 Guatemala 1.3 Panama 0.8	
731021 (OECD)	Cans < 50 l, closed by soldering or crimping	Wastewater management (sewage treatment)	Costa Rica Guatemala	9.8
731029 (OECD)	Other cans < 5011	Wastewater management (sewage treatment)	Guatemala El Salvador	3.6
847990ex	Parts of Machines and mechanical appliances having individual functions, NES.  Parts of trash compactors	Potable water treatment	Costa Rica	33.5
854389ex	Electrical machines and apparatus, having individual functions, NES  Ozone production systems	Wastewater management	Costa Rica	15.2

#### **Notes**

- El Salvador joined the project in late 2003.
- The other priority issue is environmental requirements and market access, including the promotion of production and exports of environmentally preferable products, in particular organic agricultural products. The project also has a component for South and South-East Asia (for Bangladesh, Cambodia, China, Philippines, Thailand and Viet Nam). The project is being implemented in cooperation with the Foundation for International Environmental Law and Development (FIELD).
- In a briefing note on services and developing countries, the UK Department for International Development (DFID) states: "We are working for improvements to the WTO such as a stronger voice for developing countries in negotiations, increased transparency and rules which are flexible enough to meet the needs of developing countries". Trade Matters. September 2001; http://www.dfid.gov.uk/AboutDFID/files/itd/itd services brief.pdf
- Raúl Garrido Vázquez, Scoping paper on EGS.
- For more information please see comments by Umberto Mazzei in the Commentaries chapter of this Review.
- Experts from Brazil, Colombia, Cuba, the Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua and Panama participated in the workshop.
- The workshop was organized in cooperation with the Central American Commission for Environment and Development (CCAD).
- The Nicaragua workshop revealed that this concept of environmental services is very broad and includes services provided by ecosystems (such as carbon sequestration, water supply and control of water systems and scenery beauty), species (including, for example, materials used by the pharmaceutical industry and production of food) and genes (including genetic resources and materials).
- Republica de Honduras, Secretaria de Recursos Naturales y Ambiente, Secretaria de Industria y Comercio, Estudio sobre los Servicios Ambientales en Honduras con Vistas a la Formulación de Posiciones Nacionales de Negociación post- Doha.
- Catherin Cattafesta, Diagnostico preliminar, República Dominicana. Study prepared for the Ministry of Environment and Natural Resources of the Dominican Republic.
- In several country studies the view is expressed that in the future negotiations may perhaps touch on certain eco-system services. One study (Nicaragua) suggests that certain ecosystem services could eventually be included in the category "other services" in the classification used in the WTO. There is a need to discuss the likelihood and possible implications of such development under the project.
- Experience shows that much attention is given to goods and services provided by forests. Products provided by forests include water, wood, biological material, medicinal plants, artisan products, edible fruits and plants and other non-timber forest products, as well as agricultural and livestock products.
- Services Sectoral Classification List, Note by the Secretariat, MTN.GNS/W/120.
- For a more elaborate discussion on this issue, see the previous article in this Review.
- <sup>15</sup> Communication S/CSC/W/25 as modified by job 7612 dated 28 November 2000.
- <sup>16</sup> See the comments by Ulrike Hauer in chapter 2 of this Review
- The EU proposal is the most far-reaching and controversial as it includes "water for human use and wastewater". W/120 includes sewage but not water for human consumption.
- Dr. Raúl Garrido Vázquez, CITMA, and Lic. Alina Revilla Alcaza, MINCEX, Resultados preliminares de los estudios sobre bienes y servicios relacionados con el medio ambiente en Cuba.
- Oase studies may assist Central American and Caribbean countries in their participation in the work of the Council for Trade in Services in Special Sessions (CTSSS). In accordance with the Guidelines and procedures for the negotiations on trade in services, the CTSSS will continue to carry out an assessment of trade in services in overall terms and on a sectoral basis with reference

- to the objectives of the GATS and of Article IV in particular (see WTO document S/L/93 of 29 March 2001).
- Sewage and refuse disposal, sanitation and other environmental protection services.
- UERMP is a State organism created in 1961 and is in charge of the recovery, processing and trading of recyclable solid waste. It is a self-financed organization, which covers the national territory and trades in both the internal and external markets. Currently, it specializes in three recycling aspects that are vital for the economy: cleaning, import substitution and promotion of new export items. Among the latter, the following can be highlighted: ferrous scrap iron, steel, stainless steel, fused iron, bronze, copper, aluminium, lead, other non-ferrous materials, paper and cardboard, plastic, plastic packaging, textile packaging, glass waste, textile waste. Additionally, several products are in the development phase, including electronic scrap, pneumatics (granulated rubber), PET, batteries and toner cartridges.
- In 2000, the Dominican Republic, as part of an agreement with the World Bank aimed at securing provision of basic services to the tourism sector, agreed to privatize the management of potable water and sewage services. However, pilot projects concerning the construction of a sewage system and a sanitary system in an important tourism area have not yet been implemented.
- In the 1990s the city of Managua contracted an Italian company (HIDROJET) to manage urban waste collection. However, this did not work well in practice for several reasons, including the fact that no market study had been carried out, lack of payment by users of the services provided, and the introduction of a waste collection system (through containers located in several parts of the city) with which citizens were not familiar (previously household waste was collected door-to-door). Later a new private company (ECOLOGIA 2000) was established to supply services to specific segments of the market (hotels and restaurants).
- The objectives of APROSAC are to promote the participation of communities, municipalities, micro and small enterprises in the environmental management and tourism sectors and public and private institutions in exploring development alternatives. Msc. Arq. Maribel Rodríguez M. Coordinator APROSOC-IDB solid waste project, and Executive Director APROSOC, presentation made at the national workshop on EGS in Panama.
- Catherin Cattafesta and Alejandro Mercedes, Servicios Relacionados con el Medio Ambiente en la Republica Dominicana; Caracterización de la Oferta (first draft), September 2003.
- The Dominican Republic has made market access and national treatment commitments in this category, with no limitations concerning modes 1 and 3. This offer was made following long deliberations involving trade negotiators and CODIA (*Colegio Dominicana de Ingenieros, Arquitectos y Agrimensores*).
- Law 6200 of 1963 determines the conditions under which professional services in the areas of engineering, land surveying and architecture are provided. In particular, article 17 establishes that foreign services suppliers can receive an authorization ("exequátur") to operate in the Dominican Republic only if Dominican nationals are allowed to provide the same service in the territory of the country of which the foreign services supplier is a national.
- <sup>28</sup> Labour Code of Nicaragua of 1996.
- Wastewater treatment coverage levels in Latin America are extremely low. Even in Brazil, only 40 per cent of wastewater is collected and only 10 per cent of that is treated. Many Latin American cities offer concessions to the private sector for the collection of municipal waste. An important market exists in many countries for the collection and disposal of commercial wastes. However, the region continues to lag behind in effective third-party treatment solutions. Efforts to develop regional hazardous waste disposals have floundered in the face of local opposition. Grant Ferrier, The Environmental Industry and the Prospects for Building Capacity in Developing Nations, in UNCTAD, Energy and Environmental Services, Negotiating Objectives and Development Priorities, pp. 402-405, 2003.
- Public, private or mixed enterprises in the electricity sector undertaking projects that can have adverse environmental effects or result in social relocations are obliged to avoid, mitigate, restore and provide compensation for adverse environmental and social effects of their operations in accordance with existing legislation and dispositions of the competent authorities (Article 151).
- Grant Ferrier argues that strengthening capacities in environmental services in developing countries requires: (a) creating market demand; (b) policy to encourage foreign participation and technology transfer; (c) a clear position on privatisation; and (d) education and training to create a competent labour force and selection of contractors. Grant Ferrier, The Environmental Industry

- and the Prospects for Building Capacity in Developing Nations, In UNCTAD, Energy and Environmental Services, Negotiating Objectives and Development Priorities, pp. 409-411.
- Raúl Garrido Vázquez, Evaluación Nacional sobre Servicios Relacionados con el Medio Ambiente. Estudio de caso de Cuba.
- Communication from Cuba, Negotiating Proposal on Environmental Services, S/CSS/W/142, 22 March 2002.
- Article XIX.2 provides flexibility for individual developing country Members to open fewer sectors, liberalize fewer types of transactions and progressively extend market access in line with their development situation, and when making access to their markets available to foreign service suppliers, attach to such access conditions aimed at achieving the objectives of Article IV.
- Article IV.1 provides for increasing participation of developing country Members in world trade in services through, among other things, specific commitments relating to the strengthening of their domestic services capacity and its efficiency and competitiveness, *inter alia* through access to technology on a commercial basis.
- Commitments are limited to the specific activities, i.e. the implementation and installation of new or existing cleaning systems, remedial, preventive and monitoring services, and consulting services in these fields.
- Exclusively services for conducting studies on the relationship between the environment and climate, including services for evaluation of natural disaster and reduction of their consequences.
- Msc. José Guillermo López, Situación de Bienes Ambientales (BA) en Nicaragua según Listas OCDE y APEC.
- See Report of the Expert Meeting on Definitions and Dimensions in Environmental Goods and Services in Trade and Sustainable Development, TD/B/COM.1/59 and TD/B/COM.1/EM.21/3, 27 August 2003.
- See UNCTAD, Environmental Goods, Trade Statistics of Developing Countries. TD/B/COM.1/ EM.21/CRP.1, non-edited version, 3 July 2003.
- A separate analysis of Cuban exports and imports on the APEC list found that Cuba has a trade deficit in all products. Only one export product (solar energy panels) would have predominant environmental end-use.
- This would be the case of products derived from "sustainable agriculture", "sustainable fisheries" or "sustainable forestry" which appear on the OECD, but not the APEC list. In the NGMA meeting in November 2002, New Zealand stated that it had taken action to promote trade in such products, for example through the use of eco-labelling. However, it added that there was a critical line between promoting trade in those products through schemes such as eco-labelling and accepting measures that would open the way to discrimination against products which were otherwise like products. On that basis New Zealand suggested that the NGMA would need to be very careful on how it applied some aspects of the categorization used in the OECD list for the purposes of this negotiation. WTO, TN/MA/M/4, 17 January 2003
- This will be examined, for example, in a study on the Dominican Republic.
- Different modalities may be used in different negotiations. For example, liberalization in the context of the GATS is based on a "positive list" approach that is, WTO Members make commitments when they decide to consolidate or liberalize trade in certain services. In the context of other negotiating processes, countries can exclude certain services activities from trade liberalization, but have to make a "reservation" to do so. CAFTA has adopted the negative list approach (see Annex). In other negotiating processes, both options (positive lists and reservations) are being considered.
- <sup>45</sup> In accordance with the Preamble and Article VI of the GATS.
- <sup>46</sup> In accordance with GATS Articles XVI and XVII.
- Office of the United States Trade Representative (USTR), press release, 17 December 2003. Available on: http://www.ustr.gov/releases/2003/12/03-82.pdf.
- <sup>48</sup> USTR, Fact Sheet on: Free Trade With Central America, Summary of the U.S-Central America Free Trade Agreement. 17 December, 2003, http://www.ustr.gov/new/fta/Cafta/2003-12-17-factsheet.pdf. This note draws heavily on that fact sheet.
- 49 USTR, op. cit.

- USTR, op. cit.
- 51 USTR, op. cit.
- 52 USTR, op. cit.
- According to the Coalition of Service Industries, "Negotiators should seek commitments that include services for environmental clean-up, remediation, prevention and monitoring. With this broad scope of services negotiators should seek deep and broad commitments across all modes of supply. Environmental services suppliers should be allowed to import, on a temporary duty-free basis, tools and equipment essential to the provision of those services". Coalition of Service Industries, Written Testimony on the Central American Free Trade Agreement for the Trade Policy Staff Committee, Office of the United States Trade Representative, 2 December, 2002. http://www.uscsi.org/pdf/CentralA.pdf.
- The trade capacity building committee will build on work done during the negotiations to enhance partnerships with international institutions (Inter-American Development Bank, World Bank, Organization of American States, ECLAC, and the Central American Bank for Economic Integration), non-governmental organizations and the private sector.
- Republic of Nicaragua, *Operational Program for the National Action Plan for Institutional Strengthening*. December 2002, http://www.ustr.gov/regions/whemisphere/camerica/2002-nicaragua-tcb.pdf.
- Within 90 days after the President signs the Agreement, the US International Trade Commission will submit a report to the President and Congress assessing the likely impact of the FTA on the US economy and on specific industry sectors and interests of consumers. The President will then submit to Congress a copy of the final legal text of the Agreement, a draft implementing bill, a statement of any administrative action necessary to implement the Agreement, and various other documents required for the implementing legislation to be considered under Trade Promotion Authority procedures.;http://www.fas.usda.gov/info/factsheets/cafta.html