



**Sub-Regional Brainstorming Workshop
on the Trade and Environment Issues Contained in
Paragraphs 31 and 32
of the WTO Doha Ministerial Declaration**

**Project on Building Capacity for Improved Policy Making and Negotiation on Key Trade and
Environment Issues**

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Interim Report

**UNCTAD/FIELD Project
Building Capacity for Improved Policy Making and
Negotiation on Key Trade and Environment Issues
Funded by the UK Department for International Development (DFID)**

**Environmental Goods and Services:
Challenges and Opportunities for
Central American and Caribbean Countries**

The views expressed in this paper are those of the authors
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CARIBBEAN COUNTRIES**

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I. BACKGROUND

1. Under the project *Building Capacity for Improved Policy Making and Negotiation on Key Trade and Environment Issues*, UNCTAD, in cooperation with the Foundation for International Environmental Law and Development (FIELD), is assisting five Central American countries (Costa Rica, Guatemala, Honduras, Nicaragua and Panama), Cuba and the Dominican Republic in their participation in the WTO negotiations on selected trade and environment issues and in strengthening their capacities to address key trade and sustainable development linkages.¹

2. These countries have identified trade liberalization and strengthening of domestic capacities in environmental goods and services (EGS) as one of two priority issues to be addressed under the project.² The specific objectives of corresponding project activities are to assist beneficiary countries in (a) their participation in the WTO negotiations on EGS; (b) filling information/research gaps and strengthening policy coordination; and (c) exploring issues of regional interest. To work towards these objectives, several countries committed to carry out national studies, focusing on issues such as (a) the structure and characteristics of the environmental services sector in the country; (b) relevant national legislation; (c) a preliminary assessments of present and potential markets; and (d) possible approaches, from a national perspective, to WTO negotiations on EGS. Some countries also organized national consultations with stakeholders.

3. To date, Cuba, the Dominican Republic, Honduras, Nicaragua and Panama prepared (draft) national studies, funded largely by the Governments of the countries concerned. Further analysis is being carried out with the help of research institutes or consultants recruited under the project. This includes a study on Guatemala.

4. Several meetings were held in the region. The secretariats of UNCTAD and the Economic Commission for Latin America and the Caribbean (ECLAC) jointly organized a workshop on EGS in Havana, Cuba, on 24 and 25 March 2003. Experts from Brazil, Colombia, Cuba, Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua and Panama participated in the workshop. In addition, national workshops were held in Managua, Nicaragua, on 23 and 24 June 2003 and Panama City, on 26 and 27 June 2003.³ A national workshop for the Dominican Republic is scheduled to take place in November 2003.

5. These meeting in Cuba provided an opportunity to discuss the preliminary results of national studies, exchange national experiences, explore issues of regional interest and plan future activities under the project. The draft national studies and presentations (listed in

¹ The project also has a component for South and Southeast Asia (for Bangladesh, Cambodia, China, Philippines, Thailand and Viet Nam)

² 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.

³ The workshop was organized in cooperation with the Central American Commission for Environment and Development (CCAD).

Annex I) have been made available (in Spanish) at the UNCTAD website.⁴ The national workshops brought together officials from trade, environment and other ministries, suppliers of environmental services and other stakeholders. These workshops contributed to raising awareness, clarifying concepts and promoting coordination at the national level. All regional and national meetings allowed for interaction between capital-based policy makers and Geneva-based trade negotiators.

6. Experts from beneficiary countries participated actively 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.

7. This note summarizes progress in the implementation of project activities in the area of EGS. Section II summarizes discussions concerning definitions and classifications. Section III analyses progress made in the examination of the environmental services sector. Section IV describes the implications of negotiations on environmental goods for countries in the region. Section V discusses the possible orientation for further work on EGS.

II. DEFINITIONS AND CLASSIFICATIONS

A. Concepts

8. Meetings and country studies carried out so far highlight the need to distinguish between different concepts of environmental services. Environmental services have been defined either as services provided by ecosystems⁵ (e.g. carbon sequestration) or as human activities (e.g. wastewater management) to address particular environmental problems.

9. Experience shows that environment and other ministries not directly involved in WTO trade negotiations as well as civil society are more familiar with the concept of ecosystem services. Central American countries, which are rich in biodiversity, have great potential to derive commercial and developmental benefits from environmental services provided by their ecosystems. In most cases, however, the economic value of such services has not been established. Studies and projects focus on valuation techniques and instruments to commercialize such services. Some experience exists, for example, in Costa Rica and Nicaragua.

10. 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.⁶

⁴ http://www.unctad.org/trade_env/index.htm

⁵ This concept of environmental services is very broad and includes services provided by ecosystems (such as, for example, 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). (Nicaragua workshop).

⁶ Catherin Cattafesta, *Diagnostico preliminar, República Dominicana*. Study prepared for the Ministry of Environment and Natural Resources of the Dominican Republic.

11. The representatives of beneficiary countries that participated in the planning phase of the project have agreed to initially focus project activities on EGS sectors covered by the WTO negotiations. Thus, work on services will focus on classifications used in requests and offers under the negotiations on environmental services.⁷ It is important to keep this in mind in the implementation of project activities as sometimes there appears to be an overlap between the two concepts.

12. Similarly there is a need to carefully focus project activities on "environmental goods" since experience learns that many experts in the region understand this mean a rather broad range of products derived from biodiversity.⁸

B. Classification of environmental services in the WTO

13. The issue of classification of environmental services in the WTO context has come up in project activities. Attention has been drawn to the fact that proposals on environmental services submitted so far in the CTS generally reflect the view that the current classification contained in W/120 does not properly reflect how the industry currently operates and that it needs to be modernized.

14. The European Communities, Switzerland and others have proposed a new classification for "core" environmental services that would better reflect the trade and sector-specific realities.⁹ It includes a larger number (7) of environmental sub-sectors.

15. Some participants in the Cuba meeting noted that developing countries need stability in the classifications used in the WTO negotiations and that modifying the existing classification could have disadvantages. It was also emphasized that any reclassification needs to be agreed multilaterally.

16. Independent from the question which classification would be used in the negotiations there is a need for classification systems that are well understood by environmental authorities and productive sectors. Also, several countries, such as Cuba and Honduras, have developed their own classification. The national classification of environmental services in **Cuba** 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 CPC group 86.¹⁰ In **Honduras**, basic environmental services such as sewage, potable water, hazardous waste

⁷ In several country studies the view is expressed that in the future negotiations may perhaps touch on certain eco-system services. One study 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 in an appropriate occasion under the project.

⁸ Experience shows that a lot of 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 as well as other non-timber forest products, as well as agricultural and livestock products. (Nicaragua workshop).

⁹ Communication S/CSC/W/25 as modified by job 7612 dated 28 November 2000.

¹⁰ 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.

treatment and others are included under one single sector "Water and Sanitation" with a common set of policies, institutions and legal framework. As a result, there is a lack of specific and disaggregated information.

C. Environmental goods

17. There is no definition in the WTO for environmental goods. Some attention has been given under the project to lists of "environmental goods" developed by the OECD and Asia Pacific Economic Cooperation (APEC). In addition, there has been an initial analysis of certain "environmentally preferable products" (EPPs).

18. An early UNCTAD study describes EPPs as products that take advantage of "green" market opportunities and capitalize on natural endowment of countries.¹¹ EPPs can be defined as products that cause significantly less environmental harm at some stage of their life cycle (production/processing, consumption, and waste disposal) than alternative products that serve the same purpose, or products the production and sales of which significantly contribute to the preservation of the environment. According to the UNCTAD study, less environmental harm may relate to the following criteria: (a) use of natural resources and energy; (b) amount and hazardousness of waste generated by the product along its life cycle; (c) impact on human and animal health; and (d) preservation of the environment. In the context of the WTO negotiations, EPPs would have to be defined on the basis of product characteristics as the majority of Members oppose the use of criteria based on non-product-related process and production methods (PPMs) to define environmental goods. This implies that the selection of EPPs on the basis of their relative impact at the use or disposal stages of their life cycle, but not the production stage.

19. Central American and Caribbean countries are interested in deriving economic, social and environmental benefits from the production and exports of inherently environmentally preferable products, such as renewable energy and bio-degradable products from natural fibers; recyclable products; non-timber forest products and clean fuels such as methanol/ethanol or biomass, could perhaps be considered under the negotiations on environmental goods.

20. Several Central American and Caribbean countries have expressed a strong interest in exploring export opportunities, including by removing certain export constraints, for organic agricultural products. It is recognized, however, that it may be difficult to pursue such issues in the context of the WTO negotiations on paragraph 31(iii) of the Doha Ministerial Declaration.

¹¹ For more information on the concept and criteria of EPPs, see: Environmental Preferable Products (EPPs) as a trade opportunity for developing countries (UNCTAD/COM/70), Geneva, 1995. This study was not carried out with WTO negotiations in mind.

III. LIBERALIZATION IN ENVIRONMENTAL SERVICES

A. WTO Negotiations

21. 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 regards to modes 1 (where technically feasible), 2 and, in particular, mode 3.

B. National consultations

22. In several countries, authorities responsible for trade negotiations organized consultations with other ministries and with services suppliers to determine in which sectors and modes of supply commitments, if any, would be appropriate and what conditions should be listed to support the national development of environmental services and ensure consistency with national policies.

GATS Articles IV and XIX:2

The study of **the Dominican Republic** notes that, in accordance with GATS Article XIX:2,¹² 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 sensitive within the context of the national economy. The environmental services sector is one of the most sensitive sectors of the economy because of its specific conditions, the existing legal frameworks and the need to secure the protection of 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 licenses 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.¹³

23. In **Cuba**, studies to backstop participation in WTO negotiations on environmental services were initiated in 1999 and have since then been discussed 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 ministries of Science, Technology and Environment (CITMA) and

¹² Article XIX.2 provides flexibility for individual developing country Members to open fewer sectors, liberalize fewer types of transaction 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.

¹³ 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.

External Trade (MINCEX) have had consultations with other ministries and providers of environmental services with a view to examining the implications of trade liberalization in EGS and to continuing the development of a national study on environmental services.

24. This analysis focuses on the structure of the environmental services sector; the state of development reached in particular sub-sectors and export potential. In Cuba, basic environmental services such as drinking water and wastewater management, hazardous waste management and recycling are well developed. Over 95 per cent of the population has access to water and over 97 per cent has access to sanitation services. However, large investments are needed to maintain and upgrade existing infrastructure. The Government attaches high priority to resolving environmental problems and real investment in the environment has increased manifold. 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.

25. Cuba considers that there is large potential for attracting foreign direct investment in the environmental services sector through the creation of joint ventures. For example, joint ventures with foreign capital have been established in the water sector. However, there is a need to strengthen regulatory frameworks. Possible offers have not yet been fully assessed and little progress has been made 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.

26. In the **Dominican Republic**, the principal concerns of the Ministry of Environment and Natural Resources (*Secretaría de Estado de Medio Ambiente y Recursos Naturales*, SEMARN) are with the effective regulation of and control over environmental services. In light of deficiencies in regulatory frameworks, information gaps and the experience acquired in recent years, the study makes the following recommendations:

- An evaluation is needed of several sub-sectors - solid waste; hazardous waste and recycling; among others - to assess their characteristics and needs. There is also a need to assess what is required for an effective regulatory framework for the sector, to be implemented gradually. This would also provide baseline information to enable monitoring of the impacts of future actions (there are already initiatives with regard to hazardous waste);
- Sub-sectors with regulatory gaps, like sewage, hazardous waste and recycling, need to be approached cautiously in the negotiations;
- Before adopting any far-reaching strategy concerning the environmental services sector, a working group needs to be established with representatives from the sector, who, together with the negotiators, can assess and weigh the possibilities of different sub-sectors and the potential impact of trade liberalization;
- Environment-related professional services should not be treated differently from other professional services.

In summary, SEMARN considers that a cautious and gradual strategy would be appropriate in the context of the negotiations. Technical cooperation and studies are required to take informed decisions (concrete actions have already been initiated).

27. The study by **Honduras** points out that the country lacks a thorough analysis of the potential advantages and disadvantages of market opening measures in the water and sanitation sector. There is need for a more profound dialogue among different national actors (trade, environment ministries and services providers) to evaluate the implications of liberalization of basic environmental services. There is also a need to create awareness of potential benefits of liberalization among as well as to convince municipal corporations that options for privatization already provided by existing legislation can be equitable and socially positive. The study emphasizes that it is important to strengthen local capacities in order to take advantage of trade in EGS.¹⁴ The process of liberalization should be gradual.

28. The study mentions that Honduras is creating a Unit for Environmental Goods and Services, within the Ministry of Natural Resources, to strengthen national capacities to address EGS issues, to be supported by a National Commission on Environmental Goods and Services. The idea is to provide a forum for discussion and exchange of information at the national level. It would appear that it is the intention that this unit would focus on eco-system services.

29. 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. In the consultations liberalization requests of trading partners were examined. Discussions focused on possible market access and national treatment commitment for each mode of supply; environmental services not currently classified under the CPC; and national concerns in the area of environmental services.

30. 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. Trade liberalization should result in improvements with regard to the quality of services provided, technology and environmental conditions, as well as respect national policies. Foreign services suppliers have to meet non-discriminatory performance requirements in accordance with GATS Article IV. The consultations has emphasized the following potential benefits of liberalization:

- Increased investment in environmental services, in particular when liberalization is accompanied by a strengthened regulatory framework, social policies and strategies aimed at supporting the national development in each of the sectors.
- Transfer of technology and know-how and best practices

¹⁴ 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 Formulacion de Posiciones Nacionales de Negociacion post- Doha.

31. With regard to professional services, the national study recommends to carry out an assessment of potential supply in Nicaragua.

32. Studies are required to identify legislation and assess national situation before any commitment could be considered with regard to noise abatement services (CPC 94050), nature and landscape protection services (CPC 94060) and other environmental protection services (CPC 94090).

33. For **Panama**, services represent 80 per cent of 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 services trade. In the area of environmental services, Panama has already made some commitments in specific activities falling under the sub-sector "other" environmental services, in particular subcategories, i.e. (d) cleaning services of exhaust gases (CPC 94040) and noise abatement services (CPC 94050)¹⁵ and (e) nature and landscape protection services (part of CPC 94060).¹⁶

34. Panama is considering to broaden the scope of its existing commitments and to include some other sectors, such as sewage and elimination of hospital waste.

C. National studies – some issues

35. Country studies have so far focused on a number of sectors for which a certain level of information was available, in particular water and wastewater services, waste management, recycling and professional services. These sectors will be further analyzed and the sector coverage of the studies will be gradually increased through the inclusion of other sub-sectors.

36. In general, (draft) studies provide preliminary information on the structure of the sectors under consideration and a rather detailed description of existing legislation. While detailed information tends to be provided on the volume and prices of basic environmental services (such as water and waste management), there is relatively little information on markets for environmental services.

Private sector participation

37. Most studies highlight the need to improve the efficiency and quality of basic environmental services. This, however, may require large investments and access to technology and management practices. In this context, the role of private sector participation is discussed in some studies. In general, countries in the region see potential benefits in foreign direct investment (FDI), but stress the need to develop adequate regulatory

¹⁵ 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.

¹⁶ Exclusively services for conducting studies on the relation between the environment and climate, including services of evaluation of natural disaster and reduction of their consequences.

frameworks to ensure that national environmental, social and developmental objectives are respected. Some studies also note that it would be useful to examine the experiences of developing countries that have already liberalized environmental services sectors.

38. In the **Dominican Republic** there is important private sector participation in infrastructure services such as potable water and wastewater treatment (foreign firms participate significantly in related construction services) as well as the collection and management of solid and hazardous waste.¹⁷ Recycling activities are carried out entirely by private companies. There is a very large foreign participation in the professional services sub-sector.

39. In **Honduras**, the major constraint for private investment is the lack of an institutional and regulatory framework. Although new legislation has been enacted to end state monopolies and create possibilities for private participation in the environmental services sector, it has not always been possible to implement such legislation. In the case of water and sanitation, for example, it has not yet been possible to complete a regulatory framework. The existing legislation was established 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 Sewage Service (*Servicio Nacional de Acueductos y Alcantarillados*, SANAA) to grant concessions to private operators, but no concessions have been granted so far.

40. In the area of waste management, municipal authorities are responsible for such services. In accordance with municipal legislation, in some 50 per cent of all cases the provision of such services, in particular waste collection, is outsourced to services providers. In 22 municipalities, corresponding to the largest cities, waste collection has been privatized. In addition, there are small services providers, such as community groups and individuals operating in the informal sector. In some cases there have been international concessions for the treatment and final disposal of solid and organic wastes.

41. **Nicaragua** has legislation in place that allows foreign firms and natural persons to supply services in general, subject to concessions and licenses provided by law. In practice, however, basic environmental services are supplied by public companies.¹⁸

42. In **Panama**, solid waste management services in the largest municipalities except Panama City have been privatized.

¹⁷ 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 sanitary system in an important tourism area have not yet been implemented

¹⁸ In the 1990s the city of Managua contracted an Italian company (HIDROJET) to manage urban waste collection. However, it did not work well in practice for several reasons, including the fact that no market study had been carried, 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, restaurants).

43. 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.¹⁹ A solid waste project, supported by the Inter-American Development Bank (IDB), aims to implement a strategy for the decentralization of waste collection to municipalities and to enable them to give 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 disposed off in communities, promote environmental awareness and improve health conditions in beneficiary communities.

Professional services

44. In several Central American countries there is an important foreign participation in professional services. In the Dominican Republic there are currently some 100 firms that provide professional services related to the environment and some 200 individual consultants are registered in SEMARN. Over 30 per cent of these service suppliers are foreign. The sub-sector is quite open but the 1992 Labour Code (*Código de Trabajo*) determines that foreign personnel of any company located in the Dominican Republic should not exceed 20 per cent of total personnel.

45. The College of Civil Engineers of **Honduras** registers 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, but not does not possess a registry of environmental management services. Data collected for the study on Honduras indicate that around 80 companies provide design services and 30 companies provide construction services related to services in the area of water and sanitation. In addition, there are some 158 individual consultants qualified to provide design services.

46. Multilateral aid agencies, such as the Inter-American Development Bank (IDB) and the World Bank are supporting the creation or strengthening of domestic capacities for the design and maintenance of sanitation services. These actions are carried in the context of 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 in over a period of around two years domestic capacities will have been strengthened sufficiently to provide services, either individually or through joint ventures.

¹⁹ 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 APROSAC-IDB solid waste project and executive director APROSAC, presentation made at the national workshop on EGS in Panama.

47. 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 companies have been registered to undertake environmental auditing and environmental management programmes.

Export potential

48. Most studies emphasize the potential economic, social, environmental and developmental benefits of EGS liberalization, rather than possible direct trade gains through increased exports.

49. In Cuba the most developed segments of environmental services are in the area of studies, assessments and consultancy services (CCP Group 83).²⁰ Cuba has exported such services to Brazil, the Dominican Republic, Haiti, México, Nicaragua, Spain and Venezuela. Cuba's strong points are the high level of education. Weak points are lack of technology and finance.

IV. TRADE IN ENVIRONMENTAL GOODS

A. WTO negotiations

50. Negotiations on environmental goods take place in the Negotiation Group on Market Access for Non-Agricultural Products (NGMA). The Committee on Trade and Environment plays a role in clarifying the concept of environmental goods. This may be of particular interest to countries in Central America and the Caribbean, because of their interest in environmentally preferable products.

B. Trade in environmental goods by Central American countries

51. The OECD and APEC lists include very few products of export interest to Central America, which are net exporters in only a few products (at the 6-digit HS level). For example, Costa Rica has a positive trade balance in only 8 out of 122 6-digit HS code. And for other Central American countries there are even less cases (see Table 1).

52. 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.

²⁰ Raúl Garrido Vázquez *.Evaluación Nacional sobre Servicios Relacionados con el Medio Ambiente. Estudio de caso de Cuba.*

Table 1
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 > US\$ 500,000			Number of HS codes with positive trade balance		
	OECD or APEC	OECD	APEC	OECD or APEC	OECD	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

The total number of 6-digit HS codes on either the OECD or APEC list is 164

The total number of 6-digit HS codes on the OECD list is 122

The total number of 6-digit HS codes on the APEC list is 109

53. 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.²¹ Only three of these items are on the APEC list and all are "ex-items". These five HS codes are:

6-digit HS code	Description <i>Additional product specification (APEC)</i>	Environmental end-use	Exports in 2000 (US\$ millions)
392690ex	Other articles of plastics and articles of other materials of headings 3901 to 3914; other <i>Bio-film medium that consists of woven fabric sheets that facilitate the growth of bio-organisms.</i> <i>Rotating biological contactor consisting of stacks of large (HDPE) plates that facilitate the growth of bio-organisms.</i>	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 9.8 Guatemala 2.4
731029 (OECD)	Other cans < 50l	Wastewater management (sewage treatment)	Guatemala 8.0 El Salvador 3.6
847990ex	Parts of Machines and mechanical appliances having individual functions, NES.	Potable water treatment	Costa Rica 33.5

²¹ Cuba has not reported trade data to COMTRADE. 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.

Parts of trash compactors

854389ex	Electrical machines and apparatus, having individual functions, NES <i>Ozone production systems</i>	Wastewater management	Costa Rica	15.2
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54. It is thus difficult to estimate trade in environmental goods, in particular because (a) the 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 HS level. Consequently, trade data tend to overestimate trade in environmental goods. Even with these caveats in mind, available data show that all Central American countries are net importers of environmental goods. The value of exports of goods on the OECD and APEC did not exceed US\$ 176 and US\$ 103 million in 2000 respectively (see Table 2). The value of exports on either list amounted to US\$ 220 million.

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 percentage of the value of imports

C. Products of interest to Central American and Caribbean countries

55. 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 in the recent UNCTAD expert meeting, aimed at achieving a more balanced outcome of the negotiations, in particular (a) identifying products of export interest to developing countries; (b) excluding “multiple use” products that may have little environmental application;²² and (c) addressing technology and capacity building needs.

56. It should also be noted that according to a recent US proposal Central American, 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

²² The issue of “multiple use products” is more important to developing countries, which maintain relatively higher tariffs as it could involve the loss of significant tariff revenues without necessarily generating environmental benefits. In a number of Central American countries, such as Costa Rica, tariffs are already quite low.

57. It seems important that negotiations pay greater interest to products of export interest to these countries. In this context, Central American countries, which are exporters of agricultural products, face in particular two problems. First, the NGMA does not cover agricultural products. Second, most products of export interest to the region belong to the category of environmentally preferable products (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.²³

58. 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. Central American countries also export other natural products, although at much smaller scale. For example, El Salvador exports turpentine gum (HS 130190), twine (HS 5608), and jute bags (HS 630510). Nicaragua also exports twine. Guatemala exports raw vegetable materials of a kind used in dyeing (140410). Other countries in the region are, however, net importers of such products and trade seems to be largely intra-regional.

59. It is to be noted that countries in the region have identified trading opportunities for organic agricultural products as an important theme to be addressed under 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. Some participants suggested that non-tariff trade barriers facing exports of organic agricultural products from developing countries could be addressed under the EGS negotiations. 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.

60. As mentioned earlier, most of Central America's already very modest trade in products on the APEC list consist of "basket products". Thus, if multiple-use products were excluded, trade flows would be very small indeed.

²³ 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

V. ORIENTATION OF FURTHER ACTIVITIES

A. Capacity building needs

61. Activities carried out so far have provided insight in the type of capacity building efforts that need to be supported. It seems particularly important to support the process of national consultations, including by facilitating information gathering and strengthening research capacities. National workshops in Nicaragua and Panama have highlighted the need to further clarify concepts of environmental goods and environmental services. Environmental officials need 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 need to adequately brief environmental officials on relevant WTO negotiations as well as the limitations of the WTO in addressing environmental issues.

62. Capacity building efforts should also focus on promoting an 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. This should 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 transfer of technology; and enhances efficiency and competitiveness.

Strengthening domestic capacities

63. Participants in national workshops in Nicaragua and Panama have emphasized the need to create networks of government ministries and other stakeholders to follow up on issues discussed.

64. As several country studies have outlined, trade liberalization has the potential to contribute to developing and strengthening the environmental services sector in developing countries. To capture the benefits of liberalization and take advantage of new trading opportunities, developing countries need to build supply capacities, adapt regulatory frameworks and develop supportive physical, institutional and human infrastructure. National consultations and regional dialogues may 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.

65. Once these issues have been addressed, the challenge is to provide relevant inputs to trade negotiators. This includes both information on sub-sectors to be excluded from liberalization commitments,²⁴ as well conditions to attach²⁵ to possible liberalization commitments they may schedule under the General Agreements on Trade in Services

²⁴ In accordance with the Preamble and Article VI of the GATS.

²⁵ In accordance with GATS Articles XVI and XVII.

(GATS). Similarly, trade negotiators need information on sub-sectors with export potential and obstacles to such exports in external markets to make possible requests to trading partners.

Trade negotiations

66. Central American countries are simultaneously involved in several negotiating processes at regional and multilateral levels.²⁶ Capacity building efforts could assist developing countries in facilitating the necessary flow of information and analysis to trade negotiators to assist them in effectively participating in multilateral and regional negotiations. One key challenge for the project is to distil from the information and analysis gathered under the project the kind of information trade negotiators need. National consultations are useful in examining linkages between national policies and the negotiations as well as the linkages between different negotiating processes. The UNCTAD/FIELD project seeks to promote 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.

B. Priorities

67. Based on the preliminary results of the national studies, the discussions in meetings held so far, and the analysis presented in this note, the following priorities are suggested:

- 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;
 - ✓ New national studies (Guatemala, Panama);
 - ✓ A comparative analysis of national experiences;
 - ✓ Further national and regional consultations;
 - ✓ Identification of issues of common regional interest in the services negotiations;
 - ✓ In the long run: discussion on certain eco-system 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);

²⁶ Different modalities may be used in different negotiations. For example, liberalization in the context of the GATS is based on “positive list” approach, i.e. 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. In some cases, both positive lists and reservations can be used.

- ✓ 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, outside de EGS negotiations.

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, Ministry of Development, Industry and Commerce (MIFIC), *Estudio Preliminar de la Situación de Servicios Ambientales en Nicaragua.*

Panamá

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