Statistical Commission
Thirty-eighth session
27 February - 2 March 2007
Item 3 (h) of the provisional agenda

Background document Available in English only

Items for discussion and decision: Environmental accounting;

# Global Assessment of Environment Statistics and Environmental-Economic Accounting

Prepared by United Nations Statistics Division

# Global Assessment of Environment Statistics and Environmental-Economic Accounting

#### 1. Introduction

- 1. The Global Assessment of Environment Statistics and Environmental-Economic Accounting was undertaken by the UN Statistics Division under the auspices of the Committee of Experts on Environmental-Economic Accounting (UNCEEA), in collaboration with the Inter-Secretariat Working Group on Environment Statistics. The Global Assessment responds to the request by the UNCEEA to carry out an assessment of the current status of national implementation of environmental-economic accounting and related statistics, priorities and future plans.
- 2. The Global Assessment is carried out in two phases in order not to overburden the respondents. Phase I of the Global Assessment covers general information on the programmes of environment statistics and environmental-economic accounting. It includes questions on the institutional infrastructure, subject areas, constraints encountered in the development and implementation of the programmes and countries' future plans. Phase II of the Global Assessment will consist of follow-up questionnaires focusing on specific subject areas that have been identified in phase I and will be dispatched during the first half of 2007 only to those countries that have indicated the existence of activities in the specific subject area.
- 3. Phase I of the Global Assessment was dispatched on 16 October 2006 to the 192 UN Member Countries. A brief description of the questionnaire, its structure and organization are presented in Annex I. As of 12 February 2007, 100 countries responded to the Assessment corresponding to a response rate of 52 per cent. The list of countries who responded to the Assessment is reported in Annex II. The aim is to increase the coverage of countries with the Phase II of the Global Assessment. The analysis will be updated once more responses are received and will be made available on the UNSD website.
- 4. This report presents the main findings of the assessment. It is organized as follows: Section 2 presents a summary of the main conclusions. Section 3 presents the institutional infrastructure of the environment statistics and environmental-economic accounting programmes covering the availability of these programmes in countries and their location within the country and within the institution. Section 4 presents the scope of these programmes in terms of the subject areas covered, the use of the statistics compiled and future plans. Section 5 describes the impeding factors for the development and compilation of environment statistics and environmental-economic accounting. Section 6 includes additional considerations on the training material, technical assistance and funding used in the compilation of environment statistics and environmental-economic accounts.

#### 2. Summary of the conclusions

5. The Assessment indicated that environment statistics and environmental-economic accounting are established and expanding components of national statistical programmes. 91 per cent of responding

countries has an environment statistics programme and 70 per cent of them is planning to expand their programme both in terms of broadening the coverage and expanding to new areas.

- 6. Considering that environmental-economic accounting is a relatively new area of statistics, it is noteworthy that a considerable number of countries about half of the countries that responded to the assessment have an environmental-economic accounting programme. In addition, about 20 countries which are not currently compiling environmental-economic accounts indicated that they are planning to start with their compilation in the near future. This would bring the percentage of countries compiling environmental accounts to about 70 per cent.
- 7. Water statistics is most commonly compiled within countries' environment statistics programmes both in developed and developing regions. In developing regions, Air, Land, Forest and Biodiversity statistics are additional areas among the most commonly covered by the programmes. Areas of expansion include, in order of importance, Air, Water, Land, Biodiversity, Forest, and Energy.
- 8. Water accounts and Energy and emission accounts are among the modules most commonly compiled as well as priority areas for further expansion in developing regions.
- 9. Countries identified that the lack of human and financial resources are the most common impeding factors for the development of both environment statistics and environmental-economic accounting programmes. However, in the compilation of these statistics, the availability and quality of data were considered key impeding factors.

#### 3. Institutional infrastructure

- 10. A number of questions in the assessment aimed at identifying the availability of environment statistics and environmental-economic accounting programmes in countries (whether in the responding institutions or in other institutions). For the purposes of the assessment, the environment statistics programme was defined as a comprehensive programme (even if not exhaustive in terms of subject areas covered) for the provision of information on the environment as opposed to information on specific subject areas often carried out for resource management purposes by line ministries; an environmental-economic accounting programme was defined as the compilation of any part/module of the accounts in physical and/or in monetary terms.
- 11. Table 1 shows the availability of these programmes in countries disaggregated by economic and geographical regions. Note that except for Table 1 the economic breakdown used in the rest of this report distinguishes only between developed and developing regions<sup>1</sup>.
- 12. The environment statistics programme is available globally in 91 per cent of the responding countries. Nearly all developed economies, all transition economies and a large majority of developing economies has an environment statistics programme. The geographical distribution of the programmes ranges from a maximum of 97 per cent of countries in Europe and North America to a minimum of 78 per cent of countries in Western Asia.
- 13. Considering that environmental-economic accounting is a relatively new area of statistics, it is noteworthy that a considerable number of countries about half of the countries that responded to the

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<sup>&</sup>lt;sup>1</sup> Based on the UN Standard Country or Area Codes for Statistical Use (available on-line at <a href="http://unstats.un.org/unsd/methods/m49/m49.htm">http://unstats.un.org/unsd/methods/m49/m49.htm</a>). **Developed regions** consist of Northern America, Europe, Japan, Australia and New Zealand. **Developing regions** consists of Africa, Americas (excluding Northern America), Caribbean, Central America, South America, Asia (excluding Japan) and Oceania (excluding Australia and New Zealand). Transitions economies which include CIS countries and transition countries in South-Eastern Europe have been included in the relevant economic regions.

assessment — have an environmental-economic accounting programme. The distribution of the programme among countries varies both by economic and geographical grouping. As for the economic grouping, environmental-economic accounting programmes exist in 84 per cent of developed economies, 34 per cent of developing economies and 27 per cent of economies in transition. The geographical distribution ranges from a maximum of 70 per cent of countries in Europe and Northern America to a minimum of 22 per cent in Latin America and the Caribbean.

Table 1: Existence of environment statistics and environmental-economic accounting programmes in countries

	Envi	ronment Statis	stics	Environmen	ntal-Economic	Accounting
Number of countries (1)	Number of countries responding to Part A (2)	Number of countries with a Programme (3)	Percentage of responding countries (4)=(3)/(2)	Number of countries responding to Part B (5)	Number of countries with a Programme (6)	Percentage of responding countries (7)=(6)/(5)s
All States Members of the	07	00	0.1	00	40	40
United Nations	97	88	91	99	49	49
Economic regions						
Developed regions	39	38	97	40	29	73
Developing regions	58	50	86	59	20	34
Economic grouping:						
Developed economies	32	31	97	32	27	84
Transition economies	11	11	100	11	3	27
Developing economies	54	46	85	56	19	34
Geographical grouping:						
Africa	13	11	85	14	5	36
Central, Eastern and Southern						
and South-Eastern Asia	15	14	93	14	7	50
Europe and Northern America45	36	35	97	37	26	70
Latin America and the Caribbean	18	16	89	18	4	22
Oceania14	6	5	83	6	4	67
Western Asia	9	7	78	10	3	30

*Note:* The Global Assessment consisted of two parts: Part A on Environment Statistics and Part B on Environmental-Economic Accounting. Not all the countries responded to both parts. Hence columns (3) and (6) are different.

14. A legal framework for environment statistics in the form, for example, of a statistical act or environmental protection act exists in most of the countries (84 per cent). Table 2 links the existence of environment statistics programmes in countries with that of a legal framework for environment statistics. Data seem to indicate that the environment statistics programmes are most often available in countries where there is a legal framework for environment statistics.

Table 2: Existence of a legal framework for environment statistics and environment statistics programmes

Existence of environment	Legal framewo		
statistics programme	Yes	No	Total
Yes	74	13	87
No	4	2	6
Total	78	15	93

Note: This table combines responses to Questions 1, 2 and 16 of the Global Assessment. Only 93 countries responded to all three questions.

15. Table 3 and Table 4 show the location of the environment statistics and environmental-economic accounting programmes within government institutions in countries. The environment statistics

programmes are generally dispersed across different institutions. Table 3 shows that 50 of the 82 (88 total countries less 6 countries indicating that there is no environment statistics programme) countries (about 61 per cent) with an environment statistics programme indicated that the programme is in place not only within the responding institution but also in other institutions.

**Table 3: Location of the environment statistics programmes in countries** 

In the responding	In other insti		
institution	Yes	No	Total
Yes	50	24	74
No	8	6	14
Total	58	30	88

Note: This table combines responses to Question 2 and 16 of the Global Assessment. Only 88 countries responded to both questions.

- 16. Almost all institutions (97 per cent) with an environment statistics programme indicated that there exists cooperation with other institutions in the sense that there are formal or informal agreements of data-sharing between institutions. The national statistical office often has a prominent role in the overall coordination, compilation and dissemination of statistics: the national statistical offices are the leading institutions for all subject areas in 37 per cent and for specific subject areas in 41 per cent of the countries. In the remaining 22 per cent of countries, other agencies lead the environment statistics programme.
- 17. The environmental-economic accounting programmes seem to be generally located within one institution. Table 4 shows that 35 of the 48 (88 countries less 40 indicating that there is no environmental-economic accounting programme) countries (73 per cent) with an environmental-economic accounting programme indicated that the programme is located within one institution.

Table 4: Location of the environmental-economic accounting programmes in countries

In the responding	In other institu	utions	
institution	Yes	No	Total
Yes	13	30	43
No	5	40	45
Total	18	70	88

Note: This table combines responses to Question 17 and 33 of the Global Assessment. Only 88 countries responded to both questions.

- 18. 77 per cent of the institutions with an environmental-economic accounting programme indicated that there exists cooperation with other institutions. The national statistical office has a leading role in 81 per cent of countries in the sense that it is in charge of the integration of the accounts, coordination with other institutions and dissemination of the accounts.
- 19. Table 5 and Table 6 show the location of the environment statistics and environmental-economic accounting programmes within the national statistical offices. The environment statistics programme is mostly located in separate units (in 75 per cent of countries), more often within economic statistics (47 per cent of countries) as opposed to social statistics (10 per cent of countries). A large number of countries indicated that the environment statistics programme is located within other statistics programmes: most notably, 11 countries indicated that the environment statistics programme is located in

a separate unit within agriculture statistics and 9 indicated that the programme is independently located in the national statistical office.

Table 5: Location of environment statistics programme within national statistical offices

	In a separate unit	Not in a separate unit	Total
Within Social Statistics	5	2	7
Within Economic Statistics	25	9	34
Other	23ª	7	30
Total	53	18	71

Note: <sup>a</sup> includes 11 countries where the environment statistics programme is located with Agriculture Statistics, and 9 countries where the environment statistics programme is independently located within its own department/section.

20. Table 6 shows that, within the national statistical offices, the environmental-economic accounting programme seems to be equally located within national accounts and environment statistics. When the environmental-economic accounting is located within environment statistics, it is generally not in a separate unit.

Table 6: Location of the environmental-economic accounting programme within national statistical offices

	In a separate unit	Not in a separate unit	Total
Within National Accounts	10	9	19
Within Environment Statistics	5	13	18
Other	1	2	3
Total	16	24	40

21. About half of the countries (57 per cent) with environment statistics and environmental-economic accounting programmes indicated that these programmes are integrated in the sense that the same definitions, classifications and data collections are used in the two programmes.

#### 4. Scope of the programmes

- 22. A number of questions in the Global Assessment aimed at identifying the subject areas covered by the environment statistics and environmental-economic accounting programmes, the future plans and the uses of the statistics compiled.
- 23. Only the countries whose responding institution has an environment statistics or environmental-economic accounting programme were able to provide information on the scope of their programmes: in environment statistics eight countries indicated that the programme is located within an institution different from the responding one, and, in environmental-economic accounting, five countries indicated the existence of the environmental accounting programme within other institutions. The Global Assessment will be sent in a second phase to these institutions in order to assess the scope of their programmes.

#### (i) Areas covered

24. The areas covered in the environment statistics programmes are presented in Table 7. Globally the six areas most commonly covered in countries include in order of importance: 1) Water, 2) Air; 3) Forest; 4) Land; and 5) Energy and 6) Agriculture. Water statistics remains the subject area most commonly compiled in both developed and developing regions. The order of importance of the remaining top five areas changes between regions. Waste statistics is among the areas most commonly compiled only in developed regions (62 per cent of countries in developed regions compile waste statistics). It is replaced by Biodiversity statistics in developing regions.

Table 7: Areas covered in environment statistics programme by regions

All world		Developed regions		Developing regions		
1	Percentage		Percentage	Percentage		
Number of	of	Number of	of	Number of	of	
Area countries	countries	Area countries	countries	Areas countries	countries	
Total countries - World80	100	${\bf Total\ countries\ -\ Developed\ regions\ 37}$	100	Total countries -Developing regions 43	100	
Water 70	88	Water29	78	Water41	95	
Air 60	75	Agriculture	68	Air	84	
Forest	73	Air24	65	Land	84	
Land	69	Forest	65	Forest	79	
Energy 53	66	Energy	65	Biodiversity	79	
Agriculture53	66	Waste23	62	Energy	67	
Biodiversity45	56	Land 19	51	Agriculture	65	
Transport40	50	Transport	46	Mineral	63	
Waste	50	Environmental Protection Expenditure 15	41	Transport23	53	
Mineral	45	Biodiversity11	30	Waste	40	
Environmental Protection Expenditure. 20	25	Mineral9	24	Environmental Protection Expenditure 5	12	
Other	43	Other	38	Other	47	

- 25. Table 8 presents the modules of environmental-economic accounting compiled by countries and disaggregated by economic regions. The modules most commonly compiled include, in order of importance: 1) Energy and Emission accounts, 2) Environmental Protection Expenditure Accounts, 3) Water, 4) Forest, 5) Material Flow/Waste Accounts, and 6) Mineral Asset Accounts. The order of importance differs across the economic regions especially with respect to Water accounts, Environmental Protection Expenditure Accounts and Material Flow/Waste accounts. Water accounts are clearly the most compiled module in developing regions (87 per cent of countries in the developing regions compile water accounts) followed by Energy and emission accounts (73 per cent), Mineral asset accounts (60 per cent) and Forest accounts (60 per cent).
- 26. In developed regions, Environmental Protection Expenditure Accounts and Material Flow/Waste Accounts are among the modules most commonly compiled. This may be explained by the large number of European countries in the developed regions that compile these accounts to report to European Union legislations.

Table 8: Modules of environmental-economic accounting compiled by countries, by economic regions

All world	All world Developed Regions Developi		Developing regions	ing regions	
Number of Module countries	Percentage of countries	Number of Countries	Percentage of countries	Number of Module countries	Percentage of countries
Total countries - World44	100	Total countries - Developed regions 29	100	Total countries -Developing regions 15	100
Energy and emission accounts33	75	Energy and emission accounts 22	76	Water Accounts13	87
EPEA24	55	EPEA	62	Energy and emission accounts11	73
Water Accounts22	50	MFA/Waste accounts 16	55	Mineral Asset Accounts9	60
Forest Account22	50	Forest Account	45	Forest Account9	60
MFA/Waste accounts22	50	Water Accounts9	31	Land and Ecosystem Accounts6	40
Mineral Asset Accounts14	32	Mineral Asset Accounts 5	17	MFA/Waste accounts6	40
Land and Ecosystem Accounts10	23	Fisheries Accounts	14	EPEA6	40
Fisheries Accounts	20	Land and Ecosystem Accounts 4	14	Fisheries Accounts5	33
PSUT 5	11	PSUT	10	PSUT2	13
Other	20	Other6	21	Other3	20

Note: EPEA is Environmental Protection Expenditure Accounts; MFA is Material Flow Accounts; PSUT is Physical Supply and Use Tables.

27. While there seems to be a general alignment of the areas covered in environment statistics programmes and the modules of environmental-economic accounting compiled in countries by comparing Table 7 and Table 8, it does not seems as striking as one might expect. However, if we look at the environment statistics areas and environmental-economic accounting modules compiled by the same institution in the country, (38 countries), we can see that there is a much closer alignment of subject areas especially in developing regions. Table 9 aligns the subject areas of environment statistics programmes with the modules of environmental-economic accounting compiled by those countries for which the responding institution has an environment statistics and an environmental-economic accounting programme.

Table 9: Comparison between areas covered in environment statistics and environmental-economic accounting programmes by regions

T		All	regions	4•	
<b>Environment statistics</b>			Environmental-economic accoun		n .
λ	lumher of	Percentage		Number of	Percentage of
		of countries	Module	countries	countries
Total countries – World	38*	100	Total countries - World		100
Water		84	Energy and emission accounts		79
Agriculture		71	EPEA		55
Air		66	Water Accounts	20	53
Energy		66	Forest Account		53
Forest		63	MFA/Waste accounts	20	53
Land		61	Mineral Asset Accounts		32
Waste	22	58	Land and Ecosystem Accounts	10	26
Mineral		47	Fisheries Accounts		18
Transport		47	PSUT		11
Biodiversity		34	Other		21
Environmental Protection Expenditure		29			
Other		55			
	21		oed regions		
Environment statistics		Develop	•	·•	
Environment stausucs			Environmental-economic accoun-	_	Percentage
Λ	lumber of	Percentage		of	of
		of countries	Module	countries	countries
Total countries – Developed regions		100	Total countries – Developed regions .	25	100
Water		76	Energy and emission accounts		80
Agriculture		72	EPEA		60
Energy		68	MFA/Waste accounts		56
Air		60	Forest Account		48
Waste		60	Water Accounts		36
Forest		56	Mineral Asset Accounts		16
Land		52	Land and Ecosystem Accounts		16
Transport		44	Fisheries Accounts		12
Environmental Protection Expenditure		44	PSUT		8
Mineral		28	Other		20
Biodiversity		16	Other		20
Other		48			
Other	12				
-		Develop	ing regions		
<b>Environment statistics</b>			Environmental-economic accoun		n .
λ	lumber of	Percentage		Number of	Percentage of
		of countries	Module	countries	countries
Total countries – Developing region		100	Total countries – Developing regions	13	100
Water		100	Water Accounts	11	85
Mineral		85	Energy and emission accounts	10	77
Air		77	Mineral Asset Accounts	8	62
Forest		77	Forest Account	8	62
Land		77	Land and Ecosystem Accounts	6	46
Agriculture		69	MFA/Waste accounts	6	46
Biodiversity		69	EPEA	6	46
Energy		62	Fisheries Accounts	4	31
Waste		54	PSUT	2	15
		54 54	Other	3	23
Transport		0	Other	3	23
Environmental Protection Expenditure	· 0	62			

Note: \* it excludes six countries where the environment statistics and environmental-economic accounting programmes are not located within the same institution. EPEA is Environmental Protection Expenditure Accounts; MFA is Material Flow Accounts; PSUT is Physical Supply and Use Tables.

#### (ii) Future plans

28. All the responding institutions compiling environment statistics and nearly all environmental-economic accounting are planning to continue the existing compilation programme. In addition, the majority of these countries (about 70 per cent for environment statistics programmes and 88 per cent for environmental-economic accounting) are also planning to expand their programmes both in terms of broadening the coverage and expanding to new areas. As presented in Table 10, the subject areas of environment statistics that are most commonly identified as areas for expansion include, in order of importance: 1) Air; 2) Water; 3) Land; 4) Biodiversity; 5) Forest and 6) Energy.

Table 10: Areas of expansions in environment statistics by regions

All world		Developed regions		Developing regions	
Number of Subject area countries	Percentage of countries	Number of Subject area countries	Percentage of countries	Number of Subject area countries	Percentage of countries
Total countries - World52	100	Total countries – Developed regions 22	100	Total countries - Developing regions 30	100
Air21	40	Water7	32	Air	50
Water 20	38	Air6	27	Biodiversity	47
Land	35	Land5	23	Energy	47
Biodiversity 17	33	Waste5	23	Water	43
Forest 16	31	Forest4	18	Land	43
Energy	29	Agriculture4	18	Forest	40
Agriculture 14	27	EPE3	14	Transport 11	37
Transport	23	Biodiversity3	14	Agriculture 10	33
Mineral11	21	Energy1	5	Mineral 10	33
Waste 10	19	Mineral1	5	Waste5	17
EPE7	13	Transport1	5	EPE 4	13
Other*18	35	Other7	32	Other11	37

Note: \* It includes tourism, health and marine environment. EPE is Environmental Protection Expenditure.

29. Table 11 shows the areas of further expansions in environmental-economic accounting. They include, in order of importance: 1) Material Flow/Waste accounts; 2) Energy and emission accounts; 3) Water accounts; 4) Environmental Protection Expenditure Accounts; 5) Forest accounts and 6) Land and Ecosystem accounts. Material Flow/Waste accounts seem to be top priority area mainly in developed regions. In developing regions, Energy and emission accounts, Water accounts and Environmental Protection Expenditure Accounts are the top priority areas for expansion.

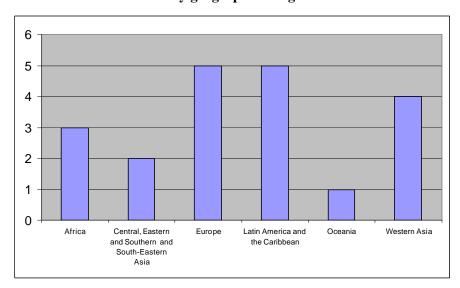
Table 11: Areas of further expansion in environmental-economic accounting by regions

All world		Developed regions		Developing regions		
Number of	Percentage of	Number of	Percentage of	Number of	Percentage of	
Module countries	countries	Module countries	countries	Module countries	countries	
Total countries - World36	100	Total countries – Developed regions .22	100	Total countries – Developing regions 14	100	
MFA/Waste accounts24	67	MFA/Waste accounts15	68	Energy and emission accounts 11	79	
Energy and emission accounts22	61	Energy and emission accounts11	50	Water Accounts 10	71	
Water Accounts19	53	Water Accounts9	41	EPEA	71	
EPEA18	50	EPEA8	36	Forest Account9	64	
Forest Account15	42	Forest Account6	27	Fisheries Accounts9	64	
Land and Ecosystem Accounts14	39	Land and Ecosystem Accounts5	23	Land and Ecosystem Accounts9	64	
PSUT13	36	PSUT5	23	MFA/Waste accounts9	64	
Mineral Asset Accounts12	33	Mineral Asset Accounts4	18	Mineral Asset Accounts 8	57	
Fisheries Accounts11	31	Fisheries Accounts2	9	PSUT 8	57	
Other5	14	Other2	9	Other	21	

Note: EPEA is Environmental Protection Expenditure Accounts; MFA is Material Flow Accounts; PSUT is Physical Supply and Use Tables.

30. Countries which are not currently compiling environmental-economic accounts were asked whether they have plans to start the compilation of any modules of the accounts in the near future. 20 countries, about half of the countries without a programme on environmental-economic accounting, indicated that they are planning to compile environmental-economic accounts. Except for five countries, most of them are in developing regions. Figure 1 shows the geographical regional breakdown.

Figure 1: Countries planning to start the compilation of environmental-economic accounts by geographical regions



31. Table 12 shows the list of modules that countries, with no programme on environmental-economic accounting, are planning to compile. The top four modules identified by countries include, in order of importance: 1) Environmental Protection Expenditure Accounts; 2) Water accounts; 3) Forest Accounts and 4) Material Flow/Waste accounts. In their answers countries have indicated different time horizons varying from two to three years to ten years making the results not completely reliable. Some countries that are in the process of starting an environmental-economic accounting programme have indicated that a technical assistance programme (mainly from Eurostat) is in place.

Table 12: Plans for compiling environmental-economic accounts in countries with no environmental-economic accounting programme

Module	Number of countries	Percentage of countries
Total countries	13	100
EPEA	8	62
Water Accounts	6	46
Forest Account	4	31
MFA/Waste accounts	4	31
Energy and emission accounts	3	23
Fisheries Accounts	2	15
PSUT	2	15
Land and Ecosystem Accounts	1	8
Mineral Asset Accounts	0	0
Other	1	8

## (iii) Uses and dissemination of the environment statistics and environmental and economic accounts

- 32. In the Global Assessment countries were asked about the uses of environment statistics and environmental-economic accounts as well as about their dissemination practices. The most common use of environment statistics is for the derivation of indicators (91 per cent of the countries), followed by modeling and economic analysis (51 per cent). 41 countries that compile environmental-economic accounts indicated that they use environment statistics for the compilation of environmental-economic accounts. Also 88 per cent of responding countries report the statistics to international/regional organizations such as Eurostat/OECD, the United Nations and its regional commissions. Similarly to environment statistics, the most common uses of environmental-economic accounts in countries is for the derivation of indicators (79 per cent), followed by the use for economic modeling/analysis (71 per cent). More than two thirds of countries compiling environmental-economic accounts indicated that they use the accounts to report to international/regional organizations (mainly to Eurostat and OECD).
- 33. The dissemination strategies for environment statistics and environmental-economic accounting most predominantly include dissemination through statistical publications. The internet is also a widely used vehicle to disseminate the statistics.
- 34. 12 countries indicated that they disseminate the environmental-economic accounting figures within one year from the release of the National Accounts figures. Few countries disseminate the accounts even before the national accounts figures are released.

## 5. Impeding factors for the development and compilation of environment statistics and environmental-economic accounting

35. A number of questions in the Global Assessment asked respondents to identify factors impeding the development of the programmes and compilation of environment statistics and environmental-economic accounting. As shown in Table 13, countries identified the lack of human and financial resources as the most common factors in the development of both programmes.

Table 13: Impeding factors in the development of environment statistics and environmental-economic accounting Programmes

Environment statistics  Number Percentage		Environmental-economic accounting  Number Percentage		
of countries	of countries	of countries	of countries	
Total countries79	100	Total countries62*	100	
Lack of human resources	72	Lack of human resources	69	
Lack of financial resources	60	Lack of financial resources	68	
Lack of inst. set-up/coordination	51	Availability of data	61	
Lack of access to training material25	32	Quality of data	52	
Lack of interest by the users	15	Lack of inst. set-up/coordination	39	
Availability of data		Lack of interest by the users	34	
Quality of data		Lack of access to training material 19	31	
Other	18	Other11	18	

Note: \* It includes 42 countries which are currently compiling environmental-economic accounts and 20 which are planning to compile environmental-economic accounts in the near future.

36. In the compilation of environment statistics and environmental-economic accounts, the top two impeding factors include data availability and data quality.

Table 14: Impeding factors in the compilation of environment statistics and environmental-economic accounts

Environment statistics	Percentage	Environmental-economic accounts	Percentage
Impeding factors countries	of countries	Impeding factors countries	of countries
Total countries	100	Total countries42	100
Availability of data56	72	Availability of data37	88
Quality of data	63	Quality of data27	64
Lack of human resources	60	Lack of human resources	62
Lack of financial resources	49	Lack of financial resources	55
Lack of inst. set-up/coordination	45	Lack of inst. set-up/coordination	29
Lack of access to training material22	28	Lack of interest by the users11	26
Lack of interest by the users 10	13	Lack of access to training material9	21
Other	12	Other6	14

#### 6. Other

- 37. A number of questions in the Global Assessment aimed at identifying the use of training material, technical assistance and funding in the compilation of environment statistics and environmental-economci accounts.
- 38. A large number of countries (87 per cent) in environment statistics and almost all (95 per cent) countries in environmental-economic accounts indicated that they made use of training material, methodological guidelines and/or other countries expertise. The training material used predominantly included the 1993 SNA, Eurostat publications, and UN publications on environmental-economic accounting and on environment statistics. Among the 'Other' guidelines that countries used are those from IPCC, FAO, OECD and EEA.
- 39. Table 15 shows the use of technical assistance for the compilation of environment statistics and environmental-economic accounts. About half of the countries have made use of technical assistance in the compilation of environment statistics and environmental-economic accounts. Technical assistance programmes were mainly from international organizations but also from other countries.

Table 15: Use of technical assistance in the compilation of environment statistics and environmental-economic accounts

	Number of countries		Source of assistance As percentage* of (2)			
	Number of countries (1)	which received Percentage Number of technical of countries assistance countries		International/ regional organization	NGOs	Other countries
Environment Statistics	78	40	51	55	5	28
Environmental-economic accounting	41	17	41	53	12	41

Note: \* these percentages do not add up to one as countries may use more than one source of funding.

40. Table 16 shows the use of external funding for the compilation of environment statistics and environmental-economic accounts. About half of the countries have made use of external funding in the compilation of environment statistics and environmental-economic accounts. Sources of external funding included mainly international/regional organizations (most commonly from Eurostat) but also frequently other institutions/agencies within the country. A few are also supported and funded through bilateral cooperation projects.

Table 16: Use of external funding in the compilation of environment statistics and environmental-economic accounts

External funding						
				Sour	ce of fundi	ıg
		Number of		As per	centage* o	f(2)
		countries			Other	
		supported	Percentage		agency	
	Number of	by external	of	International/	within	
	countries	funding	countries	regional	the	Other
	(1)	(2)	(3)=(2)/(1)	organization	country	countries
Environment Statistics	74	39	53	59	33	13
Environmental-economic accounting	41	25	61	80	20	4

Note: \* these percentages do not add up to one as countries may use more than one source of funding.

#### Annex I. Global Assessment – Phase 1

The Global Assessment – Phase 1 has been sent to National Statistical Offices of the 192 UN Member States and the central banks of 11 countries where the national accounts programmes are carried out by central banks. The Global Assessment could be filled either on paper, electronically via Email or on-line. An internet based questionnaire was developed to facilitate the response. Countries were not obliged to answer all the questions in the questionnaire; hence the number of responses to the different questions may differ. To facilitate the response, the Assessment was translated in French and Spanish.

As of 12 February 2007, 100 countries responded to the Assessment. The responding institution was generally the National Statistical Office except for seven countries where the statistical office coordinated the response with the relevant institutions in the country. In particular, for four countries, two institutions responded to the Assessment: generally the Ministry of Environment responded to the part on environment statistics and the national statistical office to the part of environmental-economic accounting. In three countries, the Ministry of Environment responded to both parts of the Assessment. Only for one country, the central bank responded to the Assessment because of its programme on environmental-economic accounting.

Corrections to the responses have been made after they were communicated and agreed by the country.

Phase 2 of the Global Assessment will be dispatched as a follow-up to Phase 1to those institutions in countries that indicated the existence of the environment statistics and/or environmental-economic accounting programme and will cover the relevant areas identified by countries.

# Global Assessment of Environment Statistics and Environmental-Economic Accounting Phase 1

Please provide your contact information:	
Country:	
Name of institution:	
Contact person:	
Email:	
Tel:	
Part A – Enviro	nment Statistics
For additional space, please use the last page.	
Help is available at the end of the Questionnaire for selected questionnaire	uestions identified with ?.
, , , , , , , , , , , , , , , , , , ,	
1. Is there a legal framework for Environment Statistics	5. Where is the Environment Statistics Programme
in your country?	located within your Institution/Agency? <i>Please select</i>
Yes - Please check all that apply	one
	In a Not in a
☐ Statistical Act	separate separate
Environmental Protection Act	Unit Unit
☐ Other - Please specify (there is no limit in the	Within Social Statistics
number of character):	Within Economic Statistics
No	Other*
2. Does your Institution/Agency have a Programme on	outer 🖺 🗎
Environment Statistics?	* Diagram and the second of th
	* Please specify (there is no limit in the number of characters):
Yes	, <u> </u>
$\square$ No $ o$ Skip to Question 15	Comments:
3. In the Environment Statistics Programme, which	6. Does your Institution/Agency cooperate with other
subject areas are covered by your institution? <i>Please</i>	Institutions/Agencies in the compilation of
check all that apply ?	Environment Statistics? (?)
☐ Air	Yes - Please describe the coordination mechanism
	and the name of the institutions involved (there is
∐ Water	no limit in the number of characters):
Land	$\square$ No $\rightarrow$ Skip to Question 8
☐ Biodiversity	
☐ Forest	7. If you answered yes to question 6, is your
☐ Energy	Institution/Agency the leading agency in Environment
☐ Minerals	Statistics? (?)
☐ Agriculture	☐ In all areas
☐ Transport	Only in specific areas - Please specify which
☐ Other - Please specify (there is no limit in the	areas:
number of characters):	In no areas - Please specify the name of the
, ———	leading Institution/Agency and the subject
4. Total number of staff working in the Environment	matter:
Statistics Programme (in full time equivalent)	
4.a In your institution:	8. In compiling Environment Statistics, has your
(i) Number of Professional staff:	Institution/Agency made use of the following:
(ii) Number of Support staff:	8.a Training material, methodological guidelines or
4 h. In other institutions:	country experiences?

Yes - Please specify (e.g. FDES (UN), SEEA	☐ Availability of data
2003, Eurostat, OECD, practices from other	☐ Quality of data
countries, etc.):	$\square$ Other - Please specify (there is no limit in the
	number of characters):
8.b Technical assistance from international	13. How are the Environment Statistics disseminated?
organizations or countries?	Please check all that apply
Yes - Please describe (e.g. during which period,	☐ Statistical Publications
nature of assistance, etc.):	 ☐ Internet
No	☐ State of the Environment Report
8.c External funding? $(?)$	☐ Other - Please specify (there is no limit in the
Yes - Please describe (e.g. during which period, from which sources, etc.):	number of characters):
□ No	14. Are Environment Statistics transmitted/reported to International/Regional Organizations?
9. Are there plans to continue the compilation of	■No
Environment Statistics in your Institution/Agency?	$\square$ Yes - Please specify (there is no limit in the
Yes	number of characters):
No	(i) To which International/Regional Organizations?
<del>_</del>	
10. Are there plans to expand the compilation of	(ii) Is there a single focal point for reporting?
Environment Statistics to areas not yet compiled? (?)	□ No
Yes - Please check all that apply	☐ Yes - <i>Please specify</i> :
☐ Air	Name of the institution/agency:
☐ Water	Name of contact person:
☐ Land	Email:
☐ Biodiversity	Telephone:
Forest	Fax:
∐ Energy —	15. In your country, are the Environment Statistics used
☐ Minerals	for: <i>Please check all that apply</i> Deriving indicators
☐ Agriculture	☐ Development of Environmental-Economic Accounts
☐ Transport	☐ Modeling, economic analysis
☐ Other - <i>Please specify (there is no limit in the number of characters):</i>	☐ Other - <i>Please specify (there is no limit in the</i>
□ No	number of characters):
11. What have been the major constraints in developing	<ol> <li>Do other Institutions/Agencies (Ministry of Environment, Environmental Protection Agency, etc.)</li> </ol>
11. What have been the major constraints in developing the Environment Statistics Programme? <i>Please check all that apply</i>	have a Programme on Environment Statistics in your country?
☐ Lack of institutional set-up/coordination	No
☐ Lack of financial resources	Yes - Please describe (Rows can be added to the
☐ Lack of human resources	tables in case there are more institutions):
☐ Lack of interest by the users	Name of Type of Contact person
☐ Lack of access to training material	institution/ statistics agency compiled
$\square$ Other - Please specify (there is no limit in the	Name Email Tel. Fax
number of characters):	a
12. What are the major constraints in compiling the	b
Environment Statistics? Please check all that apply	C
☐ Lack of institutional set-up/coordination	
☐ Lack of financial resources	
☐ Lack of human resources	
☐ Lack of interest by the users	
☐ Lack of access to training material	

### **Part B – Environmental-Economic Accounting**

17. Does your Institution/Agency have a Programme on Environmental-Economic Accounting?	No → Skip to Question 24
Yes → Answer Questions 18 through 33	23. If you answered yes to question 22, is your
=	Institution/Agency the leading agency in
$\square$ No $\rightarrow$ Answer Questions 32 through 38	Environmental-Economic Accounting? (?)
18. Which modules of Environmental-Economic Accounting	Yes
are compiled by your Institution/Agency? <i>Please check</i>	No - Please specify the name of the leading
all that apply ?	Institution/Agency and the subject matter:
☐ Water Accounts	
☐ Mineral Asset Accounts	24. In compiling Environmental-Economic Accounts, has
☐ Energy and Emission Accounts	your Institution/Agency made use of the following:
☐ Forest Accounts	24.a Training material, methodological guidelines or country experiences?
☐ Fisheries Accounts	Yes - Please specify (e.g. 1993 SNA, SEEA
☐ Land and Ecosystem Accounts	2003, Eurostat, etc.):
☐ Material Flows Accounts/Waste Accounts	□ No
☐ Environmental Protection Expenditure Accounts	24.b Technical assistance from international
Physical Supply and Use Tables	organizations or countries?
☐ Other - <i>Please specify (there is no limit in the number of characters):</i>	Yes - Please describe (e.g. during which
number of characters).	period, nature of assistance, etc.):
19. Total number of staff working in the compilation of	∐ No
these accounts (in full time equivalent)	24.c External funding
19.a In your institution:	Yes - Please describe (e.g. during which
(i) Number of Professional staff:	period, from which sources, etc.):
(ii) Number of Support staff:	☐ No
19.b In other institutions:	25. Are there plans to continue the compilation of the
20. Where is the Environmental-Economic Accounting	Environmental-Economic Accounts in your
Programme located within your Institution/Agency?	Institution/Agency?
Please select one	Yes
In a Not in a	☐ No
separate separate Unit Unit	
Within National Accounts	26. Are there plans to expand the compilation of
Within Environment Statistics	Environmental-Economic Accounts? (?)
Other*	Yes - Please check all that apply
* Please specify (there is no limit in the number of	☐ Water Accounts
characters):	☐ Mineral Asset Accounts
Comments:	☐ Energy and Emission Accounts
21. Is the Environment Statistics Programme integrated	Forest Accounts
with the Environmental-Economic Accounting	Fisheries Accounts
Programme?   ?	☐ Land and Ecosystem Accounts ☐ Material Flows Accounts/Waste Accounts
Yes - Please specify relationship:	☐ Environmental Protection Expenditure Accounts
□No	☐ Physical Supply and Use Tables
_	Other - Please specify (there is no limit in the
22. Does your Institution/Agency cooperate with other	number of characters):
Institutions/Agencies in the area of Environmental- Economic Accounts? ?	□ No
Yes - Please describe the coordination mechanism and the name of the institutions involved (there is	27. What have been the major constraints in developing
no limit in the number of characters):	the Environmental-Economic Accounting Programme?  Please check all that apply

☐ Lack of institutional set-up/coordination	☐ Modeling, economic analysis		
☐ Lack of financial resources	☐ Other - Please specify (there is no limit in the		
☐ Lack of human resources	number of characters):		
☐ Lack of interest by the users			
☐ Lack of access to training material	33. Do other Institutions/Agencies (e.g. Central Bank, Ministry of Environment, Ministry of Economic		
☐ Availability of data	Affairs/Planning) compile any parts/modules of the		
Quality of data	Environmental-Economic Accounts in your country?		
☐ Other - Please specify (there is no limit in the	□ No		
number of characters):	Yes - Please describe (Rows can be added to the tables in case there are more institutions):		
28. What are the major constraints in compiling the	Name of Type of Contact person		
Environmental-Economic Accounts? Please check all that apply	institution/ accounts compiled Name Email Tel. Fax		
Lack of institutional set-up/coordination	a		
☐ Lack of financial resources	b		
☐ Lack of human resources	c		
☐ Lack of interest by the users			
☐ Lack of access to training material	34. Are Supply and Use Tables and/or Input-Output		
☐ Availability of data	Tables compiled in your country?		
☐ Quality of data	Yes - Please specify last year of compilation,		
☐ Other - Please specify (there is no limit in the number of characters):	frequency of compilation and number of industry categories (e.g. ISIC classes):		
	☐ No		
29. How are the Environmental-Economic Accounts disseminated? <i>Please check all that apply</i>	35. Have any modules of the Environmental-Economic		
☐ Statistical Publications	Accounts been compiled in the past in your country?		
☐ Internet	□ No		
☐ Other - Please specify (there is no limit in the number of characters):	Yes - Please specify (there is no limit in the number of characters):		
30. At what time lag are the Environmental-Economic	(i) Type of accounts compiled:		
Accounts figures disseminated as compared to	(ii) For which years:		
National Accounts figures?	(ii) Agency/Institution responsible:		
Please specify:	(iii) Type of funding - Please check all that apply:		
	☐ External sources - <i>Please specify source:</i>		
31. Are Environmental-Economic Accounts transmitted/reported to International/Regional Organizations?	☐ Internal sources - Please specify source:		
□ No	None		
Yes - Please specify (there is no limit in the	_		
number of characters):	36. What were the reasons for not continuing with the		
(i) To which International/Regional Organizations?	compilation of Environmental-Economic Accounts?  Please check all that apply		
(ii) Is there a single focal point for reporting?	Lack of institutional set-up/coordination		
□ No	☐ Lack of financial resources		
Yes - Please specify:	☐ Lack of human resources		
Name of the institution/person:	☐ Lack of interest by the users		
Name of contact person:	☐ Lack of access to training material		
Email:	☐ Availability of data		
Telephone:	☐ Quality of data		
Fax:	☐ Other - Please specify (there is no limit in the		
1 WAT	number of characters):		
32. In your country, are the Environmental-Economic Accounts used for: <i>Please check all that apply</i>			
☐ Deriving indicators			
J	Ī.		

7. Are there plans to compile any modules of the Environmental-Economic Accounts in your country in
the near future?
∐ No
Yes - Please specify the following:
(i) Which modules of the accounts are planned to be compiled: <i>Check all that apply</i>
☐ Water Accounts
☐ Mineral Asset Accounts
☐ Energy and Emission Accounts
☐ Forest Accounts
☐ Fisheries Accounts
☐ Land and Ecosystem Accounts
☐ Material Flows Accounts/Waste Accounts
☐ Environmental Protection Expenditure Accounts
Physical Supply and Use Tables
☐ Other - <i>Please specify (there is no limit in the number of characters):</i>
(ii) The time frame for the compilation of these accounts:
(iii) Are you aware of any technical assistance programme from international organizations, NGOs or other institutions for the implementation of Environmental-Economic Accounts in your country?
☐ No
Yes - Please specify the name of the institutions providing technical assistance:
<ol><li>What seem to be the major constraints in starting the compilation of Environmental-Economic Accounts in your country? (Please check all that apply)</li></ol>
☐ Lack of institutional set-up/coordination
☐ Lack of financial resources
☐ Lack of human resources
☐ Lack of interest by the users
☐ Lack of access to training material
☐ Availability of data
☐ Quality of data
☐ Other - Please specify (there is no limit in the number of characters):
ox for additional comments (there is no limit in the umber of characters):
I

Annex II. List of responding countries

Albania	Croatia	Kiribati	Saint Vincent and the Grenadines
Andorra	Cyprus	Korea, Republic of	Saudi Arabia
Argentina	Czech Republic	Latvia	Seychelles
Armenia	Denmark	Lesotho	Singapore
Australia	Djibouti	Lithuania	Slovakia
Austria	Dominica	Luxembourg	Slovenia
Azerbaijan	Dominican Republic	Malaysia	South Africa
Bahamas	Ecuador	Maldives	Spain
Bahrain	Egypt	Mauritius	Suriname
Bangladesh	Estonia	Mexico	Sweden
Belarus	Finland	Mongolia	Switzerland
Belgium	France	Morocco	Thailand
Bhutan	Georgia	Nauru	The former Yugoslav Republic of Macedonia
Bolivia	Germany	Nepal	Togo
Bosnia and Herzegovina	Greece	Netherlands	Trinidad and Tobago
Botswana	Guatemala	New Zealand	Tunisia
Brazil	Hungary	Norway	Turkey
Brunei Darussalam	India	Papua New Guinea	Tuvalu
Bulgaria	Ireland	Paraguay	Ukraine
Burkina Faso	Israel	Peru	United Kingdom
Cameroon	Italy	Philippines	United Republic of Tanzania
Canada	Jamaica	Poland	United States
Chile	Japan	Portugal	Uruguay
China	Jordan	Republic of Serbia	Uzbekistan
Colombia	Kenya	Romania	Yemen