

Fifth Survey on Environmental Auditing (2006): Detailed Results

November 2007

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Acknowledgements

The WGEA Secretariat would like to thank all the Supreme Audit Institutions (SAIs) who took the time to answer the Fifth Survey on Environmental Auditing. Without them, this report would not have been possible. The WGEA Secretariat would also like to thank the following groups and individuals for their efforts in making this report a reality:

- the subcommittee members of the Fifth Survey on Environmental Auditing;
- the coordinators of the Regional Working Group on Environmental Auditing for getting answers from their members;
- the WGEA steering committee members for their review and comments; and
- Carolle Mathieu for leading this project with the support from Paul Atkinson, Jeanette Booth, Lisa Desjardins, Erin Larsen, Sylvie McDonald, Paul Pilon, and Stuart Smith at the Office of the Auditor General of Canada.



Introduction

Supreme Audit Institutions (SAIs) audit their government's environmental commitments, and, in doing so, play an important part in environmental governance. Since 1989, according to surveys, SAIs have conducted over 2,000 environmental audits on various topics, including waste management, water pollution, air pollution, and biodiversity. In addition, SAIs audit their government's commitments when they ratify international environmental agreements (IEAs), such as the Convention on Biological Diversity and the Basel Convention on the Control of Transboundary Movements Hazardous Wastes.

This document presents the detailed results of the fifth survey on environmental auditing (2006), the most recent survey conducted by the International Organization of Supreme Audit Institutions (INTOSAI) Working Group on Environmental Auditing (WGEA). The WGEA has also produced an executive summary of these results, *State of Environmental Auditing in the SAI Community: Highlights from the Fifth Survey on Environmental Auditing,* in the five INTOSAI languages (English, Arabic, French, German, and Spanish).

The practitioners of environmental auditing can use the results of the survey to compare their work to that of other countries. For SAIs that are new to environmental auditing or that do not conduct environmental audits as a common practice, this paper demonstrates that auditing environmental issues is important and that they can learn from colleagues who have made a difference in their countries. This paper also shows the international environmental community, which is concerned about environmental and sustainable issues, that SAIs play an important role.

Background

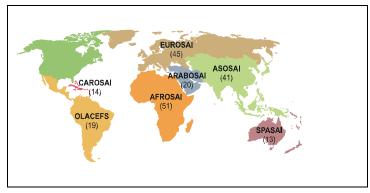
INTOSAI and the WGEA

INTOSAI (www.intosai.org), the professional organization of SAIs in countries that belong to the United Nations or its specialized agencies, has several working groups to develop different aspects of audit practice, including the WGEA (www.environmental-auditing.org).

Since its creation in 1992, the WGEA has promoted the development of environmental auditing techniques and the wide-spread application of these techniques within audit institutions. The WGEA has conducted five surveys over the past 13 years (1993, 1996, 2000, 2003, and 2006) to track progress made in this work and to identify what it can do to support the development of environmental auditing techniques and practices by INTOSAI members.

Within INTOSAI, there are suborganizations of SAIs that represent seven regions (Exhibit 1): Africa (AFROSAI), the

Exhibit 1 INTOSAI regions and number of SAIs



Note: Not all SAIs are members of a regional organization, and some SAIs are members of more than one region.

Arabic countries (ARABOSAI), Asia (ASOSAI), Caribbean (CAROSAI), Europe (EUROSAI), Latin American and Caribbean (OLACEFS), and the South Pacific (SPASAI). Regional working groups on environmental auditing (RWGEA) were established in all INTOSAI regions except CAROSAI. The WGEA is working closely with the RWGEAs.



About this report

This report describes the detailed results of the fifth survey that was conducted in May 2006. It also analyzes the trends in environmental auditing since previous surveys and presents some changes that have taken place over the 13 years since the first survey was conducted.

An executive summary of this report—State of Environmental Auditing in the SAI Community: Highlights from the Fifth Survey on Environmental Auditing—is also available.

Most of the results are presented as percentages, and the exhibits include the number of respondents for each question (N=), which indicates how the percentage has been calculated. The question asked is at the bottom of each exhibit.

Results are also presented per INTOSAI region and, sometimes, by World Bank income level. The number of respondents per region may be small, which will have a greater influence on the percentage. For instance, only six SAIs from CAROSAI answered the survey. If only two of those SAIs answered a question, the percentage could be zero, fifty, or a hundred percent. It is therefore important to look at the total respondents (N=) for each question.

Methodology

The Fifth Survey on Environmental Auditing consisted of two forms: the survey form and the environmental audits collection form. SAIs filled out the survey form using the Internet (an innovation for this survey), email, a diskette, or a paper copy. The environmental audits collection form, however, could not be filled out on the Internet; and, due to technical issues, the survey was not available on the Internet in Arabic.

The environmental audits collection form (EA form), which included information on audit reports produced by SAIs, was an essential part of the fifth survey. It was used to update the WGEA database of environmental audits (www.environmental-auditing.org, under "Environmental Audits Worldwide")—a vital resource for SAIs that want to conduct environmental auditing, and a source of information for all groups interested in environmental issues and in how well governments fulfill their environmental mandates. The EA form also allowed us to collect contact information for each SAI and information on new products and activities developed by SAIs.

The survey was distributed, by mail and email, to all 186¹ INTOSAI members in May 2006. It was conducted in English but was also sent in other INTOSAI languages (Arabic, French, German, and Spanish) to increase the response rate. Follow-up was done when responses were incomplete or required clarification, and the regional coordinators from the RWGEAs sent reminders to their members.

Because some survey questions have not changed in the past 13 years, it was possible to track the changes that have occurred during this time period. However, many new questions were included in the fifth survey. In particular, the classification of environmental audit issues was updated because the categories on the WGEA website (www.environmental-auditing.org, under "Environmental Audits Worldwide") did not cover all of the topics covered by the audits. However, with this new classification, it is not possible to make comparisons with the previous surveys, and the WGEA website had to be modified. Audits are now classified in two ways: up to and including 2002 (old classification) and from 2003 on (new classification).

¹ Of this number, one SAI is not a member of INTOSAI, but is a member of the WGEA.



The number of responses to the questions varies. Some SAIs did not answer all questions, and some respondents did not have access to certain questions due to the skip pattern—which skipped questions that the SAI didn't need to answer. For example, SAIs that never conducted any environmental audits did not have to answer the next ten questions in that section.

In addition to answering the questions in the survey, SAIs that had completed at least one environmental audit since 1 January 2003, were asked to provide details of all environmental audits they had conducted (since that date) on the Environmental Audits Collection form.

Who answered the survey?

A total of 119 SAIs had completed the survey by 14 December 2006—a response rate of 64 percent (Exhibit 2). See Appendix A for more information on the countries who answered the fifth survey and the previous surveys. Eight countries responded to a WGEA survey for the first time.

As with previous surveys, the best response rates for the fifth survey were from the EUROSAI, ASOSAI, and OLACEFS regions (Exhibit 2). The response rate from ARABOSAI and AFROSAI members was better than that of the fourth survey, although their response rate continues to be low, especially for AFROSAI, compared to the other three regions. CAROSAI and SPASAI members continue to be underrepresented—none of them achieved a 50 percent response rate.

Exhibit 2 Response rate per INTOSAI region

						Response Rates						
	Nu	mber o	of Resp	onder	its	20	00	20	03	200	2006	
Region	1993	1996	2000	2003	2006	INTOSAI Population	Response	INTOSAI Population	Response	INTOSAI Population*	Response	
EUROSAI	27	30	34	39	39	45	83%	43	88%	45	87%	
ASOSAI	24	23	25	31	32	41	78%	38	82%	41	78%	
AFROSAI	10	14	21	17	22	51	42%	51	33%	51	43%	
OLACEFS	11	12	13	14	14	19	65%	21	67%	19	74%	
ARABOSAI	11	12	17	9	12	20	90%	20	45%	20	60%	
CAROSAI	3	3	8	8	6	14	57%	14	57%	14	43%	
SPASAI	5	6	6	8	6	13	46%	15	53%	13	46%	
Other	3	3	4	2	5	10	33%	4	50%	10	50%	
All Regions	83	88	110	114	119	187	61%	186	61%	187**	64%	

^{*}Based on the actual membership of regions in 2006. Because some INTOSAI members are affiliated to more than one region, the numbers do not add up to 186.

Based on the World Bank classification, the response rate from high income (83%) and medium income (69%) countries was high, and it was lower from low income countries (39%) (Exhibit 3).

^{**}Includes one SAI that is not a member of INTOSAI but that is a member of the WGEA.



Exhibit 3 Response rate per income level*

								Respor	se Rates		
	Number of Respondents		2000		2003		2006				
Income Level	1993	1996	2000	2003	2006	INTOSAI population	Response	INTOSAI population	Response	INTOSAI population	Response
Low	14	14	18	14	19	57	32%	59	39%	49	39%
Middle	42	51	63	42	63	87	72%	81	67%	91	69%
High	27	23	29	27	34	35	83%	41	88%	41	83%
Unknown	0	0	0	0	3	1	0%	5	40%	6	50%
All Regions	83	88	110	114	119	180	61%	186	61%	187	64%

^{*}World Bank classification in the year the survey was conducted.

What is environmental auditing?

The term environmental auditing is used in the context of independent external auditing, also called legislative or public sector auditing. Generally, three broad types of audits—financial, compliance, and performance—are used in public sector auditing. Environmental auditing is, in principle, no different from the other types of audits that SAIs conduct, all of which may address environmental, natural resource, and sustainable development issues.

Financial audits are used to determine whether government's financial statements reflect its environmental costs and liabilities. Compliance audits are used to assess compliance with spending authorities and with environmental laws, treaties, and policies.

Finally, performance audits are used to determine whether a government

- · meets its environmental objectives,
- is effective in producing environmental results, and
- operates efficiently and economically.

It is not uncommon for SAIs to conduct environmental audits that combine some or all aspects of financial, compliance, and performance audits.

The Big Picture

SAIs can play a major role in protecting the environment, by helping legislatures and parliamentarians hold their countries' governments accountable for the environmental commitments that are made through international environmental agreements as well as domestic legislation and programs. According to the surveys, SAIs have conducted over 2,000 environmental audits (EAs), since 1989, on various topics, such as waste management, protected areas, and water pollution.

In the fifth survey, SAIs were asked "Has your SAI ever conducted any environmental audits?" Seventy-four percent of respondents (88 SAIs) answered that they have conducted at least one environmental audit—almost ten percent more than was reported in the fourth survey (in 2003) (Exhibit 4). SAIs in some regions, such as OLACEFS (93%) and EUROSAI (90%), are very active in environmental auditing while in others, such as CAROSAI (17%), are less active (Exhibit 5).



Exhibit 4 SAIs that have conducted at least one environmental audit

Percentage of SAIs that have conducted at least on environmental audit				
2003 (N=114)	2006 (N=119)			
65	74			
Has your SAI ever conducted any environmental audits? (Question 2b)				

N is the number of SAIs that answered this question.

Exhibit 5 SAIs that have conducted at least one environmental audit—per region

Percentage of SAIs that have conducted at least one environmental audit (2006 survey)							
AFROSAI (N=22)	ARABOSAI ASOSAI CAROSAI EUROSAI OLACEFS SPAS (N=12) (N=32) (N=6) (N=39) (N=14)						
68	50 72 17 90 93 67						
Has your SAI ev	Has your SAI ever conducted any environmental audits? (Question 2b)						

N is the number of SAIs that answered this question.

Respondent SAIs from low income countries conduct fewer environmental audits (58%) compared with high income countries (76%) and medium income countries (79%) (Exhibit 6).

Exhibit 6 SAIs that have conducted at least one environmental audit—per income level

Percentage of SAIs per income level (2006 survey)						
Low (N=19)	High (N=34)					
58	76					
Has your SAI ever conducted any environmental audits? (Question 2b)						

N is the number of SAIs that answered this question.

Environmental Audit Trends

In general, SAIs that conducted environmental audits in the past continued to do so. From 2003 to 2005, 68 percent of respondents (81 SAIs) conducted at least one environmental audit—the highest percentage so far (the same question was asked in every survey). Exhibit 7 shows a steady growth in environmental auditing over the last 15 years.

Exhibit 7 SAIs that conducted environmental audits during each survey period

Percentage of SAIs that have conducted environmental audits						
1989–93 (N=58)	1994–96 1997–99 2000–02 2003–05 (N=78) (N=110) (N=114) (N=119)					
42 60 57 62 68						
Has your SAI conducted any environmental audits since 1 January 2003? (Question 2c)						



The survey reveals that there are marked differences in the level of environmental auditing from region to region. According to the fifth survey, SAIs from the OLACEFS region are the most active compared to the other INTOSAI regions—93 percent of OLACEFS respondents conducted an environmental audit from 2003 to 2005—SAIs from EUROSAI are also very active at 82 percent (Exhibit 8).

Exhibit 8 Percentage of SAI respondents—per region—who conducted environmental audits—from 2003 to 2005

Percentage of SAIs that have conducted environmental audits (2006 survey)							
AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)	
50 42 66 17 82 93 67							
Has your SAI con	Has your SAI conducted any environmental audits since 1 January 2003? (Question 2c)						

N is the number of SAIs that answered this question.

The number of environmental audits by SAIs from countries of different income levels varies (Exhibit 9). SAIs from medium and high income countries are the most likely to report having conducted an environmental audit since 2003 (75% and 68% respectively).

Exhibit 9 SAIs that have conducted environmental audits since 1 January 2003—per income level

Percentage of SAIs that have conducted environmental audits* (2006 survey)						
Low (N=19)						
53 75 68						
Has your SAI conducted any environmental audits since 1 January 2003? (Question 2c)						

^{*} Three SAIs do not have a World Bank income level; they are not part of this exhibit.

N is the number of SAIs that answered this question.

Results of the fifth survey (2006) were compared with those of the fourth survey (2003) to see if there are newcomers to environmental auditing. Of the SAIs that stated in the fourth survey that they never conducted environmental audits, 11 conducted their first environmental audit from 2003 to 2005. These SAIs are mainly from the AFROSAI (4 SAIs) and ASOSAI (3 SAIs) regions.

From 2003 to 2005, 69 SAIs conducted 363 environmental audits. Even though the percentage of SAIs that are conducting audits has increased (Exhibit 7), the total number of audit reports, compared with the previous surveys, has decreased (Exhibit 10).

Exhibit 10 Number of environmental audit reports produced by SAIs during each survey period

Number of environmental audit reports										
1989–93*	1994–96	1997–99	2000–02	2003–05						
306	306 589 564 518 363									
(Question from the Envir	onmental Audits (EA) form)									

^{*}The First Survey covered more than three years.



It is difficult to determine how meaningful this decrease is, as we rely on countries to voluntarily inform the WGEA of all environmental audit reports produced. Some SAIs that are active in environmental auditing did not respond to the survey. Moreover, some SAIs (12) reported conducting environmental audits since 2003, but did not provide information on the audit they produced, using the "Environmental Audits Collection" form. For instance, one SAI from CAROSAI answered that they conducted at least one environmental audit during this period, but did not provide any titles. SAIs from EUROSAI and OLACEFS regions produced the most environmental audits (Exhibit 11).

Exhibit 11 Number of environmental audit reports produced by SAIs from 2003 to 2005—per region

Number of env	Number of environmental audit reports according to region*										
AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI					
12	12 26 59 0 161 94 7										
(Question from th	ne Environmental A	udits (EA) form)									

^{*} Does not add to 363 reports because a SAI can belong to more than one region. In addition, some SAIs, such as the SAIs of Canada and United States, are not members of a RWGEA.

In general, between 2003 and 2005, SAIs produced between two and five reports (Exhibit 12). Compared to the other surveys, more SAIs produced only one report and fewer SAIs produced 16 reports or more.

Exhibit 12 Number of environmental audits conducted

Number of environmental		Number of SAIs				
audits conducted	1997–99	2000–02	2003–05			
one report	12	13	20			
2-5 reports	18	26	28			
6-10 reports	12	18	12			
11-15 reports	11	2	5			
16-20 reports	4	2	2			
21-25 reports	2	6	1			
26-50 reports	5	2	1			
(Question from the Environmental Audits (EA) form)						

The types of environmental audits conducted are mainly performance and compliance audits (Exhibit 13).

Exhibit 13 Number of audit reports per type of environmental audits from 2003 to 2005

Audit type	Number of reports*
Financial audits	49
Compliance audits	242
Performance audits	296
Priori audits	1
(Question from the Environmental Audits (EA) form)	

^{*} Does not add to 363 reports because a report may combine more than one type.



For most of the regions, performance audit is the main type. However, for OLACEFS and SPASAI, compliance audit is the main type (Exhibit 14).

Exhibit 14 Number of audit reports per type from 2003 to 2005—per region

	Number of reports for each region									
Audit type	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI			
Financial audits	2	0	8	0	33	1	3			
Compliance audits	4	23	33	0	105	74	6			
Performance audits	9	26	57	0	136	63	4			
Priori audits	0	0	0	0	1	0	0			
(Question from the	Environmental A	Audits (EA) form)								

Environmental Issues Audited—2003 to 2005

As mentioned earlier, SAIs audit different environmental areas. The survey results are particularly interesting to identify which environmental issues are audited the most.

SAIs were asked to indicate the issues they audited during the last three years, from 2003 to 2005 (see the questionnaire on the WGEA website). Sixty-four environmental audit reports are related to protected areas and natural parks (Exhibit 15). Three other issues are also frequently audited:

- pollution of water bodies,
- · domestic funds and subsidies and,
- biodiversity.

The regional analysis shows that some regions are either not yet auditing some issues or are auditing them less than others (Exhibit 15).

Exhibit 15 Number of reports for each environmental issue in SAI reports (from 2003 to 2005)—overall and per region

		Number of reports*						
				INT	OSAI regi	ions		
Environmental issues in SAI reports	All INTOSAI respondents	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
Ecosystems: Protected areas and natural parks	64	0	1	3	0	35	21	0
Water: Pollution of water bodies (such as by industry and agriculture)	59	0	8	8	0	17	29	3
Governance: Domestic funds and subsidies	56	0	0	8	0	41	2	0
Ecosystems: Biodiversity	56	0	1	3	0	29	15	1



			ı	Number o	f reports	*		
		INTOSAl regions						
Environmental issues in SAI reports	Ali INTOSAI respondents	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
Governance: Environmental management system	51	0	14	18	0	21	13	1
Water: Wastewater treatment	48	1	2	7	0	31	7	2
Governance: Environmental impact assessment	45	1	3	4	0	13	24	0
Other issues	43	2	2	0	0	24	7	0
Human activities and sectors: Agriculture	42	0	4	9	0	15	16	1
Ecosystems: Ecosystem management and ecosystem changes	41	0	0	2	0	27	7	0
Human activities and sectors: Infrastructure	40	1	4	17	0	11	8	0
Human activities and sectors: Environment and human health	39	1	4	5	0	6	21	0
Ecosystems: Species at risk	35	0	3	4	0	21	6	0
Governance: Other governance issues	35	1	2	11	0	7	10	0
Human activities and sectors: Energy and energy efficiency	35	0	0	3	0	21	6	2
Water: Drinking water: quality and supply	34	1	3	7	0	11	8	3
Ecosystems: Rivers and lakes	34	1	1	1	0	22	8	0
Waste: General waste	33	4	4	5	0	14	9	0
Waste: Municipal, solid, and non-hazardous waste	32	3	2	4	0	9	15	0
Waste: Contaminated sites and soil pollution	31	0	0	1	0	8	20	0
Governance: Sustainable development	31	0	0	2	0	11	14	0
Water: Other water issues	30	0	2	5	0	8	16	0
Human activities and sectors: Land development	30	2	4	8	0	9	8	0
Water: Water quantity management or management of watersheds	28	0	1	5	0	17	2	3
Air: Local air quality, such as smog, particulates,SO ₂ , NOx, and CO ₂	27	1	1	3	0	13	8	0
Waste: Hazardous waste	26	2	4	5	0	10	6	0
Ecosystems: Wetlands	26	0	0	1	0	20	4	0



			ı	Number o	f reports	*		
		INTOSAI regions						
Environmental issues in SAI reports	Ali INTOSAI respondents	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
Natural resources: Forestry and timber resources	23	1	1	4	0	6	11	0
Governance: Government greening operations	23	1	3	3	0	6	8	1
Human activities and sectors: Other human activities/sectors	22	0	0	1	0	7	12	0
Water: Marine pollution	21	0	0	1	0	12	2	1
Human activities and sectors: Natural disaster management: preparedness responses	19	0	0	7	0	9	2	0
Natural resources: Minerals, such as mining, gas, and oil	18	0	0	1	0	4	12	0
Natural resources: Fisheries (freshwater and marine)	17	0	0	1	0	7	4	0
Human activities and sectors: Transportation, traffic and mobility	17	0	0	2	0	10	3	0
Waste: Other waste issues	17	2	5	5	0	4	4	0
Human activities and sectors: Recreation and tourism	17	0	0	0	0	8	8	0
Human activities and sectors: Cultural heritage	17	1	0	0	0	6	9	0
Human activities and sectors: Urban environment quality (sustainability)	16	0	1	1	0	4	10	0
Human activities and sectors: Pesticides	16	0	4	5	0	3	4	0
Human activities and sectors: Chemicals management	15	0	1	1	0	6	6	0
Natural resources: Other natural resources issues	14	0	0	1	0	2	11	0
Ecosystems: Coastal areas	14	0	0	2	0	4	5	0
Waste: Radioactive waste	12	0	0	0	0	8	1	0
Ecosystems: Other ecosystem issues	12	0	0	2	0	3	5	0
Air: Climate change	11	0	0	1	0	5	2	2
Ecosystems: Protection of marine habitat	10	0	0	1	0	2	4	0
Governance: Strategic environmental assessment (SEA)	9	0	0	0	0	6	2	0
Governance: International funds and subsidies, such as Global Environmental Facility (GEF)	8	0	0	0	0	4	3	0



	Number of reports*							
				INT	OSAI reg	ions		
Environmental issues in SAI reports	All INTOSAI respondents	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
Air: Toxic air pollutants, such as organic POPs, dioxins, and furans	7	0	1	1	0	3	3	0
Air: Other air issues	6	0	0	0	0	1	5	0
Governance: World Summit on Sustainable Development (WSSD)	5	0	0	0	0	3	1	0
Air: Stratospheric ozone layer depletion	4	0	0	0	0	0	3	0
Air: Acid precipitation	3	0	0	1	0	1	1	0
Human activities and sectors: Biosafety and genetically modified organisms (GMOs)	2	0	1	1	0	0	0	0
Water: Acidification	1	0	0	0	0	0	1	0
Air: Indoor air quality	0	0	0	0	0	0	0	0
(Question from the Environmental Audits (EA) for	rm)							

^{*} One audit report may include several environmental issues.

It is important to note that one audit report may include several environmental issues. For this reason, statistical analysis was also performed to determine which major issues were audited the most. If the same report was reported more than once in the sub-category issue, it was only counted once (Exhibit 16).

Issues related to human activities and sectors and to governance are audited the most overall and are audited the most in each region (Exhibit 17). SAIs from the OLACEFS region produced the most audit reports on natural resource issues. See Appendix B for the list of issues and the sub-categories.

Exhibit 16 Environmental issues in SAI audit reports from 2003 to 2005 (general category)*

Environmental issue per major category	Number of reports 2003–05
Human activities and sectors	186
Governance	170
Water	139
Ecosystems	114
Waste	105
Natural Resources	63
Air	43
(Question from the Environmental Audits (EA) form)	·

^{*}If a report was listed more than once in a category, it was only counted once.



Exhibit 17 Environmental issues in SAI audit reports from 2003 to 2005 (general category)—per region

		Number of reports								
Major category	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI			
Human activities and sectors	4	14	34	0	70	62	3			
Governance	2	17	35	0	70	49	1			
Water	2	6	22	0	60	41	4			
Ecosystems	1	4	12	0	50	37	1			
Waste	4	10	16	0	40	37	0			
Natural Resources	1	1	7	0	18	31	0			
Air	1	2	5	0	18	15	2			
(Question from the	Environmental <i>i</i>	Audits (EA) form)		1	1					

Audit Objectives—2003 to 2005

For each audit, SAIs identify the audit objectives based on the questions the audit is expected to answer about the performance of an activity. At the end of the audit, auditors conclude against audit objectives.

Audit objectives come from different sources (Exhibit 18). Since 2003, SAIs have drawn their main audit objectives from

- compliance with domestic environmental legislation (86%)
- compliance with domestic environmental policies (77%) and,
- the performance of government environment programs (72%).

Regional analysis (Exhibit 19) shows a similar pattern.

Exhibit 18 Main audit objectives of environmental audits from 2003 to 2005

Main audit objectives of environmental audits	Percentage of SAIs* (N=81)
Compliance with domestic environmental legislation	86
Compliance with domestic environmental policies	77
Performance of government environmental programs	72
Compliance with international environmental agreements and treaties	46
Fair presentation of financial statements and expenditures	38
Environmental impacts of non-environmental government programs	28
Evaluations of environmental impacts of proposed environmental policies and programs	28
Others	4
What were the main audit objectives of your environmental audits since 1 January 2003? (Q	uestion 2d)

^{*} Percentages do not total 100%, because SAIs were allowed to select more than one option.



Exhibit 19 Main audit objectives of environmental audits from 2003 to 2005—per region

	Percentage of SAIs for each region						
Main audit objectives	AFROSAI (N=11)	ARABOSAI (N=5)	ASOSAI (N=21)	CAROSAI (N=1)	EUROSAI (N=32)	OLACEFS (N=13)	SPASAI (N=4)
Compliance with domestic environmental legislation	100	100	81	100	88	92	75
Compliance with domestic environmental policies	100	100	81	100	63	77	100
Performance of government environmental programs	46	100	81	100	78	77	25
Compliance with international environmental agreements and treaties	27	60	19	0	69	39	50
Fair presentation of financial statements and expenditures	27	60	29	100	56	15	50
Environmental impacts of non- environmental government programs	46	60	24	0	16	62	25
Evaluations of environmental impacts of proposed environmental policies and programs	27	60	19	100	22	54	25
Others	0	20	5	0	0	15	0
What were the main audit object	ives of your e	nvironmental au	dits since 1 Ja	nuary 2003? (Question 2d)		

N is the number of SAIs that answered this question.

A similar question was asked in the Environmental Audits Collection form. Exhibit 20 indicates the number of environmental audit reports using different types of audit objective. Audit objectives are drawn mainly from compliance with environmental legislation and from performance of government environmental programs. Regional analysis (Exhibit 21) shows that for some regions, such as ARABOSAI and ASOSAI, compliance with domestic environmental legislation is not the main audit objective used; for these regions, performance of government environmental programs is the most common audit objective.

Exhibit 20 Number of environmental audit reports for each audit objective, included on the environmental audits collection form

Audit objective	Number of environmental audit reports 2003–05*
Compliance with domestic environmental legislation	244
Performance of government environmental programs	231
Compliance with domestic environmental policies	184
Compliance with international environmental agreements	83
Fair presentation of financial statements and expenditures	62
Environmental impacts of proposed environmental policies and programs	61
Environmental impacts of non-environmental government programs	58
(Question from the Environmental Audits (EA) form)	

^{*} An audit report can use more than one type of audit objective.



Exhibit 21 Number of environmental audit reports for each audit objective, included on the environmental audits collection form—per region

Percentage of SAIs for each region						
AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
11	9	22	0	111	84	4
2	24	52	0	103	42	4
9	23	38	0	70	44	7
3	1	0	0	54	19	3
0	0	8	0	44	5	3
0	0	3	0	18	39	1
3	0	5	0	25	23	0
	11 2 9 3 0	11 9 2 24 9 23 3 1 0 0 0 0	AFROSAI ARABOSAI ASOSAI 11 9 22 2 24 52 9 23 38 3 1 0 0 0 8 0 0 3	AFROSAI ARABOSAI ASOSAI CAROSAI 11 9 22 0 2 24 52 0 9 23 38 0 3 1 0 0 0 0 8 0 0 0 3 0	AFROSAI ARABOSAI ASOSAI CAROSAI EUROSAI 11 9 22 0 111 2 24 52 0 103 9 23 38 0 70 3 1 0 0 54 0 0 8 0 44 0 0 3 0 18	AFROSAI ARABOSAI ASOSAI CAROSAI EUROSAI OLACEFS 11 9 22 0 111 84 2 24 52 0 103 42 9 23 38 0 70 44 3 1 0 0 54 19 0 0 8 0 44 5 0 0 3 0 18 39

Environmental Issues in Non-Environmental Audits

SAIs may also include environmental issues in non-environmental audits—that is, audits that do not focus on environmental issues. An audit is usually divided in lines of enquiry (sub-topics) and may include a line of enquiry specific to environmental issues. Fifty-four percent of SAIs (N=116) have included environmental issues in non-environmental audits during the last three years (from 2003 to 2005). For example, SAIs looked at how well environment mitigation measures are respected when their government builds infrastructures, such as highways, or when they conduct defence activities.

SAIs from ARABOSAI (Exhibit 22) are integrating the most environmental issues in non-environmental audits, but SAIs from EUROSAI and ASOSAI are also often integrating these issues.

Exhibit 22 SAIs that have conducted non-environmental audits that did include environmental issues since 2003—per region

Percentage of SAIs that have conducted a non-environmental audit with an environmental component for each region								
AFROSAI (N=21)			CAROSAI (N=4)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)		
33	75	63	25	64	50	50		

Since 1 January 2003, has your SAI conducted an audit that **did not** focus on an environmental issue, but that **did** include a relevant aspect related to the environment (for example, the environment was one of the aspects of a larger non-environmental audit? (**Question 2m**)



Auditing Implementation of International Agreements

SAIs, especially SAIs from developed countries, are tackling areas that are at the forefront, such as auditing government commitments related to the numerous international environmental agreements and treaties they have signed.

Since 2003, 36 percent of SAIs (N=80) have used international agreements as a source of audit criteria. The resulting audits touch on a variety of environmental issues:

- Biodiversity:
 - · Convention on Biological Diversity,
 - Ramsar Convention on Wetlands.
 - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Waste: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
- Marine pollution: International Convention for the Prevention of Pollution from Ships (MARPOL).
- Ozone protection: Montreal Protocol on Substances that Deplete the Ozone Layer.
- Climate change: Kyoto Protocol to the United Nations Framework Convention on Climate Change.

SAIs from EUROSAI conduct the most audits related to international agreements (59%), while OLACEFS is the second most active region (39%) (Exhibit 23). SAIs just learning to do their first environmental audit do not tend to approach this area.

Exhibit 23 SAIs that have conducted an environmental audit on international agreements or treaties since 2003—per region

Percentage of SAIs that have conducted environmental audit of an international agreement or treaty for each region							
AFROSAI (N=10)	ARABOSAI (N=5)	ASOSAI (N=21)	CAROSAI (N=1)	EUROSAI (N=32)	OLACEFS (N=13)	SPASAI (N=4)	
0 0 5 0 59 39 50							
Since 1 January 2003, has your SAI conducted an environmental audit on international agreements or treaties? (Question 2e)							

N is the number of SAIs that answered this question.

Auditing Sustainable Development

Sustainable development is a concept that, over the last two decades, has gained in acceptance and understanding; it is now a major consideration in government planning and policy making. The concept of "development that meets the needs of the present generation without compromising the ability for future generations to meet their own needs" is now accepted by the public and private sectors.

So far, 25 percent of SAIs (N=87) have completed or started an audit on this topic. SAIs from all INTOSAI regions, except CAROSAI, have conducted these audits, for example, OLACEFS (31%), EUROSAI (29%), and ASOSAI (23%) (Exhibit 24). Because the number of respondents for ARABOSAI and SPASAI are low for this question, the high percentage is not as meaningful. The audit topics have included sustainable development strategies, freshwater resources and water services and their social impact, and the World Summit on Sustainable Development (WSSD) commitments.



Exhibit 24 SAIs that have started or completed an audit of their countries' progress in sustainable development—per region

Percentage of SAIs that have started or completed an audit of progress in sustainable development for each region							
AFROSAI (N=14)	ARABOSAI (N=6)	ASOSAI (N=22)	CAROSAI (N=1)	EUROSAI (N=35)	OLACEFS (N=13)	SPASAI (N=4)	
14 50 23 0 29 31 50							
Has your SAI started or completed audits of your country's progress in sustainable development? (Question 2g)							

N is the number of SAIs that answered this question.

Working Together: Cooperative Audits

Part of the mission of the WGEA is to encourage SAIs to undertake cooperative audits. Cooperative audits are useful for SAIs, particularly for environmental audits of transboundary issues and those related to international agreements (Exhibit 25). Through cooperative audits, SAIs can

- exchange information,
- train each other,
- build capacity, and
- network.

SAIs can also compare audit findings and results with other countries (benchmarking), which can make audit report more powerful. Benchmarking is particularly helpful for parliamentarians, who like to know how they perform compared to other countries.

Exhibit 25 Advantages of conducting joint, parallel (concurrent), or coordinated environmental audits

Category	Number of suggestions— provided by 29 SAIs*
Exchange of methodology and information, comparison of results	21
Advantages for auditing transboundary issues	14
Greater impact of audit findings on government	6
Capacity building	5
M	

If you answered yes to 6ai or 6aii, explain why your SAI conducts joint, parallel (concurrent), or coordinated environmental audits; according to your SAI, what are the advantages of these types of audit. (**Question 6c**)?

Since 2003, 19 percent of the 108 respondent SAIs conducted cooperative audits related to international agreements (Exhibit 26), such as the Convention on Biological Diversity or the regional Helsinki convention on the Baltic Sea. Except for one cooperative audit done by a SAI in the ASOSAI region, only SAIs in EUROSAI reported conducting cooperative audits related to international agreements (Exhibit 27).

Since 2003, 22 percent of the 111 respondent SAIs have conducted cooperative audits that were not related to an international agreement (Exhibit 26). Most of the cooperative audits on topics not related

^{*}The total number of suggestions does not add up to 29, because some SAIs made more than one suggestion. In cases where SAIs made multiple suggestions under the same category, they were counted as a single suggestion.



to international agreements have been done in EUROSAI (37%). However, other regions, including OLACEFS (21%), ASOSAI (13%), and AFROSAI (17%), are also conducting this type of cooperative audits (Exhibit 27).

In addition, SAIs do cooperate in other ways. For example, the exchange of audit information or environmental audit experiences is common for SAIs (52%) (Exhibit 26).

Exhibit 26 Type of cooperation between SAIs since 2003

Types of cooperation	(N=)	Percentage of SAIs					
The exchange of audit information or environmental auditing experiences between SAIs	109	52					
Cooperation with another SAI on an audit about an environmental subject but not an agreement or treaty	111	22					
Cooperation with another SAI on an audit related to an international environmental accord (including treaties, international agreements, obligations, or commitments)*	108	19					
Since 1 January 2003, does your SAI have experience with one or more of the following types of cooperative activity?							

Since 1 January 2003, does your SAI have experience with one or more of the following types of cooperative activity? (Question 6a)

N is the number of SAIs that answered this question.

Exhibit 27 Types of cooperation between SAIs since 2003—per region

	Percentage of SAIs for each region						
Types of cooperation	AFROSAI (N=17-18)	ARABOSAI (N=11-12)	ASOSAI (N=31)	CAROSAI (N=56)	EUROSAI (N=37-38)	OLACEFS (N=13-14)	SPASAI (N=6)
The exchange of audit information or environmental auditing experiences between SAIs	53	50	45	0	65	69	33
Cooperation with another SAI on an audit about an environmental subject but not an agreement or treaty	17	0	13	0	37	21	0
Cooperation with another SAI on an audit related to an international environmental accord (including treaties, international agreements, obligations, or commitments)	0	0	3	0	51	0	0

Since 1 January 2003, does your SAI have experience with one or more of the following types of cooperative activity? (Question 6a)

N is the number of SAIs that answered this question.

Coping with challenges related to cooperative audits

Doing cooperative audits is not yet common practice in the SAI community, because SAIs face different challenges when they consider doing such audits. Of the 119 SAIs that responded to the survey, only 24 percent reported that they did not face barriers in conducting cooperative audits (Exhibit 28). For the others, however, the main challenges were

- lack of resources (45%),
- lack of skills or experience in the SAIs (35%),



- inadequate SAI mandate (22%), and
- lack of partners (19%).

SAIs from EUROSAI have the most experience in cooperative audits (Exhibit 27) and the fewest barriers (46%) (Exhibit 29). Lack of resources seems to be an important barrier for SAIs from OLACEFS.

Exhibit 28 Major barriers to performing cooperative environmental audits

Barriers to performing joint, collaborative, or cooperative audits	Percentage of SAIs (N=119)
Lack of resources	45
Lack of skills or expertise within the SAI	35
No barriers	24
Inadequate SAI mandate	22
Lack of partners	19
Lack of interest	8
Others	8

What are the major barriers preventing your SAI from conducting joint, parallel (concurrent) or coordinated environmental audits? (Question 6d)

N is the number of SAIs that answered this question.

Exhibit 29 Major barriers to performing joint, collaborative, or cooperative audits—per region

Barriers to	Percentage of SAIs for each region								
performing joint, collaborative, or cooperative audits	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)		
Lack of resources	50	25	44	50	31	71	50		
Lack of skills or expertise within the SAI	41	33	38	33	15	36	37		
No barriers	18	8	13	33	46	14	0		
Inadequate SAI mandate	27	25	16	33	13	14	67		
Lack of partners	18	17	19	33	8	29	50		
Lack of interest	0	17	13	17	0	21	17		
Others	5	8	9	0	10	7	17		

What are the major barriers preventing your SAI from conducting joint, parallel (concurrent), or coordinated environmental audits? (Question 6d)



Measuring the Impact of Audits

Results of the fifth survey show that SAIs use different methods to measure the impact of their audit work (Exhibit 30), including

- government responses to their recommendations (73%),
- follow-up audits (66%), and
- number of parliamentarian hearings (43%).

Regional analysis (Exhibit 31) shows that some means are more important in some regions, such as media coverage, which is important in EUROSAI (49%), and less so in OLACEFS (0%). SAIs from EUROSAI are using multiple means to measure the impact of their audits.

Exhibit 30 How SAIs measure the impact of their environmental audits

Means of measuring impact	Percentage of SAIs (N=88)				
Government response to audit recommendations	73				
Follow up audit	66				
Parliamentarian hearings	43				
Media coverage	36				
We do not measure the impact of our environmental audits	14				
Other	7				
How does your SAI measure the impact of your environmental audits? (Question 2k)					

N is the number of SAIs that answered this question.

Exhibit 31 How SAIs measure the impact of their environmental audits—per region

Means of		Percentage of SAIs for each region											
measuring impact	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)						
Government response to audit recommendations	41	42	56	17	56	72	67						
Follow up audit	27	33	47	17	62	57	67						
Parliamentarian hearings	18	17	38	17	44	0	67						
Media coverage	14	0	25	0	49	0	50						
We do not measure the impact of our environmental audits	14	0	6	0	13	14	17						
Other	5	0	6	0	8	0	17						
How does your SAI me	asure the impac	ct of your enviror	mental audits?	(Question 2k)									



Mandate and Resources of SAIs

In the SAI community, there are similar roles and functions, standards, audit types, and methodologies. However there are some variations in mandates, scopes, and specific practices.

General mandate

According to the fifth survey, SAIs conduct different kinds of audits:

- most have a regularity (financial and compliance) mandate (93%);
- many of them have also a performance audit mandate (89%); and
- some have mandates to conduct priori audits (33%), in advance of expenditure.

SAIs' general mandates have not changed substantially since the last survey in 2003. However, more SAIs (89%) now have performance mandates (Exhibit 32). Regional analysis shows that OLACEFS results differ from the others (Exhibit 33).

Exhibit 32 Types of audits that SAIs have the legislative mandate to carry out

	Percentage of SAIs						
Mandate	2003 (N=114)	2006 (N=114)					
Financial audits	94*	93					
Compliance audits	94*	92					
Performance audits (Value for money)	82	89					
Priori audits (for example, audits in advance of expenditure)	33	33					
Others	N/A**	13					
Priori expertise	24	N/A					
What types of audit does your SAI have the legislative mandate to carry out? (Question 1a)							

^{*}Financial and compliance audits were not presented as options in the 2003 survey. Instead, the regularity audits were presented as options. It is assumed that any SAIs that had a regularity mandate in 2003 also had financial and compliance audit mandates.

Exhibit 33 Types of audits that SAIs have the legislative mandate to carry out—per region

		Percentage of SAIs for each region (2006 survey)										
Mandate	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)					
Financial audits	100	100	97	100	95	64	100					
Compliance audits	91	92	94	100	95	86	83					

^{**}N/A: Non Applicable.



		Percentage of SAIs for each region (2006 survey)										
Mandate	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)					
Performance audits (Value for money)	91	83	94	100	92	79	67					
Priori audits (for example, audits in advance of expenditure)	23	33	34	17	39	36	33					
Others	18	17	13	17	3	29	33					
What types of audit	does vour SAI h	ave the legislativ	e mandate to ca	erry out? (Quest	ion 1a)							

N is the number of SAIs that answered this question.

A new question was included in the fifth survey to assess the types of mandate, under which SAIs conduct compliance audits. As seen from the responses (Exhibit 34), SAIs conduct compliance audits under different mandates, including performance audit mandates. Results from the OLACEFS region (Exhibit 35) differ from the other regions.

Exhibit 34 Type of mandate under which SAIs conduct compliance audits

Type of mandate	Percentage of SAIs (N=119)
Compliance audit mandate	78
Regularity audit mandate	73
Financial audit mandate	70
Performance (value-for-money) audit mandate	68
Other	7
SAI does not conduct compliance audits	3
Haday what mandate days your CAI sandy at sansuliance and its arrab as a	

Under what mandate does your SAI conduct compliance audits, such as compliance with international agreements, domestic legislation, or domestic policies? (Question 1b)

Exhibit 35 Type of mandate under which SAIs conduct compliance audits—per region

		Percentage of SAIs for each region											
Type of mandate	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)						
Compliance audit mandate	86	83	75	83	85	71	50						
Regularity audit mandate	82	100	70	83	85	50	17						
Financial audit mandate	86	83	63	83	77	29	33						



		Percentage of SAIs for each region											
Type of mandate	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)						
Performance (value-for-money) audit mandate	73	92	72	83	80	43	33						
Other	5	0	3	0	5	29	0						
SAI does not conduct compliance audits	5	8	6	0	0	0	17						

Under what mandate does your SAI conduct compliance audits, such as compliance with international agreements, domestic legislation, or domestic policies? (**Question 1b**)

N is the number of SAIs that answered this question.

Many SAIs' mandates give them full access not only to the national government (97%) but also to provincial, regional, or state governments (75%) and local, municipal, or community governing bodies (65%). Many SAIs have also full access to state-owned enterprises or state-owned companies (78%). Environmental issues are often audited at multiple levels, and because they have such extensive audit mandates, many SAIs have the opportunity to assess how all levels of government are doing to protect the environment. SAIs often do not have full access to semi-governmental organizations. However, they may have partial access under certain conditions (Exhibit 36).

Exhibit 36 Levels of government and non governmental organizations that SAIs have access to

	Percentage of SAIs						
Governmental and non governmental organizations:	(N=)	No Access (NA)	Partial Access (PA)	Full Access (FA)			
National government	117	0	3	97			
State-owned enterprises or state-owned companies	116	0	22	78			
Provincial, regional, or state governments	99	7	18	75			
Local, municipal, or community governing bodies	113	8	27	65			
Semi-governmental organizations	110	8	55	37			
Other	19	32	42	26			
Non-governmental public enterprises or organizations	109	42	46	12			
Private sector enterprises or organizations	108	53	44	3			

What level of access does your SAI's mandate give to the following governmental and non governmental organizations? (Question 1c)

N is the number of SAIs that answered this question.

Regional analysis (Exhibit 37) shows some differences between the regions. For instance, SAIs from EUROSAI generally have less full access to provincial and local governments, and SAIs from ARABOSAI and AFROSAI have more full access to semi-governmental organizations than the other regions. Most of the SAIs, from all regions, either have partial access or do not have access to non-governmental public enterprises or organizations and to private sector enterprises or organizations.



Exhibit 37 Levels of government and non governmental organizations that SAIs have access to—per region

Governmental							Р	erce	ntag	e of	SAIs	for e	each	regi	on						
and non governmental organizations		AFROSAI ARABOSAI ASOS (N=5-21) (N=1-12) (N=7-					AROS N=0-		EUROSAI (N=7-39)			OLACEFS (N=1-14)			_	PAS N=2-					
*	NA	PA	FA	NA	PA	FA	NA	PA	FA	NA	PA	FA	NA	PA	FA	NA	PA	FA	NA	PA	FA
The national government	0	5	95	0	8	92	0	0	100	0	0	100	0	5	95	0	0	100	0	0	100
State-owned enterprises or state-owned companies	0	10	91	0	18	82	0	19	82	0	40	60	0	31	69	0	29	72	0	33	67
Provincial, regional, or state governments	5	5	90	11	0	89	4	15	81	0	0	100	6	27	67	0	25	75	33	33	33
Local, municipal, or community governing bodies	0	19	81	8	8	83	6	19	75	0	0	100	13	44	44	0	23	77	17	17	67
Semi- governmental organizations	6	39	56	0	40	60	10	50	40	17	50	33	5	62	33	0	83	17	33	50	17
Other	40	20	40	100	0	0	43	43	14	0	0	0	14	57	29	0	100	0	0	100	0
Non-governmental public enterprises or organizations	48	38	14	46	46	9	48	45	7	75	0	25	22	61	17	39	54	8	67	17	17
Private sector enterprises or organizations	80	20	0	67	33	0	55	42	3	75	0	25	28	70	3	50	50	0	83	17	0

What level of access does your SAI's mandate give to the following governmental and non governmental organizations? (Question 1c)

N is the number of SAIs that answered this question.

Mandate on environmental auditing

Often debated among SAIs is whether a special mandate is needed to carry out environmental audits. There are different, sometimes competing, views on this matter. The official position of the WGEA is that a specific mandate is not needed. Environmental audits can be done under regularity (financial and compliance) or performance audit mandates. However, some SAIs hold the view that a special mandate can help SAIs approach ministries and give a clear message to the government of the day that environmental audits are important.

According to the fifth survey, some SAIs have specific provisions for environmental auditing (17%, which is the same percentage as the fourth survey, conducted in 2003) in their legislative mandates (Exhibit 38), which can take different forms. The legislation may include environmental protection, environmental policies, environmental impact, and sustainable development. The OLACEFS region has the highest percentage of SAIs that specify environmental auditing in their legislative mandate (43%) (Exhibit 39).

^{*}NA= No Access, PA=Partial Access and FA=Full Access.



Exhibit 38 Percentage of SAIs with mandates that specifically include environmental auditing

Percentage of SAIs										
1996 (N=77)	2000 (N=105)	2003 (N=109)	2006 (N=119)							
16 14 17 17										
Does your SAI's legislative mane	Does your SAI's legislative mandate refer to environmental auditing specifically? (Question 1e)									

N is the number of SAIs that answered this question.

Exhibit 39 Percentage of SAIs with mandates that specifically include environmental auditing—per region

Percentage of SAIs with mandates that specifically include environmental auditing for each region (2006)											
AFROSAI (N=22)											
18	18 17 9 0 13 43 17										
Does your SAI's I	Does your SAI's legislative mandate refer to environmental auditing specifically? (Question 1e)										

N is the number of SAIs that answered this question.

Five percent of SAIs' mandates—specifically, in the EUROSAI and from the OLACEFS regions—have been extended since 2003 (Exhibits 40 and 41).

Exhibit 40 Changes to SAI's environmental auditing mandate since 2003

Change to SAI's mandate	Percentage of SAIs (N=116)						
The mandate has been extended	5						
The mandate has been restricted	0						
No changes have been made to the mandate	59						
Not applicable	36						
Has your SAI's environmental auditing mandate changed since 1 January 2003? (Question 1g)							

N is the number of SAIs that answered this question.

Exhibit 41 Changes to SAI's environmental auditing mandate since 2003—per region

-00041			Percentage of SAIs for each region						
ROSAI N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)			
0	0	0	0	13	7	0			
0	0	0	0	0	0	0			
52	75	60	20	69	64	33			
48	25	40	80	18	29	67			
	0 0 52 48	0 0 0 0 0 52 75 48 25	0 0 0 0 0 0 0 52 75 60	0 0 0 0 0 0 0 0 52 75 60 20 48 25 40 80	0 0 0 0 13 0 0 0 0 0 52 75 60 20 69 48 25 40 80 18	0 0 0 0 13 7 0 0 0 0 0 0 52 75 60 20 69 64 48 25 40 80 18 29			



Results from the fifth survey demonstrate that a specific environmental audit mandate is not essential since seventy-four percent of SAIs (Exhibit 4) declared that, while they had already conducted environmental audits, many of them do not have specific environmental mandates.

It is important to note that SAIs can have additional environmental roles not related to audit. For instance, SAIs may have mandates that include environmental petition processes or reviews of their government's sustainable development strategies.

SAIs helping government

In addition to the audits, some SAIs—mainly from low and medium income levels—have a mandate to help their governments evaluate their capacity to develop and implement their environmental policies and programs (24%) or formulate environmental legislation, policies, and programs (19%) (Exhibits 42 and 43). Regional analysis (Exhibit 44) shows that in all regions, most SAIs do not help government departments with any environmental issues.

Exhibit 42 Help given by SAIs to government departments

Help given by SAIs to government departments*:	Percentage of SAIs (N=119)
Does not help government departments with any environmental issues	43
Helps government evaluate their capacity to develop and implement environmental policies or programs	24
Helps government formulate environmental legislation or environmental policies or programs	19
Helps government develop their environmental management systems	18
Helps government generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	17
Other	17
Helps government produce their environmental reports	6
Does your SAI help government departments with any of the following? (Question 2q)	

^{*}A SAI may help government in more than one area

Exhibit 43 Help given by SAIs to government departments—per income level

	Percentage of SAIs			
Help given by SAIs to government departments*	Low (N=19)	Medium (N=63)	High (N=34)	
Does not help government departments with any environmental issues	21	38	62	
Helps government evaluate their capacity to develop and implement environmental policies and programs	32	24	18	
Helps in other ways	16	16	18	



	Percentage of SAIs						
Help given by SAIs to government departments*	Low (N=19)	Medium (N=63)	High (N=34)				
Helps government formulate environmental legislation or environmental policies or programs	16	25	9				
Helps government develop their environmental management systems	21	21	9				
Helps government generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	37	16	6				
Other	16	16	18				
Helps government produce their environmental reports	11	5	3				
Does your SAI help government departments with any of the following? (Question 2q)							

^{*}A SAI may help government in more than one area

N is the number of SAIs that answered this question.

Exhibit 44 Help given by SAIs to government departments—per region

	Percentage of SAIs for each region						
Help given by SAIs to government departments*	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Does not help government departments with any environmental issues	41	50	44	83	39	36	50
Helps government evaluate their capacity to develop and implement environmental policies or programs	32	33	19	0	26	29	0
Helps government formulate environmental legislation or environmental policies or programs	14	33	16	0	26	14	33
Helps government develop their environmental management systems	23	25	9	0	26	14	0
Helps government generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	27	17	13	0	15	21	17
Other	14	17	9	17	21	29	0
Helps government produce their environmental reports	9	8	3	0	3	7	17



Resources used to conduct environmental audits

SAIs who want to begin environmental audits often wonder what sort of resources they will need. Results from the fifth survey show that this varies from SAI to SAI. This demonstrates to newcomers that a SAI can begin environmental auditing without investing many resources. However, some SAIs do invest considerable resources in environmental auditing.

Most SAIs spend between one and four percent of their budget on environmental auditing; however, almost as many spend less than one percent (Exhibit 45).

Exhibit 45 Percent of annual budget spent on environmental auditing

Percentage of annual budget	Percentage of SAIs (N=66)				
Zero	21				
One percent and less	27				
Between one and four percent	29				
More than four percent	23				
Approximately what percentage of your annual SAI's budget is directed toward environmental audits? (Question 3d)					

N is the number of SAIs that answered this question.

On average, SAIs spent 2.4% of their annual budget on environmental auditing, with SAIs from EUROSAI spending the most (2.9%) (Exhibit 46).

Exhibit 46 Percentage of annual budget spent on environmental auditing—per region

Region	AFROSAI (N=7)	ARABOSAI (N=2)	ASOSAI (N=16)	CAROSAI (N=2)	EUROSAI (N=23)	OLACEFS (N=10)	SPASAI (N=6)
Percentage of budget	.9	.5	1.8	0	2.9	1.9	1.1
Approximately what percentage of your annual SAI's budget is directed toward environmental audits? (Question 3d)							

N is the number of SAIs that answered this question.

The number of people conducting environmental audits in each SAI also varies. The number of full-time equivalents (FTEs) working on environmental auditing, in an average year since 2003, is 12.7, with SAIs from OLACEFS having the highest number (18.1) (Exhibit 47). On average, SAIs have between two and ten FTEs working on environmental audits but not necessary full time (Exhibit 48).

Exhibit 47 Number of full-time equivalents, in an average year—per region

Region	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
	(N=13)	(N=4)	(N=21)	(N=2)	(N=33)	(N=12)	(N=6)
Number of full- time equivalents (FTEs)	8.0	5.3	4.9	0	11.8	18.1	1.3

Since 1 January 2003, in an average year, how much effort was spent on environmental audits in your SAI? (Please report the amount of effort in terms of full-time equivalent work; for instance two people working half-time equals one full-time equivalent)? (Question 3a)



Exhibit 48 Number of people working on environmental auditing in an average year since 2003

Full-time equivalent (FTE) in environmental auditing	Percentage of SAIs (N=86)
Zero	18
Fewer than two	14
Two to ten	41
Ten or more	27

Since 1 January 2003, in an average year, how much effort was spent on environmental audits in your SAI? (Please report the amount of effort in terms of full-time equivalent work; for instance two people working half-time equals one full-time equivalent)? (Question 3a)

N is the number of SAIs that answered this question.

The overall, average number of full-time equivalents working full time on environmental auditing is 8.2, with SAIs from OLACEFS having the highest average number (18.1) (Exhibit 49). Although SAIs from AFROSAI have a fairly high number of FTEs (8) working on environmental auditing (Exhibit 47), only a few work full time on environmental auditing (1.2) (Exhibit 49).

On average, there are fewer people working full time in environmental auditing in the group of 10 or more FTEs and more with zero people working full time on environmental audits (Exhibits 48 and 50).

Exhibit 49 Number of full-time equivalents working full time in environmental auditing—per region

Region	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
	(N=11)	(N=6)	(N=23)	(N=1)	(N=30)	(N=11)	(N=4)
Number of full- time equivalents (FTEs)	1.2	5.3	3.8	0	6.3	18.1	1.5

Of the full-time equivalents mentioned in 3a, how many work full time on environmental audits? (Question 3b)

N is the number of SAIs that answered this question.

Exhibit 50 Number of full-time equivalent working full time in environmental auditing

Full-time equivalent in environmental auditing	Percentage of SAIs (N=80)				
Zero	29				
Fewer than two	12				
Two to ten	40				
Ten or more	19				
Of the full-time equivalents mentioned in 3a, how many work full time on environmental audits?) (Question 3b)					

N is the number of SAIs that answered this question.

Although having a dedicated division is not a prerequisite for conducting environmental audits, it can help a SAI to build its expertise and 35 percent of SAIs (N=110) have decided to have a specific division working on environmental auditing. SAIs from the OLACEFS region have the most departments or sections working full time on environmental audits (Exhibit 51).



Exhibit 51 SAIs that have a specific division on environmental auditing—per region

Percentage of SAIs with a specific department or section working full time on environmental audits for each region							
AFROSAI ARABOSAI ASOSAI CAROSAI EUROSAI OLACEFS SPASAI (N=19) (N=11) (N=32) (N=3) (N=37) (N=14) (N=6)							
21 27 22 0 35 79 33							
Does your SAI have a specific department or section working full time on environmental audits? (Question 3c)							

N is the number of SAIs that answered this question.

Overcoming Barriers in Environmental Auditing

In the fifth survey, SAIs identified a number of potential barriers to conducting environmental auditing. The main barriers are the lack of skills or expertise within the SAI and insufficient data on the state of the environment. Exhibit 52 illustrates some of the other barriers.

Exhibit 52 Most common barriers to environmental auditing

	Percentage of SAIs				
1996 (N=62-72)	2000 (N=106)	2003 (N=114)	2006 (N=119)		
N/A*	50	58	56		
41	37	40	51		
51	39	40	41		
N/A	26	31	40		
49	35	40	35		
22	26	25	22		
18	15	26	13		
30	11	9	6		
	N/A* 41 51 N/A 49 22 18	1996 (N=62-72) 2000 (N=106) N/A* 50 41 37 51 39 N/A 26 49 35 22 26 18 15	1996 (N=62-72) 2000 (N=106) 2003 (N=114) N/A* 50 58 41 37 40 51 39 40 N/A 26 31 49 35 40 22 26 25 18 15 26		

^{*} N/A: Non Applicable.

N is the number of SAIs that answered this question.

Exhibit 53 indicates that for SAIs from EUROSAI the lack of skills is not a major barrier. It also indicates the interesting fact that, even though SAIs from OLACEFS are very active in environmental auditing (see exhibits 5 and 8), they are facing numerous barriers in conducting environmental audits.



Exhibit 53 Most common barriers to environmental auditing—per region

	Percentage of SAIs for each region (2006 survey)						
Barriers	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Lack of skills or expertise within the SAI	59	67	63	50	33	71	67
Insufficient data on the state of the environment	50	67	53	33	44	71	50
Insufficient formulation of government environmental policy, such as goals that are not measurable, absence of a strategy, or insufficient regulatory framework	41	17	41	50	33	57	67
Insufficient monitoring and reporting systems	46	42	44	33	28	57	50
Insufficient established environmental norms and standards	41	42	28	33	26	57	50
Inadequate SAI mandate	18	25	19	33	15	29	33
No barriers	14	0	9	17	21	0	33
Other	5	0	0	0	3	29	0
What barriers does your SAI experience in developing and executing environmental audits? (Check all that apply) (Question 2o)							

N is the number of SAIs that answered this question.

SAIs that encountered barriers were asked how they overcame them. Of the 98 SAIs that answered this question, 47 percent said that training staff was the main solution, and 34 percent said that working with RWGEAs was also a solution (Exhibit 54).

In some cases, if information from the government was lacking, SAIs

- collected environmental data from the field directly (36%),
- developed performance indicators (19%), and
- cooperated with research institutes and universities (19%).

If the country does not have sufficient norms and standards, SAIs used international organization environmental standards as criteria (29%). In other cases, the mandate of SAI was modified (7%).

Exhibit 54 Measures to overcome barriers

Measures to overcome barriers	Percentage of SAIs (N=98)
Trained SAI staff	47
Collected environmental data from the field directly	36
Worked with the Regional Working Group on Environmental Auditing (RWGEA)	34
Used international organization environmental standards	29
Developed performance indicators	19



Measures to overcome barriers	Percentage of SAIs (N=98)
Cooperated with universities or research institute	19
Modified SAI's mandate	7
Others	11
If you indicated in greating Ook that there were beginning to developing and conducting any income	

If you indicated in question 2o) that there were barriers to developing and conducting environmental audits, did your SAI use any of the following measures to attempt to overcome those barriers? (Check all that apply) (**Question 2p**)

N is the number of SAIs that answered this guestion.

Regional analysis shows that for SAIs from EUROSAI, training is not the main measure taken. For them, the main measure, taken to overcome barriers, is working with regional WGEA (Exhibit 55); this measure is also important for SAIs from AFROSAI.

Exhibit 55 Measures to overcome barriers per region

	Percentage of SAIs for each region									
Measures to overcome barriers	AFROSAI (N=17)	ARABOSAI (N=11)	ASOSAI (N=27)	CAROSAI (N=4)	EUROSAI (N=30)	OLACEFS (N=14)	SPASAI (N=4)			
Trained SAI staff	65	64	59	0	30	50	50			
Collected environmental data from the field directly	53	46	33	0	33	43	25			
Worked with the Regional Working Group on Environmental Auditing (RWGEA))	53	36	22	25	40	21	50			
Used international organization environmental standards	41	46	26	0	17	43	25			
Developed performance indicators	30	27	11	0	20	29	0			
Cooperated with universities or research institute	6	18	30	0	23	21	0			
Modified SAI's mandate	6	9	15	0	3	0	25			
Others	0	0	7	0	17	14	50			

If you indicated in question 2o) that there were barriers to developing and conducting environmental audits, did your SAI use any of the following measures to attempt to overcome those barriers? (Check all that apply) (**Question 2p**)

N is the number of SAIs that answered this question.

For the 31 SAIs that had never conducted environmental audits, 65 percent indicated that the main barrier is a lack of skills and expertise (Exhibit 56) and thirty-five percent indicated that main barrier is an inadequate SAI mandate. Regional analysis (Exhibit 57) shows that the lack of skills is the main barrier for all SAIs, except EUROSAI; an inadequate SAI mandate is the main issue for SAIs from EUROSAI. However, the population used for regional analysis is often small, for example, only one SAI from OLACEFS was part of the analysis. For this reason, raw data are presented instead of percentages.



Exhibit 56 Most common barriers for SAIs that have never conducted environmental audits

	Percentag	je of SAIs
Barriers (SAIs checked all appropriate responses)	2003 (N=37-40)	2006 (N=31)
Lack of skills or expertise within the SAI	83	65
Inadequate SAI mandate	40	35
Insufficient data on the state of the environment	35	29
Insufficient established environmental norms and standards	53	26
Insufficient formulation of government environmental policy, such as goals that are not measurable, absence of a strategy, or insufficient regulatory framework	48	23
Insufficient monitoring and reporting systems	38	23
No barriers	16	3
Other	8	3
What barriers does your SAI experience in developing and executing environmental audits? (C	Check all that apply) (Question 2o)

N is the number of SAIs that answered this question.

Exhibit 57 Most common barriers for SAIs that have **never conducted** environmental audits—per region

		Numbe	r of SAIs f	or each reg	jion (2006 s	survey)	
Barriers	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI
Lack of skills or expertise within the SAI	4	4	7	3	1	1	2
Insufficient data on the state of the environment	3	2	2	2	0	1	1
Insufficient formulation of government environmental policy, such as goals that are not measurable, absence of a strategy, or insufficient regulatory framework	1	1	1	3	0	0	2
Insufficient monitoring and reporting systems	1	0	2	2	0	1	1
Insufficient established environmental norms and standards	2	1	2	2	0	1	1
Inadequate SAI mandate	1	1	2	2	2	0	1
No barriers	1	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
What barriers does your SAI experience in	1			-			

Training was identified as the best way to overcome the main barrier (lack of skills) for the SAIs—all the regions—that never conducted environmental audits (Exhibits 58 and 59). The population used for regional analysis is often small; for this reason, raw data are presented instead of percentages.



Exhibit 58 Measures taken to overcome barriers (for SAIs that have **never conducted** environmental audits)

Measures to overcome barriers	Percentage of SAIs (N=24)
Trained SAI staff	33
Other	21
Worked with the regional Working Group on Environmental Auditing (RWGEA)	13
Used international organization environmental standards	13
Developed performance indicators	8
Collected environmental data from the field directly	8
Modified SAI mandate	8
Cooperated with universities or research institutes	0

If you indicated in question 20 that there were barriers to developing and conducting environmental audits, did your SAI use any of the following measures to attempt to overcome those barriers? (**Question 2p**)

N is the number of SAIs that answered this question.

Exhibit 59 Measures taken to overcome barriers (SAIs that have **never conducted** environmental audits)—per region

	Number of SAIs for each region							
Measures to overcome barriers	AFROSAI	ARABOSAI	ASOSAI	CAROSAI	EUROSAI	OLACEFS	SPASAI	
Trained SAI staff	3	4	5	0	0	0	0	
Collected environmental data from the field directly	1	1	1	0	0	0	0	
Worked with the Regional Working Group on Environmental Auditing (RWGEA))	1	0	1	1	0	0	0	
Used international organization environmental standards	2	1	1	0	0	0	0	
Developed performance indicators	1	0	0	0	0	0	0	
Cooperated with universities or research institute	0	0	0	0	0	0	0	
Modified SAI's mandate	1	0	1	0	0	0	0	
Others	0	0	1	0	2	0	2	

If you indicated in question 2o) that there were barriers to developing and conducting environmental audits, did your SAI use any of the following measures to attempt to overcome those barriers? (Check all that apply) (**Question 2p**)



Planning New Environmental Audits

SAIs will continue to conduct environmental audits in the future. It is interesting to see what environmental topics will be the main priority, and if SAIs anticipate any major changes in environmental auditing.

Results of the fifth survey show that 76 percent of respondents are planning to conduct environmental audits from 2006 to 2008—an increase of about 10 percent since the fourth survey (Exhibit 60). SAIs from EUROSAI, OLACEFS, and ASOSAI regions are planning to conduct the most environmental audits for this period. (Exhibit 61)

Exhibit 60 SAIs that have environmental audits planned for 2006–08

Percentage of SAIs with environmental audits planned for 2006–08								
2000 2003 2006 (N=100) (N=109) (N=118)								
57	63	76						
Are there any environmental audits planned	for 2006–08? (Question 4a)							

N is the number of SAIs that answered this question.

Exhibit 61 SAIs that have environmental audits planned for 2006–08—per region

Percentage of	Percentage of SAIs with environmental audits planned for 2006–08 for each region (2006 survey)								
AFROSAI (N=22) ARABOSAI (N=32) CAROSAI (N=6) EUROSAI (N=39) OLACEFS (N=6) (N=6)									
59	67	84	17	92	86	67			
Are there any env	vironmental audits p	lanned for 2006–08	? (Question 4a)						

N is the number of SAIs that answered this question.

SAIs were also asked about the specific topics they plan to audit during the next three years (Exhibit 62). The main topics that SAIs are planning to audit are related to protected areas, water, forestry, and waste, and the main category to be audited includes issues of water and governance (Exhibit 63).

Regional analysis (Exhibit 62) shows that some topics are more specific to certain regions. For instance, only SAIs in the OLACEFS region are planning audits of pesticides.

In addition, analysis by major category (Exhibit 63) shows that some categories of audit are more specific to certain regions. For example, audits related to ecosystems are not a priority for SAIs from ARABOSAI and AFROSAI, but they are more of a priority for SAIs from EUROSAI and OLACEFS. SAIs from AFROSAI are not planning audits of issues related to air, but SAIs from EUROSAI and OLACEFS regions are.



Exhibit 62 Main environmental issues that SAIs are planning to audit for 2006–08—overall and per region

			Percen	tage of S	Als (2006	survey)		
				INT	OSAI regi	ons		
Environmental issue	All INTOSAI respondents* (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Ecosystems: Protected areas and natural parks	28	9	8	22	0	31	64	50
Water: Drinking water and supply	28	23	25	31	0	21	43	50
Water: Pollution of water bodies (such as by industry and agriculture)	27	14	17	25	17	23	50	33
Natural resources: Forestry and timber resources	26	18	8	25	0	26	57	33
Waste: Municipal, solid, and non- hazardous	24	18	25	31	0	21	36	50
Water: Wastewater treatment	24	9	33	22	0	28	29	33
Governance: Environmental management system	22	14	17	31	17	21	21	17
Waste: General waste	21	18	8	22	0	23	29	33
Ecosystems: Biodiversity	19	5	0	9	0	28	21	50
Human activities and sectors: Agriculture	19	5	8	9	0	28	29	33
Air: Local air quality, such as smog, particulates, SO2, NOx, and CO2	19	0	17	28	0	21	29	33
Waste: Hazardous waste	19	18	25	22	0	15	43	17
Governance: Environmental impact assessment	18	14	8	13	17	8	43	50
Governance: Sustainable development	17	9	0	13	17	21	14	50
Human activities and sectors: Natural disaster management: preparedness responses	14	9	0	13	0	15	21	17
Natural resources: Fisheries (freshwater and marine)	14	0	0	9	17	18	29	33
Water: Water quantity management or management of watersheds	12	0	0	16	17	10	7	33
Human activities and sectors: Infrastructure	12	0	0	19	0	10	29	0
Natural resources: Minerals, such as mining, gas, and oil	11	5	17	13	0	8	36	17



			Percen	tage of S	Als (2006	survey)		
				INT	OSAI regi	ons		
Environmental issue	All INTOSAI respondents* (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Governance: Domestic funds and subsidies	11	0	0	6	0	28	7	0
Air: Climate change	11	0	0	3	0	21	7	33
Human activities and sectors: Energy and energy efficiency	10	5	8	6	0	15	21	0
Governance: Government greening operations	10	0	8	9	0	10	14	33
Ecosystems: Ecosystems management and ecosystem changes	10	5	0	6	0	15	14	17
Governance: Strategic environmental assessment (SEA)	10	5	8	9	0	8	21	17
Governance: International funds and subsidies, such as Global Environmental Facility (GEF)	9	0	0	3	0	15	21	17
Water: Marine pollution	9	5	8	9	17	8	0	33
Human activities and sectors: Land development	9	0	0	3	17	10	14	33
Human activities and sectors: Transportation, traffic and mobility	9	5	8	6	0	21	7	0
Human activities and sectors: Environment and human health	8	9	8	3	0	5	21	33
Natural resources: Other natural resources	8	5	8	9	0	8	7	33
Water: Other water issues	8	5	8	3	0	13	7	0
Waste: Radioactive waste	8	5	8	3	0	13	7	17
Ecosystems: Species at risk	8	0	0	6	0	8	7	17
Ecosystems: Coastal areas	8	0	0	9	0	5	7	33
Human activities and sectors: Cultural heritage	8	0	0	6	0	5	29	17
Waste: Contaminated sites and soil pollution	7	0	0	3	0	8	7	17
Air: Other air issues	7	0	0	9	0	10	7	0
Ecosystems: Rivers and lakes	7	5	0	3	0	13	7	0
Human activities and sectors: Urban environment quality (sustainability)	6	5	0	3	0	8	7	17



			Percen	tage of S	Als (2006	survey)		
				INT	OSAI regi	ons		
Environmental issue	All INTOSAI respondents* (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Air: Toxic air pollutants, such as organic POPs, dioxins, and furans	5	0	0	0	0	5	14	33
Waste: Other waste issues	5	5	0	3	0	5	0	17
Human activities and sectors: Pesticides	5	0	0	0	0	0	29	0
Ecosystems: Protection of marine habitat	5	0	0	3	0	5	7	17
Ecosystems: Other ecosystem issues	4	0	0	3	0	5	14	0
Human activities and sectors: Chemicals management	4	5	8	0	0	3	7	0
Governance: Other governance issues	4	5	0	3	0	5	0	17
Human activities and sectors: Other human activities and sectors	3	0	0	6	0	5	0	33
Ecosystems: Wetlands	3	0	0	0	0	5	7	0
Air: Stratospheric ozone layer depletion	3	0	0	3	0	5	0	17
Human activities and sectors: Recreation and tourism	3	0	0	0	0	5	0	17
Human activities and sectors: Biosafety and genetically modified organisms (GMOs)	3	0	0	0	0	3	7	17
Governance: World Summit on Sustainable Development (WSSD)	3	0	0	0	0	3	7	17
Water: Acidification	1	0	0	0	0	0	0	17
Air: Acid precipitation	1	0	0	0	0	0	0	17
Air: Indoor air quality	1	0	0	0	0	0	0	17
Indicate what issues related to the environn	nent your S	Al is planni	ng to addre	ss in audits	scheduled	for 2006–0	8. (Questio	n 4b)

^{*} Percentages do not total 100%, because SAIs were allowed to select more than one option.



Exhibit 63 Main environmental issues that SAIs are planning to audit for 2006–08—per major category, overall and per region

		Percentage of SAIs (2006 survey)						
		INTOSAI regions						
Major category	Ali INTOSAI respondents	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Water	50	32	50	63	17	49	71	50
Governance	46	36	33	38	17	51	79	67
Waste	45	41	42	53	0	49	57	50
Human activities and sectors	43	32	25	34	17	51	71	50
Natural Resources	42	23	25	47	17	36	79	50
Ecosystems	36	18	8	28	0	44	71	50
Air	28	0	17	31	0	41	43	33
Indicate what issues related to the enviro	nment your	SAI is plani	ning to addr	ess in audits	scheduled	for 2006–08	(Question	4b)

, , , ,

N is the number of SAIs that answered this question.

According to the SAIs that answered the survey, the top five environmental issues facing their countries fall under the category of water and waste issues (Exhibit 64). Drinking water, wastewater treatment, and pollution of water bodies were the issues most frequently mentioned by SAIs.

Local air quality and forestry and timber resources were also areas of major concern. Two ecosystems issues—protected areas and natural parks and biodiversity, also rated highly—and they were the top audit topics during 2003–05 (Exhibit 15). Overall, the major category of water is the main environmental issue for all the regions (Exhibit 65).

There is a high level of correspondence between the topic SAIs plan to audit in the coming three years (see Exhibit 62) and the most common environmental concerns (Exhibit 64). The ten most-planned environmental audit topics are nearly identical to most common environmental issues faced by countries. The main exception is probably the local air quality issue. It was identified by SAIs as a major environmental issue (43 percent), but only 19 percent of SAIs are planning to audit local air quality (Exhibit 62).

Analysis by region and by major category shows that issue of air quality is a less common environmental issue—except for the ASOSAI region, where it is the third main issues after water and waste (Exhibit 65).



Exhibit 64 Most common environmental issues faced by countries—overall and per region

				Percentaç	ge of SAIs	i		
				INT	OSAI regi	ons		
Environmental issue	All INTOSAl respondents (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Water: Drinking water: quality and supply	55	86	58	47	83	28	64	83
Water: Wastewater treatment	52	64	75	47	33	46	57	67
Water: Pollution of water bodies (such as by industry and agriculture)	50	59	50	56	33	31	79	50
Waste: General waste	50	77	58	38	67	39	50	50
Waste: Municipal, solid, and non- hazardous	47	68	58	50	33	33	50	67
Air: Local air quality, such as smog, particulates, SO ₂ , NOx, and CO ₂	43	27	50	56	0	46	57	33
Natural resources: Forestry and timber resources	40	50	33	34	50	21	86	33
Ecosystems: Protected areas and natural parks	39	59	25	28	33	26	57	33
Ecosystems: Biodiversity	37	32	17	22	17	36	50	67
Human activities and sectors: Agriculture	35	59	33	25	67	21	50	33
Waste: Hazardous waste	35	59	58	34	50	15	43	33
Human activities and sectors: Land development	34	55	33	19	50	23	36	50
Air: climate change	33	41	33	19	33	28	29	83
Water: Water quantity management or management of watersheds	30	59	33	31	50	10	29	67
Natural resources: Fisheries (freshwater and marine)	29	32	0	19	50	18	36	50
Human activities and sectors: Transportation, traffic and mobility	29	36	42	22	50	33	14	17
Natural resources: Minerals, such as mining, gas and oil	29	41	50	28	50	13	50	33
Waste: Contaminated sites and soil pollution	27	41	8	13	17	23	43	33
Human activities and sectors: Natural disaster management: preparedness responses	26	36	17	22	50	13	29	50



				Percentaç	ge of SAIs			
				INT	OSAI regi	ons		
Environmental issue	All INTOSAI respondents (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Human activities and sectors: Environment and human health	24	41	42	22	33	5	36	50
Water: Marine pollution	24	27	50	28	50	18	7	50
Human activities and sectors: Energy and energy efficiency	23	36	33	13	33	15	36	33
Ecosystems: Rivers and lakes	21	32	25	25	17	5	36	17
Ecosystems: Coastal areas	19	14	8	22	50	8	29	67
Ecosystems: Ecosystems management and ecosystem changes	19	18	8	16	17	13	43	33
Human activities and sectors: Urban environment quality (sustainability)	19	27	33	25	17	5	29	33
Human activities and sectors: Cultural heritage	19	27	25	13	33	5	21	50
Human activities and sectors: Pesticides	19	27	25	19	33	8	29	17
Human activities and sectors: Infrastructure	18	32	42	22	0	13	7	17
Ecosystems: Protection of marine habitat	17	18	42	22	17	5	14	33
Air: Toxic air pollutants, such as organic POPs, dioxins, and furans	16	14	42	25	17	5	14	33
Human activities and sectors: Recreation and tourism	16	32	8	13	17	5	14	17
Ecosystems: Species at risk	15	27	0	13	17	5	21	17
Ecosystems: Wetlands	13	32	8	0	17	5	36	0
Waste: Radioactive waste	11	18	17	9	17	8	7	17
Human activities and sectors: Chemicals management	11	14	17	9	17	3	21	17
Air: Indoor air quality	8	23	8	6	0	0	7	17
Air: Stratospheric ozone layer depletion	8	5	8	6	0	3	14	50
Air: Other air issues	7	9	8	13	17	3	0	0
Water: Other water issues	6	14	8	6	0	0	7	17
Human activities and sectors: Biosafety and genetically modified organisms (GMOs)	6	9	17	3	0	0	21	17



				Percentaç	ge of SAIs			
				INT	OSAI regi	ons		
Environmental issue	All INTOSAI respondents (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Natural resources: Other natural resources issues	5	9	8	0	0	8	0	17
Waste: Other waste issues	4	9	8	6	0	0	7	0
Air: Acid precipitation	3	5	0	3	0	0	7	17
Water: Acidification	3	9	0	0	0	0	7	0
Human activities and sectors: Other human activities/sectors	2	5	0	0	0	3	0	0
Ecosystems: Other ecosystem issues	1	5	8	0	0	0	0	0
What are the five (5) most important envi	ronmental is	sues facing	your countr	y? (Questic	on 2a)			

Exhibit 65 Most common environmental issues faced by countries—per major category, overall and per region

				Percentaç	ge of SAIs	•		
				INT	OSAI regi	ons		
Environmental issue per major category	All INTOSAI respondents (N=119)	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Water	90	96	100	94	100	80	100	100
Waste	83	91	92	88	100	77	86	83
Ecosystems	71	68	58	69	67	69	86	83
Air	69	59	67	81	67	67	64	83
Human activities and sectors	65	64	75	59	83	64	86	67
Natural Resources	59	68	67	53	83	38	93	50
What are the five (5) most important envir	onmental is	sues facing	your count	ry? (Questi	on 2a)			

N is the number of SAIs that answered this question.

Because some topics are of special interest for the WGEA, surveys over the years have included specific questions about cooperation, sustainable development, and international agreements (Exhibit 66).



Most SAIs (70%) are interested in cooperating with another SAI in the future to conduct environmental audits. SAIs are also very interested in auditing environmental agreements (with or without another SAI) and sustainable development commitments.

Analysis by region shows some differences. For instance, SAIs from ARABOSAI are less interested in cooperation with another SAI (Exhibit 67).

Exhibit 66 Interest in cooperative audits and audits of international agreements and sustainable development commitments

	Percentage of SAIs							
Types of environmental audit:	2000 (N=98–102)	2003 (N=74)	2006 (N=119)					
Cooperation with another SAI on an audit of an environmental subject	79	77	70					
Audits of international environmental agreements and treaties*	53	50	59					
Cooperation with another SAI on an audit of international environmental agreements and treaties	76	72	59					
Audits of sustainable development commitments	N/A**	N/A	56					
Would your SAI be interested in conducting one or more of the following en	vironmental audits in	the future? (Ques	tion 4c)					

^{*}The 2000 and 2003 wording was "Audit compliance by the government with an international environmental accord, but independent of other SAIs".

N is the number of SAIs that answered this question.

Exhibit 67 Interest in cooperative audits and audits of international agreements and sustainable development commitments—per region

		Percenta	ige of SAIs	for each re	egion (2006	S survey)	
Types of environmental audit:	AFROSAI (N=22)	ARABOSAI (N=12)	ASOSAI (N=32)	CAROSAI (N=6)	EUROSAI (N=39)	OLACEFS (N=14)	SPASAI (N=6)
Cooperation with another SAI on an audit of an environmental subject	68	33	63	50	72	93	67
An audit of international environmental agreements and treaties	59	58	41	33	64	71	67
Cooperation with another SAI on an audit of international environmental agreements and treaties	50	33	41	33	77	71	67
An audit of sustainable development commitments	59	58	50	17	62	43	100
Would your SAI be interested in conducting	one or more	of the followi	ng environm	ental audits ir	the future?	(Question 4	

^{**}N/A: Non Applicable.



SAIs were asked if they were anticipating changes in the volume of environmental auditing that their SAI has scheduled for the next five years (Exhibit 68). The SAI respondents are anticipating that the volume of environmental audits, on the following topics, will increase in the next five years:

- Sustainable development (50%)
- Performance audits of environmental issues (50%)
- Compliance audits related to environmental international agreements (42%)
- Compliance with environmental legislation (41%)
- Financial audits of environmental issues (30%)

Regional analysis shows some differences (Exhibit 69).

Exhibit 68 Changes in volume of environmental audits anticipated by SAIs in the next five years

		Percentage of SAIs									
Type of environmental issue	(N=)	N/A*	Fewer (F)	No Change (NC)	More (M)						
Audits of sustainable development	90	27	6	18	50						
Performance audits of environmental issues	107	18	7	26	50						
Compliance audits with environmental international agreements and treaties	90	21	6	31	42						
Compliance audits with environmental legislation	100	15	8	36	41						
Financial audits of environmental issues	93	25	9	37	30						

Please indicate any anticipated changes in the volume of environmental auditing scheduled by your SAI in the next five years. (Question 4e)

Exhibit 69 Changes in volume of environmental audits anticipated by SAIs in the next five years—per region

Types of										Per	cer	ıtag	e o	f SA	Als f	or e	each	ı re	gio	n								
environmental audit:	_		OS 5-2				BOS 7-11		-		OS/ 24-3		C		OS (=3)		_		OS 27-3			DLACEFS (N=11-13)		SPASA (N=6)				
*	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М
Audits of sustainable development	47	12	6	35	13	0	37	50	27	8	19	46	33	0	0	67	19	0	15	67	23	0	31	46	17	17	17	50
Performance audits of environmental issues	38	5	14	43	18	0	36	46	7	7	32	55	33	0	0	67	14	3	23	60	23	8	31	39	17	17	50	17
Compliance audits with environmental international agreements and treaties	41	12	12	35	29	0	43	29	1	8	38	33	33	0	0	67	14	3	41	41	15	0	23	62	17	0	50	33

^{*}N/A: Non Applicable.



Types of										Per	cen	tag	e of	SA	\ls f	or e	each	ı re	gio	า								
environmental audit:	_		OS. 5-2				BOS 7-11		1		OS <i>A</i> 24-3		C		OS. =3)	AI	_		OS. 27-3		~		CEI	_	SPAS (N=6			
*	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М	N/A	F	NC	М
Compliance audits with environmental legislation	30	10	20	40	9	0	55	36	7	11	36	46	33	0	0	67	13	3	50	34	17	8	25	50	17	0	50	33
Financial audits of environmental issues	53	7	13	27	22	0	67	11	15	15	46	23	67	0	0	33	21	3	41	35	18	18	27	36	17	0	50	33

Please indicate any anticipated changes in the volume of environmental auditing scheduled by your SAI in the next five years. (Question 4e)

N is the number of SAIs that answered this question.

SAIs are also anticipating various developments in the area of environmental auditing to occur in the next five years. The data from these 98 SAIs (Exhibit 70) indicates that many of them plan to

- increase the exchange of knowledge with other SAIs (71%),
- integrate environmental issues in other audits (70%),
- provide more environmental audit training (66%),
- use advice from external experts (40%),
- create pools of environmental auditors (31%), and
- create environmental units in their SAIs (22%).

Exhibit 71 shows that regional differences exist.

Exhibit 70 Environmental auditing developments anticipated by SAIs anticipate in the next five years

Anticipated development	Percentage of SAIs (N=98)
Exchange of knowledge with other SAIs	71
Integration of environmental issues in other audits	70
Training in environmental auditing	66
Training in environmental issues in other audits	49
Evaluate impact of own work and ways to improve impact	44
External expert advice	40
More measurement of effectiveness of policy	36
Creation of a pool of environmental auditors	31
More attention to quality and reliability of information	31
Development of environmental performance indicators	30
Creation of an environmental unit within our SAI	22

^{*}N/A=Non Applicable, F=Fewer, NC=No Change, and M=More.



Anticipated development	Percentage of SAIs (N=98)
Peer review of other SAIs	20
Peer review by external experts (for instance, universities)	18
Development of new products that are not environmental audits	9
Other	3
What major developments does your SAI anticipate regarding environmental auditing in the new	ext five years? (Question 4f)

Exhibit 71 Environmental auditing developments anticipated by SAIs in the next five years—per region

	Percentage of SAIs for each region													
Anticipated development	AFROSAI (N=19)	ARABOSAI (N=11)	ASOSAI (N=26)	CAROSAI (N=5)	EUROSAI (N=28)	OLACEFS (N=13)	SPASAI (N=6)							
Exchange of knowledge with other SAIs	68	73	81	40	68	85	67							
Integration of environmental issues in other audits	58	64	85	80	61	69	83							
Training in environmental auditing	74	82	81	40	50	77	67							
Training in environmental issues in other audits	58	46	35	40	39	62	67							
Evaluate impact of own work and ways to improve impact	16	18	58	20	36	62	83							
External expert advice	21	18	50	0	46	31	67							
More measurement of effectiveness of policy	21	18	19	0	57	46	50							
Creation of a pool of environmental auditors	53	36	35	0	21	15	50							
More attention to quality and reliability of information	32	36	31	20	36	15	50							
Development of environmental performance indicators	26	27	15	0	29	39	50							
Creation of an environmental unit within our SAI	32	18	31	20	4	15	67							
Peer review of other SAIs	32	18	15	40	7	23	50							
Peer review by external experts (for instance, universities)	1	9	27	0	18	23	33							
Development of new products that are not environmental audits	0	0	4	0	11	15	17							
Other	0	9	0	0	4	8	0							
What major developments does your SAI a	nticipate rega	arding enviror	mental audit	ing in the nex	t five years?	(Question 4	f)							



SAIs Electronic Capacity

Comparisons with previous surveys show that SAIs have increased their access to electronic information; all the respondents have now access to internet (Exhibit 72). It is getting easier to communicate with SAI by email since 93 percent of them have now an e-mail address (Exhibit 73). However, for some SAIs from some regions (Exhibit 74), such as OLACEFS, an e-mail address is less common.

Exhibit 72 SAIs' access to the Internet

	Percentage of SAIs				
Type of electronic access	2000 (N=107)	2003 (N=114)	2006 (N=110)		
Access to the internet	84	96	100		
Does your SAI have access to the internet? (Question 5a)					

N is the number of SAIs that answered this question.

Exhibit 73 SAIs' access to email

	Percent of SAIs			
Type of electronic access	1996 (N=80)	2000 (N=110)	2003 (N=114)	2006 (N=117)
SAI has an email address	47	90	90	93
Does your SAI have a general email address? (Question 5b)				

N is the number of SAIs that answered this question.

Exhibit 74 SAIs access to email—per region

Type of	Percentage of SAIs for each region (2006 survey)								
electronic access	AFROSAI (N=22)								
SAI has an email address	86	100	97	100	95	79	100		
Does your SAI have a general email address? (Question 5b)									

N is the number of SAIs that answered this question.

The biggest change from the previous surveys is that many SAIs now have their own website (81%) (Exhibit 75). However, in some regions—such as CAROSAI, AFROSAI, and SPASAI—it is not yet common to have a website (Exhibit 76).

Exhibit 75 SAIs that have websites

		Percent of SAIs					
Type of electronic access	1996 (N=80)	2000 (N=110)	2003 (N=114)	2006 (N=116)			
SAI has a website	12	56	68	81			
Does your SAI have a website? (Question 5c)							



Exhibit 76 SAIs that have websites—per region

Type of	Percentage of SAIs for each region (2006 survey) AFROSAI ARABOSAI ASOSAI CAROSAI EUROSAI OLACEFS SPASA (N=20) (N=11) (N=32) (N=6)						
electronic access							
SAI has a website	50	82	94	17	100	100	50
Does your SAI have a website? (Question 5c)							

For those SAIs that do have websites, 63 percent post their full environmental audit reports on their website, and 58 percent have a summary or press notes for their reports (Exhibit 77).

Regional analysis (Exhibit 78) shows that in some regions, such as ARABOSAI and AFROSAI, it is not a common practice for SAIs to put the full text of their audit reports on their website.

Exhibit 77 Information available on SAIs' websites

Information available on SAI's website	(N=)	Percentage of SAIs
Full text of reports	81	63
Summary or press notes of reports	78	58
Web link to the WGEA website or RWGEA Web	69	25
Training information for environmental audits	72	17
Planned environmental audits	73	15
What information about environmental auditing is available on your website? (Question 5d)		

N is the number of SAIs that answered this question.

Exhibit 78 Information available on SAIs' websites—per region

		Percentage of SAIs for each region					
Information available on SAI's website	AFROSAI (N=8)	ARABOSAI (N=7)	ASOSAI (N=22-26)	CAROSAI (N=0)	EUROSAI (N=29-35)	OLACEFS (N=11-12)	SPASAI (N=3)
Full text of reports	25	14	54	0	83	50	67
Summary or press notes of reports	0	0	44	0	74	67	33
Web link to the WGEA website or RWGEA Web	0	14	14	0	41	18	0
Training information for environmental audits	13	14	17	0	10	33	0
Planned environmental audits	0	0	4	0	27	17	0
What information about environmental auditing	ı ng is availabl	e on vour we	bsite? (Ques	tion 5d)			



How the WGEA can Help

The results of the fifth survey were essential when the WGEA 2008–10 work plan was developed. Drawing on the survey's results, the WGEA adopted the theme of climate change for the next 2008–10 work plan. The topics of natural resources (forestry, mining) and energy were also rated as important issues to tackle, and the WGEA decided to develop guidelines in these areas (Exhibit 79).

Exhibit 79 Suggested themes for the next WGEA work plan (2008–10)

Category	Number of suggestions— provided by 82 SAIs*
Air Pollution	23
Protected Areas and Parks, Ecosystems, Biodiversity	16
Climate Change	14
Human Activities and Sectors (including Human Health)	10
Governance (including International Environmental Agreements)	10
Sustainable Development	9
Water, Marine Pollution	9
Waste	7
Forestry	7
Energy	6
Natural Disaster Management	5
Natural Resources	5
Mining	5
Desertification	2
What should be the main theme of the 2008–10 WGEA work plan? The WGEA has Please explain your choice. (Question 7c)	

SAIs were asked if they were interested in new guidance material. The development of WGEA guidance materials remains very important (86%) (Exhibit 80), particularly for low (100%) and middle (90%) income countries (Exhibit 81) and regions, such as AFROSAI (100%) and SPASAI (100%), that are currently less active in environmental auditing (Exhibit 82).

Exhibit 80 SAIs that are interested in new WGEA guidance on environmental auditing

Percentage of interested SAIs for each survey year					
2003 (N=114)	2006 (N=109)				
75 86					
Would your SAI be interested in new WGEA guidance on environmental auditing? (Question 7b)					

^{*}The total number of suggestions does not add up to 82 because some SAIs made more than one suggestion. If SAIs made multiple suggestions that fit under the same category, they were counted as a single suggestion.



Exhibit 81 SAIs that are interested in new WGEA guidance on environmental auditing—per income level

Percentage of interested SAIs for each income level						
Low Medium High (N=17) (N=58) (N=34)						
100 90 71						
Would your SAI be interested in new WGEA guidance on environmental auditing? (Question 7b)						

Exhibit 82 SAIs that are interested in new WGEA guidance on environmental auditing—per region

Percentage of interested SAIs for each region (2006 survey)								
AFROSAI (N=19)								
100	100 80 87 75 78 79 100							
Would your SAI be interested in new WGEA guidance on environmental auditing? (Question 7b)								

N is the number of SAIs that answered this question.

SAIs interested in new guidance material were also asked to provide topics of interest (Exhibit 83). Thirty-three SAIs gave suggestions, and the WGEA analyzed them and incorporated many of those suggestions (climate change and natural resources) in the 2008–10 work plan. Some suggestions were not considered, because guidance material had already been developed (for example, guidance on waste, water, and biodiversity).

Exhibit 83 Suggested topics of interest for WGEA guidance

Category	Number of suggestions— provided by 33 SAIs*			
Waste	7			
Protected Areas and Parks, Ecosystems, Biodiversity	6			
Water	6			
Environmental Auditing (in general)	6			
Sustainable Development	5			
Natural Resources, Energy	3			
Human Activities and Sectors (including Natural Disaster Management)	3			
Forestry	3			
Climate Change	3			
Environmental Governance	3			
Air Pollution	2			
Soil Management	2			
Would your SAI be interested in new WGEA guidance on environmental auditing? Topics of interest. (Question 7b)				

^{*}The total number of suggestions does not add up to 33 because some SAIs made more than one suggestion. In cases where SAIs made multiple suggestions that fit under the same category, they were counted as a single suggestion.



Overall, SAIs are most interested in receiving guidance material, training, and seminars during WGEA meetings (Exhibit 84). Regional analysis (Exhibit 85) shows that SAIs from ARABOSAI and AFROSAI regions are particularly interested by training.

Exhibit 84 Suggested types of product or service the WGEA could provide

Suggested type of WGEA product or service	Percentage of SAIs (N=119)
Guidance material	76
Training	74
Seminars during WGEA meetings	73
WGEA web news	68
Communication	50
Others	7
What products or services could the WGEA offer your SAI to help you to cond	duct environmental audits? (Question 7d)

N is the number of SAIs that answered this question.

Exhibit 85 Suggested types of product or service the WGEA could provide—per region

Suggested	(N=22) (N=12) (N=32) (N=6) (N=39) (N=14) (N=74) 77 67 78 67 74 76 83 91 100 84 67 51 79 83													
type of WGEA product or service							SPASAI (N=6)							
Guidance material	77	67	78	67	74	76	83							
Training	91	100	84	67	51	79	83							
Seminars during WGEA meetings	73	67	75	33	74	71	67							
WGEA web news	68	50	72	67	59	71	100							
Communication	68	33	38	67	36	50	67							
Others	5	8	3	14	0									
What products or se	rvices could the	WGEA offer you	r SAI to help you	u to conduct env	ironmental audit	s? (Question 7d	l)							

N is the number of SAIs that answered this question.

Benefiting from the WGEA and other SAIs

Over the years, the WGEA has developed many guidance documents, and it has developed a website. In general, SAIs are aware of the products that the WGEA recently developed, for example, between 83 and 89 percent of SAIs are aware of the four most recent 2004 WGEA papers (Exhibit 86).



Although many SAIs (83%) are aware that the WGEA website exists, some are not aware of all the available information (Exhibit 86). For instance,

- only 67 percent are aware of the Greenlines newsletter,
- only 71 percent are aware of the list of environmental audits available under "Environmental Audits Worldwide".

Exhibit 86 Awareness of WGEA products—from most aware to least aware

WGEA product	(N=)	Percentage of SAIs that are aware of WGEA products*
INTOSAI Paper "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	114	89
INTOSAI Paper "Environmental Auditing and Regularity Auditing" (2004)	114	86
WGEA Paper "Towards Auditing Waste Management" (2004)	114	85
WGEA Paper "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	112	83
Home page of the WGEA website	111	83
INTOSAI Paper: "Guidance on Conducting Audits of Activities with an Environmental Perspective" (2001)	113	82
WGEA Paper "Results of the Fourth Survey on Environmental Auditing" (2004)	112	76
WGEA work plans on the WGEA website	107	75
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	110	73
INTOSAI Paper: "How SAIs may Cooperate on the audit of International Accords" (1998)	107	72
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	108	71
WGEA meeting material (including compendium) on the WGEA website	107	70
Greenlines newsletter on the WGEA website	107	67
INTOSAI Paper: "Natural Resource Accounting" (1998)	104	58
Which of the following WGEA and INTOSAI products on environmental auditing is your SAI awar your SAI found useful? (Question 7a)	e of, has y	our SAI used, or has

*The products are listed from "most aware" to "least aware"

N is the number of SAIs that answered this question.

SAIs can learn from the experiences of other SAIs. They can also find guidance documents on the WGEA website, which are usually available in most INTOSAI languages. In particular, the "Guidance on Conducting Audits with an Environmental Perspective" could be very useful for newcomers; according to the survey, this document was the most used (56%) and was considered to be the most useful (76%) by SAIs (Exhibits 87 and 88). Sixty-nine percent of respondents felt that "How SAIs may Cooperate on the Audit of International Accords" was very useful (Exhibit 88); this document can be used by those wishing to undertake cooperative audits.

The *Greenlines* newsletter, which is produced twice a year and is posted on the WGEA website, contains helpful information, particularly in its section "News brief from SAIs around the World". Sixty percent of respondents who read *Greenlines* found it very useful (Exhibit 88). In addition, membership in the WGEA and attendance at WGEA meetings provides SAIs with good opportunities to network and share



environmental auditing practices. Seventy percent of the respondents who used the meeting material found it very useful (Exhibit 88).

Exhibit 87 Use of WGEA products—from most used to least used

WGEA product	(N=)	Percentage of SAIs that have used the product*
Home page of the WGEA website	89	80
Greenlines newsletter on the WGEA website	68	71
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	73	69
WGEA meeting material (including compendium) on the WGEA website	71	63
WGEA work plans on the WGEA website	76	59
INTOSAI Paper: "Guidance on Conducting Audits of Activities with an Environmental Perspective" (2001)	90	56
WGEA Paper "Towards Auditing Waste Management" (2004)	93	52
WGEA Paper: "Results of the Fourth Survey on Environmental Auditing" (2004)	79	51
INTOSAI Paper: "Environmental Auditing and Regularity Auditing" (2004)	94	50
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	76	45
INTOSAI Paper: "How SAIs may Cooperate on the audit of International Accords" (1998)	74	45
INTOSAI Paper: "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	90	44
INTOSAI Paper: "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	97	43
INTOSAI Paper: "Natural Resource Accounting" (1998)	58	29
Which of the following WGEA and INTOSAI products on environmental auditing is your SAI aware your SAI found useful? (Question 7a)	e of, has yo	our SAI used, or has

your SAI found useful? (Question 7a)

Exhibit 88 Usefulness of WGEA products—from most useful to least useful

		Percentage of SAIs that found the products useful									
WGEA product	(N=)	Not Useful (NU)	Somewhat Useful (SU)	Very Useful (VU)							
Home page of the WGEA website	71	0	24	76							
INTOSAI Paper: "Guidance on Conducting Audits with an Environmental Perspective" (2001)	49	0	24	76							
WGEA meeting material (including compendium) on the WGEA website	43	0	30	70							
INTOSAI Paper: "How SAIs may Co-operate on the Audit of International Accords" (1998)	32	0	31	69							

^{*}The products are listed from most used to least used, according to those SAIs that are aware of the products.



		Percentage of SAIs that found the products useful									
WGEA product	(N=)	Not Useful (NU)	Somewhat Useful (SU)	Very Useful (VU)							
INTOSAI Paper: "Environmental Audit and Regularity Auditing" (2004)	46	0	35	65							
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	50	0	36	64							
INTOSAI Paper: "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	41	0	37	63							
WGEA Paper: "Towards Auditing Waste Management" (2004)	47	2	34	64							
WGEA Paper: "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	39	0	38	62							
WGEA Paper: "Results of the Fourth Survey on Environmental Auditing" (2004)	40	0	40	60							
Greenlines newsletter on the WGEA website	48	2	38	60							
WGEA work plans on the WGEA website	42	0	48	52							
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	34	0	50	50							
INTOSAI Paper: "Natural Resource Accounting" (1998)	16	0	56	44							

your SAI found useful? (Question 7a)

Many SAIs that have not used WGEA products in the past, are planning to do so in the future (Exhibit 89).

Exhibit 89 WGEA products that SAIs intend to use in the future (for those aware of the product but that have not yet used it)

WGEA product	(N=)	Percentage of SAIs that intend to use WGEA products
Home page of the WGEA website	15	100
Greenlines newsletter on the WGEA website	17	100
WGEA work plans on the WGEA website	26	92
INTOSAI Paper: "How SAIs may co-operate on the Audit of International Accords" (1998)	36	94
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	37	92
WGEA meeting material (including compendium) on the WGEA website	21	90
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	20	90

^{*} The products are listed from most useful to least useful—for those who used the products.



WGEA product	(N=)	Percentage of SAIs that intend to use WGEA products
WGEA Paper "Towards Auditing Waste Management" (2004)	37	89
INTOSAI Paper: "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	49	88
WGEA Paper: "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	43	86
INTOSAI Paper: "Environmental Audit and Regularity Auditing" (2004)	41	83
INTOSAl Paper: "Guidance on Conducting Audits of Activities with an Environmental Perspective" (2001)	36	83
INTOSAI Paper: "Natural Resource Accounting" (1998)	35	77
WGEA Paper: "Results of the Fourth Survey on Environmental Auditing" (2004)	33	73
Which of the following WGEA and INTOSAI products on environmental auditing is your SAI awa your SAI found useful? (Question 7a)	re of, has you	ur SAI used, or has

Exhibits 90 and 91 show the differences between the regions in awareness, use, intend to use and usefulness of WGEA products. Because the number of SAIs per region may be very low for each product, raw data are presented instead of percentage data.

Exhibit 90 SAIs that are aware, used or intend to use WGEA products—per region

		Nι	ımb	er c	of S	Als					-	nat u each				end	to	use	W	GEA	١.
WGEA product	AF	ROS	SAI	AR	ABO	SAI	Α	sos	ΑI	CAROSAI			EUROSAI			OL	ACE	FS	S	PAS	Al
*	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU
Home page of the WGEA website	13	8	4	11	7	4	28	22	4	4	1	1	35	31	3	10	8	2	5	3	1
INTOSAI Paper: "Guidance on Conducting Audits with an Environmental Perspective" (2001)	16	8	7	10	5	5	25	15	5	4	1	2	36	20	12	10	6	2	4	1	2
WGEA meeting material (including compendium) on the WGEA website	9	1	5	10	4	4	25	15	6	2	0	2	33	24	5	5	4	1	4	2	1
INTOSAI Paper: "How SAIs may Co-operate on the Audit of International Accords" (1998)	10	0	10	9	1	8	19	8	8	4	0	2	35	21	10	8	3	4	3	1	1
INTOSAI Paper: "Environmental Audit and Regularity Auditing" (2004)	16	7	8	10	6	4	27	14	9	4	1	2	37	17	12	11	5	4	5	3	1
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	11	7	4	9	4	4	21	14	5	3	0	2	34	25	6	7	4	1	4	3	0
INTOSAl Paper: "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	16	3	12	10	0	9	27	13	11	5	1	1	38	19	14	12	5	4	5	2	2
WGEA Paper: "Towards Auditing Waste Management" (2004)	16	7	7	10	6	4	28	15	10	5	0	2	36	20	12	9	4	2	5	3	1



		Nu	mb	er c	of S	Als			e av duc		•					end	to	use	WC	VGEA				
WGEA product	AF	ROS	SAI	AR	ABO	SAI	ASOSAI			CAROSAI			EU	ROS	SAI	OL	ACE	FS	S	ΑI				
*	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU	Α	U	IU			
WGEA Paper: "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	12	4	7	9	3	6	27	12	12	4	0	1	38	19	13	9	4	3	5	2	2			
WGEA Paper: "Results of the Fourth Survey on Environmental Auditing" (2004)	12	5	5	9	4	4	28	14	7	1	0	1	36	17	9	6	3	1	4	2	1			
Greenlines newsletter on the WGEA website	8	2	4	6	2	4	23	15	7	3	0	2	30	25	4	7	6	0	4	3	0			
WGEA work plans on the WGEA website	10	2	7	9	1	6	25	14	9	3	1	1	32	22	5	8	6	1	4	2	1			
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	11	0	9	9	0	9	24	8	11	3	0	2	34	21	10	7	4	2	5	2	1			
INTOSAI Paper: "Natural Resource Accounting" (1998)	7	1	6	7	1	6	16	7	5	2	0	0	26	6	10	7	1	5	3	2	0			

Which of the following WGEA and INTOSAI products on environmental auditing is your SAI aware of, has your SAI used, or has your SAI found useful? (Question 7a)

Exhibit 91 Usefulness of WGEA products—from most useful to least useful—per region

		Nui	nbe	r of	F SA	ls t	hat	fou	nd	use	ful	WG	duc	ts f	or e	each	n region				
WGEA product	AF	ROS	SAI	AR	ABO	SAI	Α	sos	Al	CA	ARO	SAI	EU	IROS	SAI	OL	ACE	FS	S	Al	
	NU*	SU*	VU*	NU	su	VU	NU	su	VU	NU	su	VU	NU	SU	VU	NU	SU	VU	NU	su	VU
Home page of the WGEA website	0	1	7	0	0	7	0	6	16	0	0	1	0	9	22	0	2	6	0	1	2
INTOSAI Paper: "Guidance on Conducting Audits with an Environmental Perspective" (2001)	0	0	7	0	0	5	0	4	11	0	1	0	0	6	14	0	1	5	0	1	0
WGEA meeting material (including compendium) on the WGEA website	0	1	0	0	2	2	0	5	9	0	0	0	0	6	17	0	1	3	0	1	1
INTOSAI Paper: "How SAIs may Co-operate on the Audit of International Accords" (1998)	0	0	0	0	0	1	0	4	4	0	0	0	0	5	15	0	1	2	0	1	0
INTOSAI Paper: "Environmental Audit and Regularity Auditing" (2004)	0	1	5	0	1	5	0	6	8	0	1	0	0	8	9	0	0	5	0	2	1
Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	0	0	7	0	2	2	0	8	6	0	0	0	0	9	16	0	1	3	0	2	1
INTOSAI Paper: "Sustainable Development: The Role of Supreme Audit Institutions" (2004)	0	1	2	0	0	0	0	5	8	0	1	0	0	7	12	0	1	3	0	2	0
WGEA Paper: "Towards Auditing Waste Management" (2004)	0	0	6	0	0	5	1	4	10	0	0	0	0	11	9	0	1	3	1	1	1
WGEA Paper: "Auditing Water Issues: Experiences of Supreme Audit Institutions" (2004)	0	0	3	0	1	2	0	4	8	0	0	0	0	9	10	0	2	2	0	2	0

^{*}A= Aware, U= Used, and IU= Intend to Use (for those aware of the product but that have not yet used it)



		Nui	nbe	r of	FSA	ls t	hat	fou	ınd	use	ful	WG	EA	pro	duc	ts f	or e	each	ı re	gio	n
WGEA product	AF	ROS	SAI	AR	ABO	SAI	ASOSAI			CAROSAI			EUROSAI			OL	ACE	FS	S	Al	
	NU*	SU*	VU*	NU	SU	VU	NU	SU	VU	NU	SU	VU	NU	SU	VU	NU	SU	VU	NU	SU	VU
WGEA Paper: "Results of the Fourth Survey on Environmental Auditing" (2004)	0	0	5	0	1	3	0	7	7	0	0	0	0	9	8	0	1	2	0	2	0
Greenlines newsletter on the WGEA website	0	0	2	0	1	1	0	7	8	0	0	0	0	9	16	1	2	3	0	1	2
WGEA work plans on the WGEA website	0	0	1	0	0	1	0	8	5	0	0	1	0	9	12	0	4	2	0	2	0
INTOSAI Paper: "The Audit of International Environmental Accords" (2001)	0	0	0	0	0	0	0	5	3	0	0	0	0	11	10	0	1	3	0	2	0
INTOSAI Paper: "Natural Resource Accounting" (1998)	0	0	0	0	0	0	0	5	2	0	0	0	0	3	3	0	0	1	0	1	1

Which of the following WGEA and INTOSAI products on environmental auditing is your SAI aware of, has your SAI used, or has your SAI found useful? (Question 7a)

All the titles of environmental audits, provided by SAIs through surveys, are on the WGEA website, (www.environmental-auditing.org), under Environmental Audits Worldwide. This site is a rich source of information for SAIs and for the international community, which is interested in environmental issues. Sixty-four percent of the respondents who used this web page found it very useful (Exhibit 88). Audits are classified on the website by country; but, more importantly, audits are classified by environmental audit topic. The information on this web page could be very helpful for any SAIs that is undertaking an audit. For many of these audits, a summary or the full audit report may be available on the website.

If the report is not available on the WGEA website, SAIs may find links to the report on the originating SAIs website, under "SAI Contact and Mandate". According to the fifth survey, 81 percent of SAIs have websites (see Exhibit 75) (in 2003, only 68 percent of SAIs had websites). Most SAIs make their audit reports available to the public (89 percent) (Exhibit 92). SAIs from EUROSAI are most likely to make their audit results available to the public (Exhibit 93).

Currently, SAIs are more likely to make their audit reports available on their website (75 percent) (compared to the fourth survey) (Exhibit 94). As a result, it is relatively easy to access information, although language could be a barrier. Findings from these reports can be used by various stakeholders in the environment field. SAIs are also using other means to make their results available to the public, in particular press releases and media interviews.

However, for some regions, such as AFROSAI, audit reports are less available through the internet (Exhibit 95).

Exhibit 92 SAIs that make their environmental audit results available to the public

Percentage of SAIs that make their environmental audit results available to the public							
2003 (N=74) 2006 (N=85)							
89	89						
Does your SAI make its environmental audit results available to the public? (Question 2i)							

^{*}NU= Not Useful, SU= Somewhat Useful, and VU= Very Useful



Exhibit 93 SAIs that make their environmental audit results available to the public—per region

Percentage of SAIs that make their environmental audit results available to the public for each region (2006 survey)										
AFROSAI ARABOSAI ASOSAI CAROSAI EUROSAI OLACEFS SPASAI (N=13) (N=5) (N=23) (N=1) (N=34) (N=13) (N=4)										
85 40 78 100 100 92 75										
Does your SAI m	Does your SAI make its environmental audit results available to the public? (Question 2i)									

N is the number of SAIs that answered this question.

Exhibit 94 How SAIs make the results of their environmental audits available to the public

	Percentage of SA			
Method of making environmental audit results available	2003 (N=74)	2006 (N=76)		
Audit reports available to the public on the internet (website)	50	75		
Audit results communicated through press releases and/or media interviews	N/A*	54		
Audit results communicated through conferences and seminars	N/A	37		
Audit results communicated through articles in journals	N/A	37		
Others	N/A	12		
How does your SAI make its environmental audit results available to the public? (Question 2j)				

*N/A: Non Applicable.

N is the number of SAIs that answered this question.

Exhibit 95 How SAIs make the results of their environmental audits available to the public—per region

	Percentage of SAIs for each region (2006 survey)									
Method of making environmental audit results available	AFROSAI (N=11)	ARABOSAI (N=2)	ASOSAI (N=18)	CAROSAI (N=1)	EUROSAI (N=34)	OLACEFS (N=12)	SPASAI (N=3)			
Audit reports available to the public on the internet (website)	9	0	89	0	91	75	100			
Audit reports available to the public in paper format	73	50	61	100	50	67	100			
Audit results communicated through press releases and/or media interviews	9	0	50	0	71	42	33			
Audit results communicated through conferences and seminars	9	0	33	0	38	42	33			
Audit results communicated through articles in journals	9	0	33	0	27	25	0			
Others	18	50	11	0	12	8	33			
How does your SAI make its environmental at	udit results a	vailable to the	e public? (Q	uestion 2j)						



Regional Working Groups on Environmental Auditing (RWGEAs)

Sharing expertise and results are also important. As mentioned in Background, SAIs can benefit from their regional working groups on environmental auditing (RWGEAs), some of which are particularly active organizing regional meetings and workshops. Thirty-four SAIs are looking for some products and services—mainly training and guidance—from their RWGEAs. (Exhibit 96).

Exhibit 96 Suggested products or services RWGEAs could provide

Category	Number of suggestions— provided by 34 SAIs*
Training and seminars	14
Guidance material	13
Sharing results, exchange of expertise	9
Suggestions for the website	3
Miscellaneous	2
Are there any specific products or services that your RWGEA could provide? (Question 7e)	

^{*}The total number of suggestions does not add up to 34 because some SAIs made more than one suggestion. In cases where SAIs made multiple suggestions that fit under the same category, they were counted as a single suggestion.

Conclusion

As concerns about the state of our Earth increase, SAIs are conducting more and more environmental audits. Every country is concerned about local environmental issues, such as drinking water quality and waste management. In addition, global environmental issues, such as climate change or ozone layer depletion, have emerged. Pollution in one region can affect another part of the world or the entire world. The international community has put international agreements in place to deal with these global issues.

Governments have a major role to play in protecting the environment, by enacting appropriate legislation and setting programs to protect the environment.

SAIs can play a major role in making their government accountable for their commitments. According to the results of our survey, many SAIs are already very active in this area, and new SAIs are embarking on their own journeys to protect the planet for the future generations.



Appendix A: SAIs that responded to the fifth survey and previous surveys

The fifth survey was sent to 187 SAIs, and 119 SAIs responded (see shade countries). For the other surveys, the number of responses was as follows:

- In 1993 (the first survey), 83 SAIs responded.
- In 1996 (the second survey), 88 SAIs responded.
- In 2000 (the third survey), 110 SAIs responded.
- In 2003 (the fourth survey), 114 SAIs responded.

Country	Qu	estic	onna	aire		Country	Que	estic	onna	ire		Country	Qu	esti	onn	aire	
	1	2	3	4	5		1	2	3	4	5		1	2	3	4	
A						Burkina Faso		•			•	F					
Albania		•	•	•	•	Burundi					•	Fiji		•	•	•	,
Algeria	•	•	•	•	•	С						Finland	•	•	•	•	,
Andorra				•	•	Cameroon	•		•		•	France	•		•	•	,
Angola				•	•	Canada	•	•	•	•	•	G					
Antigua and Barbuda		•	•	•		Cape Verde	•	•	•			Germany	•	•	•	•	,
Argentina		•	•	•	•	Chile	•	•	•	•	•	Ghana		•	•	•	,
Armenia						China	•			•	•	Greece	•	•	•	•	,
Australia	_					Colombia	•	•	•	•	•	Grenada			•	•	,
Austria	_ •		•	•		Cook Islands				•	•	Guatemala	•				
Azerbaijan	_	•	•	•		Costa Rica	•	•	•		•	Guyana		•	•	,	
3			·	·		Croatia		•	•	•	•	Н					
Bahamas						Cuba	•					Honduras	•		•	,	
				•		Cyprus	•	•	•	•	•	Hungary	•	•	•	•	,
Bahrain	•	•	•		•	Czech Republic	•	•	•	•	•	1					
Bangladesh	•	•	•	•	•	D						Iceland	•	•		•	,
3arbados			•			Denmark	•	•	•	•	•	India	•			•	,
Belarus				•	•	E						Indonesia	•	•	•	•	,
Belgium Belize	•	•	•	•	•	Ecuador	•			•	•	Iran (Islamic				•	
			•	•		Egypt	•		•	•	•	Republic of)					
3hutan				•	•	El Salvador			•	•	•	Iraq	•	•	•	•	
Bolivia		•	•	•	•	Eritrea			•			Ireland	•	•	•	•	,
Botswana					•	Estonia	•	•	•	•	•	Israel	•	•	•	•	•
Brazil -	•	•	•	•	•	Ethiopia	•	•	•	•	•	Italy	•	•	٠	•	
Brunei Darussalam	•			•	•	European						J					
Bulgaria	•				•	Union	•	•	•			Jamaica				•	



Country	Qu	estic	onna	ire		Country
	1	2	3	4	5	
Jordan		•	•	•	•	N
K						Namibia
Kazakhstan					•	Nepal
Kiribati		•			•	Netherlands
Korea, (Republic of)	•	•	•	•	•	Netherlands Antilles
Kuwait	•	•	•	•	•	New Zealan
Kyrgyzstan				•		Nicaragua
L Lao Peoples						Northern Mariana Islands*
Democratic Republic				•		Norway
Latvia		•	•	•	•	0
Lebanon			•		•	Oman
Lesotho			•	•	•	P
Libyan Arab Jamahiriya			•			Pakistan
Liechtenstein			•		•	Palau
Lithuania		•	•	•	•	Panama
Luxembourg	•			•	•	Papua New Guinea
M						Paraguay
Macedonia						Peru
(The former Yugoslav Republic of)		•		•	•	Philippines
Malaysia	•	•		•	•	Poland
Maledives				•		Portugal
Malta	•	•	•	•	•	Puerto Rico
Marshall						Q
Islands	•					Qatar
Mauritius		•	•	•	•	R
Mexico	•		•	•	•	Romania
Micronesia, (Federated States of)	•			•		Russian Federation
Moldova					•	Rwanda
Mongolia						S
Morocco	•	•	•	Ť	•	Saint Kitt an Nevis
Myanmar	•				•	Saint Lucia

Country	Que	estic	onna	ire	
	1	2	3	4	5
N					
Namibia		•	•	•	
Nepal	•	•	•	•	•
Netherlands	•	•	•	•	•
Netherlands Antilles		•		•	
New Zealand	•	•	•	•	•
Nicaragua		•		•	
Northern Mariana Islands*				•	
Norway	•	•	•	•	•
0					
Oman	•	•	•	•	•
P					
Pakistan	•	•	•	•	•
Palau				•	
Panama		•		•	
Papua New Guinea	•	•	•	•	
Paraguay		•	•	•	•
Peru	•	•	•	•	•
Philippines	•	•	•	•	•
Poland	•	•	•	•	•
Portugal		•	•	•	•
Puerto Rico			•		
Q					
Qatar	•	•	•	•	
R					
Romania	•		•	•	•
Russian Federation		•	•	•	•
Rwanda				•	•
S					
Saint Kitt and Nevis				•	•

Country	Qu	estic	ire		
	1	2	3	4	5
Saint Vincent and the Grenadines	•				
Samoa					•
Saudi Arabia	•	•	•		•
Seychelles *			•		
Sierra Leone					•
Slovakia	•	•	•	•	•
Slovenia		•	•	•	•
South Africa	•	•	•	•	•
Spain			•	•	•
Sri Lanka			•	•	•
Sudan			•	•	•
Suriname	•		•		•
Swaziland	•	•	•	•	•
Sweden	•	•	•	•	•
Switzerland	•	•	•	•	•
Syrian Arab Republic			•		
Т					
Tanzania (United Republic of)				•	•
Thailand		•	•		•
Togo		•	•		
Tonga		•	•	•	•
Trinidad and Tobago		•	•	•	
Tunisia		•	•	•	•
Turkey	•	•	•	•	•
Turks and Caicos Islands*					•
Tuvalu	•	•	•		•
U					
Uganda	•		•	•	•
Ukraine			•	•	•



Country	Questionnaire									
	1	2	3	4	5					
United Arab Emirates	•	•	•	•	•					
United Kingdom	•	•	•	•	•					
United States of America	•	•	•	•	•					
Uruguay		•	•	•	•					

Country	Questionnaire									
	1	2	3	4	5					
V										
Vanuatu	•									
Venezuela	•		•	•	•					
Viet Nam		•	•	•	•					

Country	Questionnaire										
	1	1 2 3 4									
Υ											
Yemen	•	•	•								
Z											
Zambia	•	•	•	•	•						
Zimbabwe	•	•	•	•	•						

^{*} These countries are not members of INTOSAI.



Appendix B: List of environmental issues (from the Environmental Audits Collection form)

Which issues related to the environment did this report address? (Check all that apply)

Water			Species at risk
	Drinking water: quality and supply		Wetlands
	Pollution of water bodies (such as by		Rivers and lakes
	industry and agriculture)		Protection of marine habitat
	Wastewater treatment		Coastal areas
	Acidification		Other ecosystem issues
	Water quantity management or management of watersheds	Human activities and sectors	
	Marine pollution		Agriculture
П	Other water issues		Land development
 Air			Energy and energy efficiency
	Climate change		Natural disaster management: preparedness responses
	Stratospheric ozone layer depletion		Transportation, traffic and mobility
	Acid precipitation		Recreation and tourism
	Local air quality, such as smog,		Cultural heritage
_	particulates, SO2, NOx, and CO2		Urban environment quality (sustainability)
	Indoor air quality		Biosafety and genetically modified
	Toxic air pollutants, such as organic POPs, dioxins, and furans		organisms (GMOs) Chemicals management
	Other air issues		Pesticides
Waste			Environment and human health
	General waste		Infrastructure
Н	Hazardous waste		Other human activities /sectors
H	Municipal, solid, and non-hazardous waste	Gov	ernance
\Box	Radioactive waste		
П	Contaminated sites and soil pollution		Government greening operations
	Other waste issues		Environmental impact assessment Strategic environmental assessment
Natural resources			(SEA)
	Minerals, such as mining, gas, and oil		Environmental management system
\Box	Forestry and timber resources		Sustainable development
ī	Fisheries (freshwater and marine)		World Summit on Sustainable
	Other natural resources issues		Development (WSSD)
Ecosystems			Domestic funds and subsidies
	Biodiversity	Ш	International funds and subsidies, such as Global Environmental Facility (GEF)
	Protected areas and natural parks		Other governance issues
	Ecosystem management and ecosystem changes	Oth	er issues