MINUTES
15TH Steering Committee Meeting of the INTOSAI Working Group on Environmental Auditing

11-14 September 2017
Washington D.C., USA

MONDAY, 11 SEPTEMBER 2017

Environmental Excursion to General Service Administration Building and Picnic at Fort Park, Alexandria

The delegates of INTOSAI WGEA SC Meeting have a great opportunity to be introduced to green initiatives taken by the United States General Service Administration office. Green initiatives from the implementation of smart building architecture, shared office spaces, and tele-working were ones that have proven to help the office to implement a more sustainable office. After taken tour around the buildings, the delegates spent their late afternoon for a picnic at the Fort Park, Alexandria.

Picture. Delegates at the General Services Administration Building

Picture. Delegates at the Fort Alexandria Park

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TUESDAY, 12 SEPTEMBER 2017

Welcoming Remarks

- **Gene Dodaro, Comptroller General of the United States of America**

Mr. Dodaro welcomed guests from the Working Group on Environmental Auditing (WGEA) to the United States and the Government Accountability Office (GAO) and extended GAO's hospitality and greetings. He is pleased to serve as the host for this meeting. He noted that WGEA is one of INTOSAI's longest running and largest working groups.

Keynote Address

- **J. Christopher Mihm, Managing Director, Strategic Issues, U.S. Government Accountability Office**

Mr. Mihm described the purpose of his remarks as a summarization of the rest of the WGEA meeting over the next several days. This will stem from the 17 Sustainable Development Goals (SDGs) of the 2030 agenda, which will be discussed at a high level here. Mr. Mihm complimented the WGEA agenda for integrating these principles throughout this week's meetings.

These 17 principles are intended to be integrated and indivisible. Mr. Mihm stated that it is understood that they should be implemented in an integrated way and that the WGEA agenda clearly demonstrates this intention. Key issues, such as forestry sustainability, water sustainability, and urban area sustainability, will be discussed this week. That these principles are indivisible means that action on one will lead to action on the others, but, importantly, inaction on one will lead to failure on the others.

These principles should be universal in application—all countries should be able to implement and achieve these goals. The Millennium Development Goals were viewed as global north goals that were not applicable to the global south. The Millennium Development Goals made incredible progress in reducing extreme poverty; notwithstanding, about 700 million people live on less than $1.25/day. SDG Goal 1.2 intends to achieve a 50 percent reduction of poverty in each country. Millennium Development Goals had the implicit assumption that government structures already existed to take action; the SDGs explicitly recognize the need to establish structure—goals 16 and 17 address this. [*Note: SDG Goal 1.2 is to, by 2030, reduce at least*

by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions. SDG Goal 16 is to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. SDG Goal 17 is to strengthen the means of implementation and revitalize the global partnership for sustainable development.]

In addition to establishing effective governance and the means of implementation, SDGs make a commitment to "leave no one behind." With a focus on marginalized communities, these goals recognize that progress is made only when those less well-off are making progress as well.

Mr. Mihm noted that 2030 agenda and SDGs also include national reporting standards, and rigorous follow-up and review are required for successful implementation. Follow-up and review occurs at the national, regional, and global levels. It is important to learn what is working as well as what is not.

The theme developed in the INTOSAI strategic plan from the Abu Dhabi congress is a commitment from INTOSAI and supreme audit institutions (SAI) to assess national preparedness and implementation of 2030 agenda. There are four key roles for SAIs in achieving this commitment: (1) support national efforts to build effective institutions; (2) audit national systems of assessing progress toward national SDGs; (3) undertake performance audits that examine the economy, efficiency, and effectiveness of key government programs; and (4) be models of transparency and accountability for their own internal operations. There is a range of ways SAIs can contribute.

Goals 16 and 17 also include a "whole of government" approach and perspective. Specifically, audits should focus on results rather than individual programs. These audits should measure systemic risks across the entire delivery chain rather than individual program risks. In addition, they should provide collaborative mechanisms to achieve SDGs. Decisions should be data driven and better records, such as death and birth records, should be made available. The overarching objectives are to: build government capacity in new and different way, strengthen capabilities in strategic management and guide effective implementation, and employ strategic civic engagement with open and transparent governance.

Mr. Mihm spoke about the INTOSAI Development Initiative (IDI) / Knowledge Sharing Committee (KSC) Program for Auditing National Preparedness and an e-learning effort that is underway to implement 2030 agenda. Credit is owed to the Indonesians for identifying the

need to establish audit objectives. These objectives, already agreed upon, are instrumental to make progress and include: (1) to what extent has the government adapted the 2030 agenda into its nation context? (2) Has the government identified and secured resources and capabilities (means of implementation) to implement 2030 agenda? And (3) has the government established mechanisms to monitor, follow up, review and report on the progress toward the implementation of 2030 agenda?

At the top level this requires the development of a logic model. The traditional logic model flows linearly from one point to the next: inputs lead to outputs. In reality, though, the focus of effort should be on the overall goal of interrelationships, according to Mr. Mihm (e.g., Complexity and Disaster Risk Reduction/Climate Change Adaptation). Traditionally, an audit would focus on individual programs, but audits can be done on the linear logic flow (inputs and outputs) or the totality of the interrelated parts.

The whole of government approach demonstrates the need to look across government and leverages sectors. GAO's ongoing duplication, overlap, and fragmentation work is an example of this. Duplication occurs when more than one agency is doing the same work—this is rare. Overlap occurs when more than one agency shares similar goals and activities. Fragmentation is more common and occurs when more than one agency is involved in a similar national area doing different parts of the work. The goal is to learn how we can make these agencies work better together. This work has resulted in over $75 billion in financial benefits between fiscal years 2010 and 2016, with another $61 billion to be accrued over time.
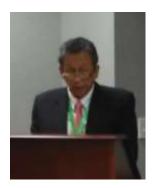
Mr. Mihm concluded with two bottom lines: (1) for the government, there is a need for new ways of thinking, management, and capacity; (2) for SAIs and auditors, there is a need to make sure practice of performance auditing needs to adapt in tandem with complexity of government approaches and structures used to address national needs.

Opening Remarks
- **Dr. Moermahadi Soerja Djanegara, CA. CPA, Chairman of the Audit Board of the Republic of Indonesia, Chair of INTOSAI WGEA**

Dr. Djanegara remarked that he was honored to serve as the Chairman and to assume the Chair of WGEA. Based on the work done thus far, and attendance at this meeting, it is evident that the spirit has continued and progress is being made toward the 2030 agenda. There is a responsibility to follow up and identify the progress made at the national, regional, and global levels and to identify opportunities for improvement.

Under the leadership of the Indonesian President and the Minister of National Improvement, the Indonesian SAI has developed a national audit plan to implement the SDGs as part of its commitment to the 2030 agenda. They have made a commitment to audit problems of national importance using a holistic approach. It is important that SAIs pursue this type of national synergy within our governments to identify areas of future improvement.

Dr. Djanegara thanked Mr. Dodaro for hosting this WGEA meeting and expressed confidence that this year's meeting will meet its objectives. He also expressed his sympathy to those affected by the recent hurricanes—Harvey and Irma—in Florida, Texas, and the Caribbean. There is hope for a quick recovery and that systems are developed to make improvements that are effective and minimize future risks.

The meeting's project plans cover a range of topics and will assist in preparing documentation and plans for future meetings. The 2017 project plans include: development of audit guidance, presentations from all project leaders, and emphasis on environmental auditing. With new membership on the standing committee, WGEA must deal with large and exciting challenges. Dr. Djanegara commended participants on all of the work done already.

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INTOSAI Response toward Agenda 2030 and the Role of Environmental Auditing to Achieve the Goals

- **Presented by Mr. Khalid Hamid of the United Arab Emirates, via videoconference**

Following introductions, the Indonesian representatives expressed their support of the United Nations 2030 agenda on SDGs. Mr. Hamid then provided an overview of INTOSAI's work pertaining to the SDGs. He noted that in July 2017, INTOSAI's Development Initiatives group met with the United Nations Department of Economic and Social Affairs to discuss how SAIs could contribute to implementing the SDGs and tracking progress on the goals. The meeting participants discussed several approaches and roles for the SAIs in implementing the SDGs, including providing expert opinion and developing a framework for aggregating SAI performance audits related to the SDGs.

Mr. Hamid discussed possible WGEA strategies to facilitate inter-SAI coordination regarding SDGs and sustain a global public voice for INTOSAI related to the SDGs, identifying three main mechanisms for doing so: (1) aggregate relevant performance audit findings at the regional and global level; (2) utilize WGEA's Performance Audit Subcommittee or KSC to collect and make accessible audits related to the SDGs, sub-goals, and indicators, identifying common issues and barriers to reaching the goals; and (3) compile and analyze audit findings related to environment-related governmental internal controls, per SDG goal 16.6. [*Note: SDG Goal 16.6 calls for developing effective, accountable and transparent institutions at all levels.*]

Mr. Hamid suggested compiling environmental audit findings into regional- and global-level reports. He explained that a number of challenges, including various national priorities, could affect this process. He suggested using the KSC portal to compile and codify environmental reports and results, as well as methodologies and ongoing audit work. This could help identify common findings, helping solidify the results framework and facilitate regional-, national-, and global-level consistency. Due to INTOSAI's non-hierarchical nature, Mr. Hamid suggested developing a regional reporting structure to coordinate SAIs' knowledge. He explained that without such region-level coordination, INTOSAI will have difficulty functioning as a global organization. Mr. Hamid noted that WGEA could have a presence at the upcoming High Level Political Forum when countries will present their voluntary reviews of progress toward the SDGs.

To serve as a global public voice, it will be important for INTOSAI to extract a straightforward, understandable message, adhering to auditing standards while avoiding becoming too technical or convoluted. While environmental performance audits can have narrow scopes, a broader, aggregated message will help link national indicators to the SDGs and other global indicators. WGEA and INTOSAI can add value to the SDG process because we have the on-the-ground perspective. During this process, SAIs should focus on findings related to SDGs, determining research areas accordingly. One possible area for research could pertain to the United Nations Economic Commission for Europe and the United Nations Development Programme's (UNDP) environmental work. INTOSAI work could help map the success of these organizations' strategies, in preparation for upcoming 2022-2024 efforts to reach carbon emission goals that 20 to 30 countries expect to cooperate on.

Mr. Hamid pointed to two potential research areas to facilitate bridging from national audits to SDGs: (1) how can SAIs transform or translate narrow national indicators into broader global indicators? And (2) how can UNDP and the United Nations Environment Programme (UNEP) map environmental programs to SDGs at a regional and global level in order to align their efforts? Mr. Hamid expects the process to be long and intensive, due to the necessary thorough SDG analysis. He hopes that INTOSAI can learn from its work pertaining to the United Nations' Millennium Development Goals (in which SAIs discovered issues after the fact), developing an early warning system to identify any problems with SDGs quickly enough to allow for their successful resolution.

Discussion

Mr. Junnius Arifa of Brazil inquired regarding INTOSAI's perspective and guidance pertaining to prioritizing environmental audits. He voiced specific interest regarding coordination with other INTOSAI initiatives, including the IDI and transportation and infrastructure related work. Mr. Hamid explained that prioritization is something WGEA needs to discuss. INTOSAI aims to link research areas to tangible aspects of the SDGs, such as the effort to reach carbon emission goals. Over the next 10-20 years, as SAIs identify reports that apply to broader global issues, he expects audit guidelines to develop based on priorities, stakeholder consideration, and framework issues. Mr. Hamid hopes to see Brazil's work on the matter, and advised all SAIs be proactive, rather than reactive.

Mr. Arifa also feels that guidance, which WGEA can coordinate, is important to INTOSAI's role in SDG attainment. Mr. Hamid agreed, explaining that sufficient guidance can help tie issues together—a sentiment that Mr. Christopher Mihm of the United States agreed with.

Additionally, Mr. Arifa inquired regarding INTOSAI's capacity to undertake Approaches 1 and 2. Mr. Hamid is planning to aggregate audit results to develop comprehensive overall conclusions targeted to an audience broader than just the SAI community. To reach such conclusions, he feels INTOSAI will need to expand beyond its typical role as a forum for SAIs to collaborate. He looks forward to seeing the results.

Mr. Yudi Ramdan Budiman of Indonesia asked for advice regarding INTOSAI's efforts to become a global voice. Specifically, they highlighted interest in ideas for integrating different approaches and improving audit-related policy and framework. Mr. Hamid discussed the importance of sub-regional structures in linking different research and audit approaches. For example, 110 SAIs are currently conducting Approach 1 readiness audits. He explained that it is important to understand how different parts of government interact; discuss realities

related to environment, health, and education; and development a government-wide approach. After separate parts of INTOSAI analyze different issues, the Performance Audit Subcommittee will consolidate their findings and link them to SDGs. Representatives from Indonesia clarified that they are currently discussing possible SDG audit strategies with their government and hope to begin a performance audit within the next year.

Mr. Mark Gaffigan of the United States noted that at a December 2016 planning meeting of the UN High Level Political Forum (UN HLPF)—charged with SDG follow up and review-- many government representatives were not familiar with the performance audit process. Thus, he challenged them to collaborate more with national SAIs, as well as with state, local, tribal, and non-governmental stakeholders, to better determine roles and responsibilities, distribute resources, and develop indicator quality criteria. Mr. Hamid asked for Mr. Gaffigan's views on SAIs' ability to influence other stakeholders. While Mr. Gaffigan realizes this process can be challenging as SAIs must maintain their independence, all stakeholders have a common interest, and thus can work together to conduct follow up and review to measure progress toward achieving the goals. In the United States, while the federal government usually has a role in addressing SDG related issue, it is not an exclusive role and it is necessary for them to collaborate and develop partnerships with other parties at different governmental levels and with non-governmental entities.

The UN HLPF must focus on good performance indicators and methods of assessing performance and progress. And SAIs can help as they are in business of performance review. Without an emphasis on follow up and review, the 2030 agenda SDGs may not make measurable progress, necessitating the UN to specify similar goals in 2030 for the future. Mr. Mihm added that while all reports are deliverables intended to help formulate a public voice, developing a crosswalk that ties national audits to the SDGs could be a challenging and time-consuming process. Mr. Gaffigan explained that developing an inventory of relevant performance audits, such as that planned by the climate change team could help tie findings to SDGs, such as 13.1. [*Note: this target under goal 13 is to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. Goal 13 is to take urgent action to combat climate change and its impacts*.] He suggested developing a working group to facilitate such initiatives, which could help INTOSAI develop strategic plans for the 2022-2025 initiative.

Mr. Alfredo Gomez of the United States suggested expanding INTOSAI's working group survey to collect information pertaining to SDG-related reports, helping facilitate development of a consolidated database. Mr. Arifa noted that if we collect reports from SAIs centrally, it will

be challenging to collect and report this information continuously over the years. Mr. Hamid has responded to working group surveys and feel they help the organization establish consistent practices.

Mr. Jonathan Keate of New Zealand noted that some regions are undertaking efforts to collect reports and that there is a lot of activity and dissemination from the KSC and IDI. Mr. Keate suggested developing a one-stop INTOSAI website pertaining to SDGs. Mr. Hamid explained that, while INTOSAI's ability to do this is currently limited due to other commitments and a culture that limits this type of sharing, he plans to discuss this proposal at the organization's upcoming governing board meeting in Austria.

Mr. Sunil Shreekrishna Dadhe of India suggested developing an international community of practice portal, facilitating two-way information exchange between SAIs. The portal already exists, but it needs to be regularly updated and more accessible. Mr. Hamid hopes to see this in the future, possibly two years from now.

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How WGEA's Guidance and Research Projects Should Fit into INTOSAI Framework of Professional Pronouncements and Opportunities to Contribute to the IFPP Strategic Development Plan

- **Presented by Ms. Beryl Davis of the United States of America**

Ms. Beryl Davis, of GAO's Financial Management and Assurance team, serves on the working group developing the INTOSAI Framework of Professional Pronouncements (IFPP). She discussed how to avoid fragmentation, overlap, and duplication amongst the INTOSAI working groups.

Ms. Davis explained that the IFPP was established during the 2016 Congress with the decision that a stronger quality control process for standards was needed due to a lack of consistency, causing overlap. Her working group is responsible for making sure that it applies to certain requirements. Comments for the exposure draft of the IFPP are addressed by the working group, and they decide whether the final product needs revisions. The final draft is then sent to Congress for approval. Ms. Davis explained that due process has changed due to the quality control function and that the due process documents and the Strategic Development Plan show which projects will line up with

the 2017 Congress. Project proposal information is not readily available and must be retrieved from the Chair in order to submit to the framework of professional pronouncements.

Ms. Davis stated that a lot of the working groups are developing documents that will not go into the framework and will not necessarily be an International Standard of Supreme Audit Institutions (ISSAI), but will be guidance, or "GUIDs" per the framework, for the community. A process will be developed for the quality control of these documents. Quality control for documents outside of the framework is being suggested with three quality layers: (1) due process with an exposure draft, (2) key stakeholders to discuss the draft with, and (3) quality assurance with cooperation with your working group. Nothing has been submitted to Congress yet, but it is in the process.

Discussion

Mr. Junnius Arifa of Brazil asked about the timeline for submitting a proposal document, noting that there seem to have been difficulties with fulfilling the dates. Ms. Davis explained that there may be many working groups in a similar situation and that there is no project for the environmental working group, but there is some subject matter specific to guidance. The timeframe to submit for this year is short and likely not possible. If you are not able to accelerate your project, then the 2019 timeline is not possible to meet and that you should aim to submit documents for 2022. Mr. Arifa explained that they are not sure if the guidance that they are providing for their sustainable developmental goals project should be priority level 1, 2, or 3. Ms. Davis stated that the Strategic Developmental Plan is priority 3 and has a possible need for guidance. She explained that if you are priority 3, that does not mean you should not start now, but finalizing for the 2019 conference may not be possible.

Mr. Wilfredo Agito of Philippines noted confusion over the framework after the previous framework had four levels and the new one has three. Ms. Davis explained that the fourth level was specific to program audits and environmental auditing, and a transition between the old framework to the new one is in the process of converting the standards into subject matter specific material. Under the new framework, products created by the working groups will be considered guidance. Ms. Davis explained that documents developed recently will just move over to the new framework and will not require much revision. Changes will be allowed to work as needed with review and revision occurring once it has been in place for a few years to see how things are going.

Ms. Ma. Corazon Gomez of Philippines asked if there is a working group that is looking at if guidance is already in line with the current ISSAIs that are moving out of a level. Ms. Davis

stated that the guidance currently being developed (ISSAI 10, 20, 30, etc.) is not something that they will need to deal with, but a preliminary project proposal may be needed. [*Note: ISSAI 10 is the Mexico Declaration on SAI Independence, ISSAI 20 is principles of transparency and accountability, and ISSAI 30 is the code of ethics.*]

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Audit Guidance on Climate Change: Strengthen Resilience and Adaptive Capacity to Climate-Related Hazards and Natural Disasters in All Countries

- **Presented by Ms. Marissa Dondoe, Ms. Krista Mantsch, and Ms. Michelle Wong of the United States of America**

The presenters thanked WGEA for their feedback and suggestions on their project plan and looked forward to working with WGEA on it. The project's overall goal is to develop audit guidance on strengthening resilience and adaptive capacity to climate-related hazards in all countries. The United States is the project lead, and sub-leads include Canada and Zambia. They also coordinate with other teams, such as one led by Brazil, so that they do not duplicate efforts. Further, they hope to create new guidance that complements past guidance (rather than updating it) to assist SAIs when they audit government's response to climate change and related events, such as ocean acidification. The final product will be flexible, and may include technical background information, case studies, best practices, and may be available either as web-based training or downloadable documents. The presenters also would like feedback from other SAIs on what would be helpful for them.

The project's first objective focuses on the UNDP SDG 13: Climate Action. Specifically, the focus is on the SDG 13 first target (13.1), which is to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. The project seeks to identify criteria to assess nation's strategy for meeting the SDG goal and national preparedness.

SAIs' comments provided various ideas for the project, including incorporating additional SDGs that relate to the project goals, such as SDG 11: Sustainable Cities and Communities. [*Note: SDG 11 calls to "make cities and human settlements inclusive, safe, resilient and sustainable."*] Specifically, applicable targets under SDG 11 focus on increasing the number of cities that have adopted and implemented integrated policies and plans towards mitigation

and adaptation to climate change; and efforts to significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses caused by disasters. The project also incorporates the Sendai Framework for Disaster Risk Reduction, which relates to the SDGs, and global and regional strategies to conduct cooperative audits with other SAIs.

The project's second objective is to identify past and ongoing or potential future audits with sustainable and resiliency goals. This project will look at relevant audits and organize them so that SAIs may easily find them. One example is GAO's review of designing standards for buildings. This review examined how to incorporate resiliency when constructing a building. This could help other SAIs complete audits in their respective or other countries, and provide criteria and methods going forward. The presenter asked participants to identify audits that have occurred in their own country that may be relevant for the SDGs. For example, Brazil identified some audits in the comments they provided to the project.

Discussion

Mr. Shakeel Asghar of Pakistan asked whether the projects that SAIs could collaborate on with each other—or audits that may share similar issues—are limited to countries that neighbor each other or distant countries that may have similar issues. The presenters said that they did not envision whether the collaboration would be with neighboring countries or not, but SAIs do not necessarily need to be next to each other to face similar issues. The idea would be to come up with a collaborative template to address these issues related to climate change.

Mr. Junnius Arifa of Brazil said that it would be important to align the project to a WGEA project on developing guidelines for delivering SDGs through environmental auditing. A pilot would be useful to help establish criteria and provide examples of a design matrix and work papers, as a first step. The presenters said that they would work together to align projects with criteria and think of a baseline.

Ms. Xinfang Zhang of China thanked her U.S. colleagues for their good work. She referenced the material in appendix 1 on assessing national preparedness for implementing SDGs. She said that it would be helpful to have similar material related to SDG 13.1, including specific objectives, methods, audit examples, and case studies. She said her fellow Chinese delegates believe that it would be helpful to learn from that.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Research Project on Environmental Health – Focus on Air Pollution

- **Presented by Ms. Ma. Corazon Gomez of the Philippines**

Ms. Gomez thanked the subcommittee and other entities for the valuable comments they submitted. She said that the comments received on time were incorporated into the project plan, and they are considering the other comments that they did not receive on time. Ms. Gomez said that the Project Work Plan is for 2017-2019 on environmental health with a focus on air pollution. Project members include SAIs from Morocco, Czech Republic, Iran, and Pakistan. To show the status of air pollution worldwide, she presented pictures from various countries such as China, Brazil, Mexico, Thailand, and the Philippines.

Ms. Gomez stated that there are many contributors that affect air conditions. For instance, contributors could be from transportation, industry, and even the agricultural sector. For example, Thailand's agricultural sector affects air quality when crop land is burned. This project focuses on the effects of air pollution on health. She said that air pollution has health effects that could cause cancer, asthma, chronic bronchitis, and emphysema. In addition, it affects the human system and causes, for example, allergies, headaches, dry skin, and fatigue. Furthermore, carbon dioxide toxicity, which comes from air pollution, affects the human body's systems. Thus, air pollution is harmful to the human body in a number of ways.

Environmental pollution is one of the most serious crises today. The United Nations General Assembly delegates unanimously agreed to set standards across multiple sectors to reduce pollution. She said that the standards will help the economy and overall health. Air pollution is responsible for 7 million deaths, according to the World Health Organization, and the international community needs to cooperate and play a role in addressing air pollution. The cost in OECD countries, in addition to death and illness, was $1.7 trillion in 2010. In China, the cost of air pollution on health was $1.4 trillion and in India it was $500 million. It has an enormous health impact.

The project also considered the 2015 SDGs related to air pollution. Air pollution is included in SDGs goal 3 and 11. SDG goal 3 is "to make cities and human settlements inclusive, safe,

resilient and sustainable by reducing the adverse per capital environmental impact of cities, including by paying attention to air quality." SDG goal 11 states that steps should be taken to "ensure healthy lives and promote wellbeing for all ages through substantial reduction of the number of deaths and illnesses from hazardous chemicals and air pollution."

The project has three objectives: (1) identify and describe the issues and risks related to environmental heath, with a focus on air pollution, in which the governments worldwide faced with that needed concrete response measures; (2) find out how international organizations can assist/support in surmounting the effects of air pollution on health; and (3) describe the challenges of SAIs in auditing these issues and identify the best strategies and practices which will assist SAIs in facing and overcoming these challenges.

In addition, the team identified five issue areas for the project scope:

(1) The effects/impact of air pollution to environmental health: this chapter will identify sources of air pollution, those who are vulnerable to air pollution, and the effects of air pollution on health, among other issues.

(2) Risks to governments due to effects of environmental health related to air pollution: this chapter will discuss risk related to access to information on levels of air pollution and their main sources of pollutants (noting that governments should have access to information so that they can determine the level of air pollution in their country). There is a risk that the government might not be aware of the health impacts of air pollution; there is a risk to environment and human health; and there are financial risks related to air pollution and human health, as well as the risks that the governments may face.

(3) Role of governments in responding to the effects of environmental health related to air pollution: this chapter will focus on efforts by selected governments worldwide to determine the level of air pollution in their own country as well as its impact on public health; policies and/or programs and strategies taken by these governments to reduce and combat air pollution and its health impact; and evaluate the cost effectiveness of policies, programs and strategies of these governments against air pollution and is effects on health. (During the discussion, a delegate suggested that issue areas 2 and 3 could be consolidated.)

(4) Efforts of international organizations on air pollution: this chapter will give an overview of the assistance and provision of funding sources in support of programs and projects related to impacts of air pollution on health, among other issues.

(5) A description of the challenges faced by SAIs in auditing these issues and identify the best approaches and practices that will assist SAIs in overcoming these challenges: this chapter will identify SAIs' best audit practices; and identify the

obstacles/hindrances faced by other SAIs who have not yet engaged in auditing air pollution and its health impacts, among other issues.

The team's planned methodology has eight parts: (1) literature review; (2) study of different SAIs' audit reports; (3) reference to recent publications of the Organisation for Economic Co-operation and Development and the European Environmental Agency; (4) review of the concluded cooperative and parallel audits of WGEA SAI members related to the subject of the project as references; (5) discussion panels with experts and academics; (6) analysis of information and case studies; (7) information on data exchange, by email, with the members of the subgroup on the project; (8) and workshops and work sessions during the meetings of the WGEA members, specifically with the steering committee. The team plans to provide the final draft of the project plan to the WGEA secretariat by the end of May 2017. The proposed deadline for the final version of the project is June 2019.

Discussion

Ms. Barbara Patterson of the United States thanked the Philippines delegation for their presentation on a topic that is very important. One consideration for moving forward is that the scope is large. The project has five issue areas. With regard to issue area 1, there is already documented information about the effects and impacts of air pollution on environmental health and the project could potentially rely on those reports. For issue area 3, the project plan discusses evaluating the cost effectiveness of policies and programs; examples of this may already exist that may be useful. The delegation from the Philippines said that they are focusing on selected governments and already have a group working on this. They plan to use categories of underdeveloped, developing, and developed countries to study effects of air pollution. Local groups are working on some of the issue areas with them, and subcommittee SAIs members also contribute.

Mr. Sunil Shreekrishna Dadhe of India asked if the results of the audit could be shared with other SAIs, including the UNEP SAI. He said that international organizations obtain funding from a particular country, but then may implement the project in another country. The country from which they obtain funding, and the country in which they implement the project, may have different environmental policies. He said that the international organizations should consider the environmental policies from the country in which they are implementing the project.
The Philippines delegation asked if Mr. Dadhe wanted more information on how international organizations work in specific countries. Mr. Dadhe said that there are specific mandates for projects, and the SAIs would be concerned about national mandates. Thus, the audit is limited by the mandate of that particular SAI. Mr. Wilfredo Agito of Philippines agreed and said that

SAIs are bound by international agreements that are initiated by international organizations. The project has to harmonize the policies and pronouncements of SAIs related to the function and role of international organizations on air pollution. A decade and a half ago, the Philippines passed their Clean Air Act, which is legislation that addresses air pollution. A UNEP program provides funding for implementing the Clean Air Act that focuses on reducing fluorocarbon emissions. With the UNEP's support, they are working to significantly reduce fluorocarbons.

Ms. Viire Viss of Estonia said that it is very important to support the idea that SAIs have done research themselves. Perhaps they could make the scope smaller by shortening the introductory part of the project. They could then focus more on other parts of the project. Air pollution is a cross border issue; a problem could exist in one country but the same problem can also come to another.

Mr. Yudi Ramdan Budiman of Indonesia said that it will be useful, when all of the project plans are available, to discuss the linkages and connections of the problems with regard to Sustainable Development Goals (SDGs). The secretariat can map the projects in order to present the information visually. SAIs can email additional comments to the secretariat.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Research Project on Greening Cities
- **Presented by Mr. Michal Rampír and Ms. Helena Vorbová of the Czech Republic**

The aim of this project is to build on previous projects conducted under Goal 1 of INTOSAI WGEA's Work Plan for 2017-2019: "Update existing and develop new guidance materials available to SAIs, conduct research studies on emerging topics in environmental auditing." There are several questions to focus on this area, such as why SAIs should deal with environmental challenges in cities or in urban areas, whether this issue is important to SAIs, and how SAIs can contribute to improving environmental challenges in cities.

According to publically available information and United Nations materials, in 2015 54% of the world's population lived in cities, and this number is expected to grow to 80% of the world's population by 2050. An additional 2.5 billion people could be added to the urban population

by 2050. The majority of growth in the urban population takes place in developing countries. Many of the new urban residents will be the poorest people in the world. The importance of this theme is not just for developing countries; it is an important issue for all countries that SAIs should pay attention to. Information on urban agglomerations from the United Nations shows that there is an expected increase in urban populations in some cities in intense bursts between the years 1990 and 2030. For example, Shanghai, China had an urban population of 7.8 million in 1990 and this number is expected to grow to 30.8 million in 2030. Similar trends are apparent in Delhi, India, Beijing, China, and Cairo, Egypt. Significant changes in the urban population are expected in Asia, Africa, and South America.

The majority of the world's population will be concentrated in towns and cities, with large differences between cities in developing and developed countries. Definitions are important to understanding issues related to greening cities. For example, in the city of Toronto there is the "city proper," corresponding to the Toronto census subdivision, the "urban agglomeration," corresponding to the main population center of Toronto, and the "metropolitan area," corresponding to the broader census metropolitan area.

The objectives of this project are to (1) identify and describe the most critical challenges to urban agglomerations, such as increased noise and infrastructure and quality of drinking water, sewage, and waste management systems; (2) share the experience of SAIs in auditing this area; and (3) emphasize the importance of this issue within the INTOSAI WGEA in the set planning period. This project is tied to the United Nations' SDGs that have previously been defined and approved, as massive population growth in urban areas is a threat to the sustainability of cities and quality of city life, leading to social instability. Related goals include 6 (Water and Sanitation), 7 (ensure access to affordable, reliable, sustainable and modern energy for all), 11 (Sustainable Cities and Communities), and 13 (Climate Action). Examples of targets include upgrading slums, as well as providing access to safe, affordable, accessible and sustainable transportation systems for all. With specific respect to goal 11 and why it is related and important, about half of humanity—3.5 billion people—lives in cities today, and 95% of urban expansion takes place in the developing world. Cities account for 60-80% of energy consumption and 75% of carbon emissions.

Environmental audits worldwide are already ongoing in areas related to greening cities. There also may be examples of audits focused on individual environmental issues that are not listed in the SAI database, so the project team would like to ask SAIs about audit activities in the field concerning urban agglomerations.

The structure of the study will consist of three parts. First, the project team will identify basic information on concepts and definitions related to greening cities and on environmental problems in urban agglomerations. Second, the project team will research the importance of international accords, strategies, and governmental programs related to the quality of the environment in cities or urban agglomerations and with regard to the fulfilment of the SDGs Third, the project team will collect experiences of SAIs from audits of individual environmental components in cities or urban agglomerations, resulting in case studies from environmental audits and possible obstacles that prevented SAIs from conducting audits on this subject. The planned methodology will be similar to that of other projects discussed at this meeting, and will be based on guides and manuals published by INTOSAI and survey data sent to WGEA members, among other things.

A related project from the Czech Republic is planned on the topic of "Support of Air Quality Improvement" studying the two regions with the worst air quality in the Czech Republic. One of the main audit questions will be to determine what effective strategies are being undertaken by the central government to improve air quality in the two largest cities. An obstacle of the study will be that the SAI cannot audit municipalities, but the team plans to address this by making the research objectives central to the main government.

The timeline and key milestones of the project include providing a final version of the project plan to the WGEA Secretariat by October 2017, with a final draft of the project output to the Secretariat by February 2019. The results of the project will be discussed at the 19th WGEA Assembly in September 2019.

Discussion

Ms. Viire Viss of Estonia noted that there may be the potential for overlap with other projects, such as those related to wastewater and air pollution. There may be limitations to this project given the lack of authorization to audit local governments that are responsible for problems related to city planning, such as storm water management or transportation. One idea to think about is the use of public funds in this area and whether the government says how they may be used.

Ms. Xinfang Zhang of China said that in order to be more comprehensive, one may study issues related to green urban development such as green transportation and green energy utilization. Transportation is a big issue in Chinese cities, and the delegate suggested adding emerging issues to the plan.

Ms. Ma. Corazon Gomez of the Philippines remarked that this is a huge topic area, and she suggested looking at issues that may have the biggest impact.

Mr. Francois Bekemen Moukoko of AFROSAI said that one issue to consider are the criteria, asking at what point one may say that a city is "green enough." This is highly country-dependent; however, it could be a point that SAIs could consider in specific areas, such as transportation. Ms. Viss agreed that the country or regional context is important as is establishing criteria. She noted that in Europe there are European criteria related to establishing green capitals, and some states have green indexes. She recommended to clearly establish the criteria.

Mr. Sunil Shreekrishna Dadhe of India stated that existing information on the carbon footprint or ecological footprint of a city could form a baseline for this review, which would allow for the study of the effects of various government initiatives over a period of time.

Ms. Dilyanka Zhelezarova of European Court of Auditors suggested specifying in the plan how data sources will fit more into the overall projects. There are a lot of materials available from the United Nations, suggest choosing those that are most important to the issues facing SAIs in this area. Mr. Michal Rampir of Czech Republic informed that all data used were obtained from United Nations data source.

Ms. Susan Iott of the United States said that normal regulatory approaches and incentives for green cities should be discussed separately so that there is an understanding of how they will be different. Financing issues are also important to consider because there are a lot of different ways to fund projects in this area, but ultimately local governments will bear the primary burden with states and federal governments providing assistance. Other areas to consider are privatization, public-private partnerships, and tax breaks.

Mr. Junnius Arifa of Brazil said that it is important to establish criteria of the governance approach. The project should establish that there is a cross cutting view, how country can build or achieve goals. Can think about what countries need to do to achieve greening cities.

The presenters thanked the delegates for their comments and noted that the main goal is for SAIs to recognize the importance of the issue of cities, not to prepare guidance for auditing in urban agglomerations.

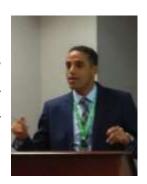Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Research Project on Water Sanitation

- **Presented by Mr. Hassan Namrani of Morocco**

Mr. Namrani provided an overview of the importance of water sanitation issues, noting that the 2030 SDG included two targets in Goal 6 (6.2 and 6.3) on water sanitation. [*Note: SDG Goal 6 is to ensure availability and sustainable management of water and sanitation for all. Target 6.2 is to, by 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. Target 6.3 is to, by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.*]

He also provided a history of how WGEA has dealt with this issue. For example, a document was created in 2004 and updated in 2013 to provide guidance on auditing water issues. The 2017-2019 work plan includes direction to conduct research on water sanitation with a team led by Morocco and including committee members from Chad, China, Czech Republic, Iraq, Lesotho, Malaysia, Nigeria, Philippines, Sri Lanka, and the United States.

Mr. Namrani noted that the research conducted for this report would be of a general character and highlighted the project objectives: (1) provide information on wastewater and wastewater management worldwide in a sustainable perspective; (2) identify opportunities and potential efforts in designing, implementing government policies, and developing government programs that provide adequate and effective responses to waste water issues; and (3) provide, based on SAIs' experiences, comprehensive and possible audit topics on wastewater issues and examples of how SAIs have addressed these issues in their audits.

The project will include two parts divided into four chapters. Part 1 will address best practices on wastewater management worldwide; opportunities and potential efforts in designing and implementing development policies that provide adequate and effective responses to

wastewater issues; and explore types of instruments used at national and international level in this field. Part 2 will be based on SAIs' experiences and relevant audit topics on wastewater issues; it will also use case studies to provide examples of best practices.

The project methodology includes a literature review, a study of different countries' audit reports, discussion panels with related experts, information from SAI's collected by survey from WGEA members and in discussion with subcommittee members, and workshops held during WGEA meetings.

The presentation of the project plan is expected to take place in September 2019.

Discussion

Mr. Jianfeng Xing of China suggested that they would want to see more sharing on experiences, and best practices and challenges in the last part (on auditing wastewater). For example, China would want to share its experiences with other SAIs, noting that the project contact for China would be changed. Mr. Namrani responded that they would send a questionnaire to all INTOSAI members requesting that they share their relevant experiences.

Mr. Mark Gaffigan of the United States recommended that the term "wastewater" be better defined in order to, for example, exclude oil and gas wastewater. Mr. Namrani responded that while in the first stage of the project they would focus on wastewater sanitation, they would be interested in extending the project scope to all types of wastewater in the future. Ms. Susan Iott of the United States asked how the project will handle storm water as wastewater, noting that non-point source pollution in the United States is treated differently than point-source pollution. Mr. Namrani responded that they would look at wastewater in two ways: first, how to manage sewage/sanitation water and second, how to use wastewater as a resource, noting that there are a number of scientific studies that address this second topic.
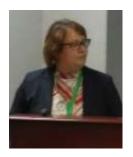
Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Research Project on Visibility of Environmental Auditing
- **Presented by Ms. Jerneja Vrabic of the European Court of Auditors**

Ms. Vrabic provided an overview of the importance of raising the visibility of environmental auditing, noting that there have more than 3,500 environmental audits worldwide over the years. These audits are on important environmental issues that people care about, such as safe drinking water, clean air, and sustainable development. There is a rising awareness about environmental issues and their negative consequences to the environment, human health, and future generations, as well as a rising awareness of national and international policies.

In its work plan for 2017-2019, WGEA committed to developing a research project on the visibility of environmental auditing that will build on the existing WGEA document "How to increase the Quality and Impact of Environmental Audits." The project lead will be the European Court of Auditors, and committee members include New Zealand and Russia. Ms. Vrabic noted that environmental audits are often overlooked because they do not include quantifiable financial information.

The main objective of the report will be to to develop a high quality research paper to assist SAIs to increase the visibility of their environmental auditing among parliaments, media, business, non-governmental organizations, and ordinary citizens. The report will provide examples of successful audits, a toolbox of various methods (e.g., press releases, conferences, stakeholder meetings, expert seminars, ideas on cooperation with journalists and non-governmental organizations), case studies, and proposals on how to measure visibility.

The main focus of the project will be on how to enhance the visibility of environmental audits and will also include how SAIs can effectively communicate environmental audits to stakeholders and how to demonstrate the importance and value add of environmental auditing. The project methodology will include a literature review, survey of SAI's on best practices and case studies, focus groups, and examples of communication strategies.

Ms. Vrabic concluded by highlighting the current communications strategy at the European Court of Auditors, which includes early involvement of public relations offices in the development of the special reports, announcements on the web pages and social media, and presentations to parliamentary groups in member states.

Discussion

Mr. Sunil Shreekrishna Dadhe of India noted that visibility depends not only on what one does after the report, but also how an SAI plans the report. He suggested including ways to plan reports to have more visible analyses.

Mr. Yudi Ramdan Budiman of Indonesia noted that during the audit process, SAIs could partner to engage the public and civil society groups that are concerned about issues through focus groups and discussions. Stakeholder involvement can happen during all three phases of an audit: planning, process, and final product dissemination.

Mr. Jonathan Keate of New Zealand agreed that SAIs should think about visibility and communication throughout the audit process and build engagement and interest throughout. He noted that the report could be more than a paper: for instance, it could also be an online resource or toolkit that includes examples of what other SAIs have done visually or socially to increase visibility.

Mr. Junnius Arifa of Brazil noted that Brazil had developed a number of products to communicate with the public such as infographics that show all the information about the audit and its outcomes on one page. This has helped Brazil a lot with journalists who have become more interested in the content of the reports as a result. He also noted that Brazil has developed an "index" to categorize problems and conflicts so they can show and compare audit results with other institutions/countries. This makes it easier to follow up, as well.

Ms. Dilyanka Zhelezarova of the European Court of Auditors said that they measure how many tweets they get on each reports, for example. She said that they would be happy to share their practices.

Mr. Keate encouraged the team to ask for examples in the survey of communication tools not only from environmental audits but from others that might be transferable.

Mr. Shakeel Asghar of Pakistan noted that it would be useful if communication tools included information on the directions being taken by the organization to create an impression that the audit is effective.

Mr. Mark Gaffigan of the United States said that GAO is always looking to improve its communication strategies and would be happy to provide information about what it does on social media, for example, as well as tools for measuring how it assesses the impacts of these activities.

Ms. Ma. Corazon Gomez of Philippines said that it would be useful if the project also considered what barriers and hindrances block good outreach.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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WEDNESDAY, 13 SEPTEMBER 2017

Recap of the First Day of the Meeting
- **Session Led by Dr. Moermahadi Soerja Djanegara, CA. CPA, Chair of INTOSAI WGEA**

The Chair provided a recapitalization of the Day 1 discussions, explained the approved project plans on the first day, and noted that today will continue with more presentations on project plans.

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Updating SAI Biodiversity Guidance in Light of the Strategic Plan for Biodiversity 2011-2010 and the Sustainable Development Goals
- **Presentation by Dr. Robert Höft, Convention on Biological Diversity**

Mr. Höft began by reaffirming the United Nations commitment in updating guidance and exploring new areas of collaboration.

The most recent meeting, as part of the Convention on Biological Diversity (CBD), was focused on the Aichi Biodiversity Targets as part of the strategic plan for biodiversity at large, not just the organization of the CBD. All the conventions on biodiversity and species have the same focus on finding ways to more effectively deliver on the national commitments regarding biodiversity.

As agreed upon in 2010 in Japan, the core of strategic plan consists of 20 Aichi Biodiversity Targets to improve biological diversity, grouped by the effect of the action. The plan goes beyond CBD and just biodiversity by looking at subsidies and other social factors, as well as considerations in, for example, financial planning, sustainable production. There are other processes under the United Nations that discuss those pressures, but Mr. Höft said that we need to think about these factors as human beings who are affected by the loss of biodiversity and not just the impact of these factors on humanity alone. The plan provides a global approach to maintenance of biological diversity and is the main tool to address biodiversity policies. For example, Target 11 is a best-known target for marine areas; the number included in the global target is a compromise, but it must be translated by each country into their own situation. Based on this international target, there should be a goal of at least 17% conservation of terrestrial and inland waterways in each country.

One must look beyond the narrow focus of biodiversity itself and look towards the broader goal of sustainability. CBD has taken steps towards the biodiversity targets; however, these steps are at an insufficient rate to meet the goals by their deadlines. CBD has tracked all 20 targets and their elements over time, and while most show some progress, there is not enough progress to achieve the goal within the timeframe. The process must be accelerated in all areas. Ministries of environment tend to be the least well-resourced of any ministry; therefore those resources must be put to the best effect. For example, instead of dealing with environmental damage from other sectors after the fact, the ministry could work proactively to avoid damage in the first place.

The Sixth National Report, stemming from the Conference of the Parties to the CBD, shows self-analysis for national commitments and national targets, with a submission deadline of December 31, 2018. The objective of the reporting is to provide information on measures taken for the implementation of the CBD targets and the effectiveness of these measures. Even negative data is helpful data for future assessments. The report focuses on the effectiveness of measures taken and the progress towards national biodiversity targets and lessons learned, as well as the scientific, technical, and capacity needs and implementation support required to move forward, and what the national contributions have been towards the achievement of these goals. Sharing this information can help identify linkages between various factors and approaches that have worked in other situations. Reporting could also result in identifying, for example, "this is what we've done but it hasn't helped," or "we need help to move forward."

Biological diversity is a collective endeavor where countries need to work together and commit to making improvements.

The auditing guidance in place is helpful in terms of the associated case studies being submitted as part of the updates. Updating—not rewriting—is the key: a focus on reorganizing the elements that need to be addressed in response to state commentary, a difficult logical flow, new policies and procedures in place across the globe since the examples were first created, and ensuring that the concerns of the other partner conventions are also being addressed.

Many groups are unaware of the biodiversity guidance. INTOSAI and quality institutions in these participant countries are helpful, but increased knowledge and awareness can increase and/or improve effectiveness, especially the appropriate use of resources to meet the objectives of the country. Recommendations include potentially implementing an internal audit of the country's commitment and process towards achieving these goals.

Discussion

Mr. Junnius Arifa of Brazil participated in the first drafting of the auditing guidance, and since then they have audited our own work in this area, and coordinated audits in the entire region to assess the continued implementation in protected areas, including problems in governing, implementation steps, and others. In 2018, Brazil will conduct a follow-up audit in the Caribbean and AFROSAI countries to assess their progress as well. As a specialist country, Brazil has coordinated workshops and helps countries that don't have the budget to participate in the conventions and conferences. Mr. Arifa thinks the new Brazilian approach aligns with the new guidance and could be used as a case study moving forward.

Ms. Rukhsana Rafique of Pakistan asked whether there is a compliance statute. Mr. Höft replied that there is no compliance statute or requirement; the only two obligations to the conventions are to pay dues and honor obligations and report on the status of implementation. These are much softer obligations under the convention than a "requirement" as members felt there was no point to force something that can't happen for various reasons. However, the countries still need to work together and support each other by, for example, financially supporting countries in need on key projects. To reiterate, no, there is no punishment in the context of the convention.

Mr. Mohammad Diyer of Morocco asked if there are partnerships for global data information. Mr. Höft said yes, and that there are over 100 global indicators where functional data sets

exist with global coverage on these indicators through partnerships. National data sets exist which don't feed or match the global sets. However, you never have all the information you need to make a decision and are always making the best decision given the information available. The big picture remains the effective delivery of ecosystem services to the public.

Further, Mr. Höft illustrated how the degradation of the environment affects humans and what one can do about it. He added that one should make sure to include biodiversity in their national plan to minimize the negative impact of environment degradation.

Ms. Kimberly Leach of Canada said that it was excellent to have Mr. Höft at the meeting. She noted that in Jakarta when the Executive Director of the CBD gave the presentation, he inspired a Canadian audit that will be issued in spring 2018. Ms. Leach added that there is a lot to learn with this work to understand the SDGs and also an audit on the Aichi Biodiversity Targets.

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Updating the 2007 INTOSAI WGEA Document – Auditing Biodiversity: Guidance for SAIs
- **Presentation by Ms. Dominika Rosana of Indonesia and Ms. Manako Ramonate of Lesotho**

Ms. Rosana began by thanking Mr. Höft for his presentation and reiterated that biological diversity is back in the spotlight in view of the Paris Agreement, the 2030 agenda on biodiversity, and the enactment of the Strategic Plan for Biodiversity (2011-2020). Interest in biodiversity has returned, with more than just a focus on the goals for life on land and life below water. Interest in biodiversity issues also relate to issues of hunger, for example, and should be addressed in the guidance. WGEA has already recognized the importance of this issue, but in light of the last ten years, the 2007 guidance needs updating.

The project aims to update the guidance material through providing recent developments and impacts on national governance, recent case studies and national reports submitted to WGEA and other parties, improved audit steps/methods for biodiversity audits, and mainstreaming biodiversity as the WGEA fosters the implementation of Agenda 2030. With this in mind, the updated guidance will follow the outline of the original 2007 document: an introduction of the topic, including international awareness, importance, and audits, a background on biodiversity,

guidance on choosing and designing audits, updated case studies, as well as updates of a number of appendices (some that have outdated or irrelevant data).

Team members of the subcommittee include Brazil, Cameroon, China, Estonia, the European Court of Auditors, and Nigeria. Lesotho and Indonesia are co-leads for the committee and the CBD acts as an external partner. The subcommittee would like Canada to join the group as well.

The committee plans to utilize literature studies on recent policies and issues, consultation with CBD, data mining on the WGEA database on biodiversity audits, interviews with SAIs with outstanding performance in auditing biodiversity issues, as well as a small survey of regional coordinators on biodiversity policies within their regions. The team has already solicited, received, and incorporated comments and suggestions from many of the SAIs on the approach.

Ms. Ramonate discussed some of the format changes in the updated guidance. The introduction will include additional information on the Nagoya Protocol and Agenda 2030, as well as recent developments in technology for biodiversity audits. Chapter 1 will include additional discussion on the results of the thirteenth meeting of the Conference of the Parties and the Strategic Plan of Biodiversity, as well as the progress made by countries towards achieving the targets. Chapter 2 will include the new biodiversity tools that can be used by auditors. Chapter 3 will be updated with recent audits and how they relate to achieving the targets. Appendices 1 and 3 will be deleted and merged into the body of the paper, Appendix 2 will be updated with information from the regional areas, and Appendix 4 will be replaced by the Aichi Targets and the SDG targets related to biodiversity. The goal is to have a final draft of the project by the first half of 2019.

Discussion

Ms. Ma. Corazon Gomez of the Philippines asked if the group solicited comments or input from the original authors as to what was lacking in the first draft or what should be included. The presenters stated that the team has gotten assistance and met with WGEA members who were involved in the original creation of the guidance. The team is looking to get additional input this area, as well as soliciting information from surveys as the project moves forward.

Ms. Kimberley Leach of Canada said that Canada would be delighted to participate on the working group looking into the guidance updates. The reason why Canada had not joined

before was because one main person who participated on the original guidance just retired from the government. However, Canada is now doing biodiversity audits again and would be happy to help.

Mr. Sunil Shreekrishna Dadhe of India asked whether the new guidance would include a baseline for biodiversity measurements, so that levels of preservation can be compared with what the area looks like after steps have been taken in accordance with the targets. He noted that it would be helpful to have an appendix outlining the benchmarks for key indicators of biodiversity. The team accepted the suggestion and noted they would look into the possibility.

Mr. Jonathan Keate of New Zealand noted he had used the guidelines in a recent audit, and he asked what the team would be looking for from regional coordinators. Ms. Rosana replied that they would ask regional coordinators about biodiversity protocols, regulations, and polices that only apply to their region. This would be a "data grab" for many sites in a more efficient way, instead of asking individual countries what regional legal constraints they must follow.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

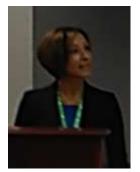The Steering Committee Members approved the project plan by acclamation.

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The Progress of SDGs Implementation and SAI's Role to Support the Achievement of SDGs

- **Presentation by Ms. Aranzazu Guilan Montero, United Nations Department of Economic and Social Affairs**

Ms. Montero provided background information on the status of the 2030 agenda, which is in its second year of the implementation process. Ms. Montero also noted a number of complementary frameworks and agreements including the Paris Climate Agreement, Addis Ababa Action Agenda, and the Sendai Framework for Disaster Reduction. The indicator framework for the 2030 agenda was approved by the General Assembly in July 2013; many indicators are not sufficiently robust, but there is a commitment to review and refine these indicators every year. The voluntary national review guidelines have been reviewed, and countries are starting to make progress on implementing the guidelines in the reviews: 22 countries presented national reviews in 2016, 43 in 2017, and 44 will present in 2018. By the

High Level Political Forum in 2018, we will have information from 109 countries reporting on what they are doing.

Ms. Montero noted that the 2030 agenda is not just the 17 goals it contains; it also includes key principles that have implications for the implementation process that in turn has implications for the work of the SAIs. For example, it includes the principles of leaving no one behind, addressing inequality, and national ownership. The Agenda is not just about meeting the goals and targets but also about how those targets and goals are met. It is thus not just how countries are creating goals and targets, but also how they are meeting these other concepts.

In contrast to the Millennium Development Goals, the 2030 agenda implementation process has a monitoring process of follow-up and review as well as an explicit recognition of national oversight institutions. Integration is one of the key issues with implementing the SDGs; as environmental auditors, interdependence between societal, economic, and environmental factors has been recognized for a long time. Therefore, the SDGs can be seen as an integrated network of targets. This provides a first step to think in a more systemic and integrated way about making progress on the goals. For example, if you have a specific target, you will see environmental outcome and socio-economic impacts.

There are different steps that countries should be taking to implement the agenda. The steps include building awareness of the agenda; engaging multiple stakeholders by making commitments to engage multiple stakeholders; tailoring SDGs to national and local contexts and ensuring that governments incorporate the SDGs into their own policy and planning processes at the national and local level; strengthening horizontal and vertical coherence (a key challenge in the past has been developing integrated solutions that involve all the sectors); identification and mobilization of resources from both the public and private sectors that includes data, technology, and capacities needed to make progress in implementation; and monitoring review and reporting to ensure accountability for performance and results at the national level.

Progress is evident (see, for example, the SDG Report 2017), but there are some areas where progress is slower than needed to reach the goals by 2030. For example, poverty and hunger have been reduced overall by 11%, but some areas still have 42-43% of people living in extreme poverty. There are often regional differences. In addition, environmental stressors are

expected to grow and be more impactful to specific groups of people, such as women. The lack of good data is also one of the ongoing gaps.

Despite the absence of strong indicators to measure SDGs, the national reviews provide a lot of information from a qualitative assessment perspective. We can see there is a strong commitment from governments to implement the agenda, and we see many countries internalizing the SDGs into their processes. Countries are taking this seriously and are taking steps to improve policy coherence and coordination to move the agenda forward. Countries are creating new structures and entities, as well as cross cutting mechanisms between departments. Some countries are already aligning their budgets with the SDGs. There is still a need to translate these interlinkages into policy making and institutional structures. In addition, there is still a need to create incentives for enhancing the engagement of local authorities and a lot of work to be done here.

Multi-stakeholder engagement is increasing and changing in nature—it is happening in more institutionalized ways. Engaging stakeholders in coordinating is a key step as well as engaging new actors (e.g., the private sector).

Ms. Montero said that there is still a need to integrate monitoring and evaluation structures to avoid overlaps and parallel structures. Localizing targets and indicators is critical, as the local level is where much of implementation will happen. Countries are exploring different approaches to monitoring and evaluation such as created new structures to monitor the SDGs or getting the national statistical offices involved.

The INTOSAI community has positioned itself very strongly to the agenda and made a strong commitment to integrating the SDGs into its work. Four different approaches have been identified to organize each SAI's contributions to the 2030 agenda, and INTOSAI has made a commitment to provide guidance and support to supreme audit institutions. SAIs are making a lot of progress compared to other actors. SAIs are included in strategic plans in some countries, and there have been audits on how governments are preparing to implement the SDGs and are supporting follow-up review. SAIs such as Canada and Finland are also proactively reaching out to advocate their role in supporting the 2030 agenda, and there is a consensus among SAIs on the value of the related audits. SAIs have been auditing SDGs in the past without knowing it—the need now is to tap into that knowledge and experience. The follow-up and review process open an entry point to SAIs to provide inputs and information into the implementation process.

The High Level Political Forum receives the national reviews and reports on indicators on an annual basis as well as regional reviews. The purpose is not so much to hold governments accountable, but to share knowledge. Each year the Forum selects a theme for the review progress; governments are responsible for meeting and coordinating this review process at the national level, where the work really takes place. At the national level, governments may decide whether to engage SAIs or not—in many countries, SAIs can advocate for that role and engage with actors to help with the national review. At the regional level, SAIs can engage with the three regional United Nations organizations through INTOSAI to provide input in regional review. It is already known what the Forum themes will be in the coming years: in 2018 it will review SDG 11 and 15; in 2019 the Forum will review SDG 13. [*Note: SDG 15 calls to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.*]

There is a need to raise awareness of SDGs in government. SAIs have different mandates and capacities for performance audits, and it is thus important to reflect on the role that different SAIs can play. The auditing of SDGs is distinctive from the usual work of SAIs, and countries are starting to implement SDGs with different approaches, requiring wider stakeholder engagement, focus on inclusiveness, and different audit performance information. The quality and availability of data is always one of the key concepts in starting this process.

Given the extensive scope of this endeavor, it is important for SAIs and working groups like this one to take a strategic approach about how to prioritize this work. There needs to be some strategic thinking about how to select specific SDGs to look into more closely. SAIs need to ensure that SDG audits are not "siloed" but are integrated and interlinked with the work of the SAIs by focusing on integrative approaches. SAIs need to think strategically about whom to collaborate with, how to communicate findings, and how to aggregate information at the regional and global level. There is also a need to leverage the capacity of SAIs through knowledge sharing; INTOSAI has a good track record in this area, but it could be strengthened.

Discussion

Ms. Kimberley Leach of Canada stated that Canada's SAI is currently conducting an audit on preparedness to implement SDGs in Canada and developing guidance for WGEA SDG audits from an environmental perspective. Because one cannot do everything at once, Canada is struggling with the concept of inclusiveness of SDGs and how they are universal, inclusive, and indivisible in a lot of ways. Canada is trying to look at SDGs from an environmental perspective, which does not cover everything. Other institutions are developing guidance on

other approaches, such as gender equality. Ms. Leach wondered if it is acceptable to divide up the SDGs and consider how to do things in smaller groups before one can look at the whole.

Ms. Montero responded that of course it is acceptable and noted two aspects of this challenge: first, that one cannot do everything at once, but it is helpful to have a plan to start with a small piece and then know what the next steps will be to make progress into the short-, medium-, and long-term plans. Having this kind of strategic thinking at the beginning is important. Second, one can look at a small set of issues related to the agenda while also keeping in mind some of the key interlinkages. There are different ways to narrow the scope while being faithful to the spirit of the agenda. The selection of an initial focus depends on the country context and the priorities and capacities of the SAI. It is also important to keep in mind when looking at a specific target to address the core principles, such as inclusiveness and interdependence.

On the matter of low level of awareness of governments on sustainable development, Mr. Wilfredo Agito of the Philippines suggested that, in terms of capacity building, INTOSAI could follow the Philippines example of working together with other government agencies. Mr. Agito noted that in several locations they have conducted forums with the SAI and other government officials. There are about five government agencies that are very much involved with the SAI, such as the Philippines statistics authority, the department of environment, the department of the interior, and local government. This cooperative approach will be an effective mechanism to raise the level of awareness in the government. Ms. Montero responded that this type of approach can also play a very important role at national and local levels about raising awareness

Mr. Jonathan Keate of New Zealand asked whether reporting by country is voluntary or mandatory. He asked if a country could do very little towards the agenda and if the United Nations would notice that if it was not for a SAI reporting it. Ms. Montero responded that the national reports are voluntary. There were heated debates about the strength of the agenda accountability mechanisms, as some see the voluntary reporting as a soft mechanism, but it is something that was not there before, and it is thus a first step even if the accountability text is removed from the agenda. The response to a global follow-up mechanism has been significant; countries have been willing to submit information, but of course it is self-reporting. This is where SAIs can contribute as independent auditors, looking at how the review process was conducted as audit agencies.

Mr. Sunil Shreekrishna Dadhe of India asked if in the United Nations system there is any mechanism to capture total expenditure by total United Nations agency by each SDG. Ms.

Montero noted that, regarding implementation of the agenda more generally, in the second year there has been an increasing awareness of reflecting on resources and financing and questions of budgetary alignment with the agenda. This is a key issue in terms of the resources put into this but also in how to make this an integrated process and agencies working in a more coordinated way.

Mr. Junnius Arifa of Brazil agreed with Ms. Leach. Based on Brazil's pilot process, they have realized that there are no criteria to evaluate crosscutting policies. He suggested that perhaps there could be some criteria on how to prioritize the approach with the SDGs, as it is impossible to have an audit that is overarching. Mr. Arifa asked Ms. Montero if she thought this kind of approach is the best way to work on this guidance. Ms. Montero responded that one of the key issues for auditors is the criteria. One of the principles of the agenda is national ownership—countries implement the agenda aligned with their country context, thus there are no global criteria. For example, in some countries the SDGs are integrated into legal and regulatory frameworks and in others they are not. Auditors can look at good practices and determine which criteria are strongest and useful. In terms of linkages, when working with other actors one can see there are many other research initiatives exploring the issues of interlinkages between the targets and the SDGs. Collaborating with these actors can help the actors do good work as well as strengthening the criteria.

Ms. Ma. Corazon Gomez of the Philippines said that one of the contributions that SAIs can make is an assessment of level of awareness as well as level of implementation of SDGs. There is a learning course on implementation of SDGs by governments. Ms. Montero responded that in the IDI program they thought that they could audit the SDGs. Part of the challenge for auditors is to reflect on these and think of different ways of coming up with criteria that are strong enough to conduct this type of audit. This requires auditors to be aware of what countries are doing and different models that they are using as well as collaboration within the auditing community. If a SAI has good criteria or an idea, they should be pulled together and shared.

Mr. Mohammad Diyer of Morocco noted that, at this stage of the agenda, SAIs can assess the degree of the preparedness of the government. The first things to look at are activities in the government and the coordination of the relevant activities. Morocco is working on a project and will have a report available next year. Ms. Montero responded that KSC and IDI rely on blueprints for national review and the steps that could be taken to prepare; the resulting document will be a good point of reference. SAIs can rely on experience on other SAIs that

have conducted (or are beginning to conduct) this type of audit—these include Canada, Brazil, and Australia—and use that experience as a guide to come up with better criteria.

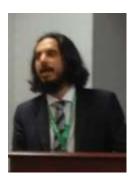Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Audit Guidance on Delivering the 2030 Agenda (SDGs) through Environmental Auditing
- **Presented by Mr. Junnius Arifa of Brazil (joined on the project by Canada and Indonesia)**

The INTOSAI strategic plan spans the years 2017-2022. Mr. Arifa said it is important to develop audit guidelines because it is important for SAIs to confirm a common language and establish transparency with initiatives of SAIs and governments. It is also important to take a "whole of government" approach and to look at cross-cutting issues. A global governance index for preparedness to audit SDGs helps quantify preparedness to audit SDGs: a rating of 0 would indicate no implementation and an absence of structure; a rating of 1 indicates establishing and a defined structure; rating of 2 indicates developing and an implemented structure; and a rating of 3 is optimized, with best practices.

It is important to look at key issues that weigh most on the achievement of a target; objectives and criteria are needed. This could be pursued, for example, through pilot projects with two approaches. The first would look at the whole of government and governance mechanisms, including institutional (e.g., budget), strategy and coordination (e.g., national, regional, and state-level authorities), supervision, and transparency. The duplication, overlap, and fragmentation framework also aligns with a WOG approach and considering crosscutting issues.

An SAI Brazil pilot project on sustainable food production (SDG target 2.4) provides an example of how a pilot project can accomplish these multi-faceted goals. [*Note: Target 2.4 is to, by 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.*] The organic production

of food is interconnected with low carbon, sustainable alternatives, technical assistance, and agrochemical production. Brazil has farmer loan and crop insurance and fiscal policies that favor agrochemical productions. In this case, one policy "cancels" some of the effects of another policy that has important results. Mr. Arifa said that the goal is not to assess everything; rather, it is important to assess what is important in public policy based on what the stakeholders want. The objective and outcome of the project are to provide SAIs with concepts, tools, and examples, and to provide a model for environmental auditing with an SDG perspective based on assessing whole-of-government cross-cutting issues; duplication, overlap, and fragmentation; and omission.

The project scope includes understanding the 2030 agenda; challenges implementing SDGs; the role of an SAI in monitoring targets and indicators; the types of audits; sources of criteria; audit tools and methods; and environmental crosscutting issues. The project outline includes background, steps taken, and case studies. The methodology includes a survey, literature review, and expert interviews.

Discussion

Ms. Viire Viss of Estonia agreed on the merits of clarity and added that there was some training provided. She also suggested changing the name of the project, reasoning that by attempting to address each of the 17 goals contained within the project, the possibility of discussing development thoroughly may be undermined. Thus, she suggested that the panel consider selecting a specific number of the 17 goals on which to focus, thereby providing Estonia with the ability to use their expertise. Mr. Arifa said that it was very important to consider Estonia's suggested approach. However, he clarified that the intent initially is not to have the all the 17 goals addressed in the guidance. He added that a survey of goals to select may be the most effective approach and that it may be challenging to prioritize some topics over others, so an effective approach would be for INTOSAI to determine certain goals that it may want to include in the survey.

Mr. Shakeel Asghar of Pakistan noted that Brazil's current presentation of the topics appears too broad for the guidance that is being prepared, adding that consideration should be given to narrowing the topics. With respect to the audit activities identified in the project, the delegate said that rather than suggesting particular courses of activities, focus should be placed on the objectives of those activities.

Mr. Arifa replied said that if Mr. Asghar decide to use the matrix, they may well enrich others that are related in some way. He explained that if "organic production" is the topic at issue,

then it is possible that only a direct derivative of that topic, such as low carbon emissions, may be also receive attention. However, by using Brazil's approach—which presents the topics more broadly—other derivatives (e.g., deforestation, economic/funding issues) of the topic at issue may receive attention as well. Brazil's approach is a change from the status quo that has been used for the past 50 years. Additionally, Brazil's approach provides private citizens with the ability to prioritize issues that matter to them due to increased transparency.

Mr. Sunil Shreekrishna Dadhe of India expressed concern with respect to the title of the project, noting that the title may be construed as suggesting that seven of the 17 topics are not prioritized. He suggested that consideration be given to the following specific language amendment: rather than saying "on environmental," one could amend it to say "to environmental." He said that this is a strategic-level decision that must be made because, as currently worded, the project appears too ambitious. Ms. Ma. Corazon Gomez of Philippines concurred with Mr. Dadhe, stating that because there are 17 goals and an abundance of targets, an effective approach would be to limit focus to those topics that focus on the environment directly. She also asked what phase of audit should be considered in the Audit Guidance whether preparedness, implementation or monitoring and review. Additionally, Mr. Dadhe said that INTOSAI may select topics with a focus on the scope and scale of those topics. Mr. Arifa responded that Brazil did, in fact, give due consideration to preparedness, performance audits and preparing guidance.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Auditing Agriculture and Food Production: Guidance for Supreme Audit Institutions
- **Presented by Francois Bekemen Moukoko of Cameroon**

The project was recently adopted last year, and SAI Cameroon is leading it, with other members. This presentation will cover four main points related to the project: background, objective/outcome, focus, and structure.

There are trends and challenges in agriculture and food production that influence food security and accessibility of food in agricultural systems, such as economic growth and population growth. Increasing food production is necessary to keep pace with this growth. Feeding 9.1 billion people in 2050 would require raising food production. There needs to be investments in technological innovations which will have consequences on the environment and the food we have. There need to be investments to address hunger and extreme poverty.

Another trend and challenge is the increase in capital-intensive food systems that are concentrated in fewer hands. Climate change affects food production, too, especially in poor countries. There are increasing numbers and intensity of natural disasters. To address these issues, there is a need to produce more food to feed the population, contribute to the overall development in many agriculture-dependent developing countries, and adapt more to climate change.

There needs to be a change in focus from increased productivity alone to a more holistic integration of natural resources. Goal 2 focuses on ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture. There is a need to link three aspects of sustainability—economic, social (e.g., health, gender, traditions, culture), and environment.

The main objectives of the project are to increase knowledge about food production and agriculture, and to encourage more audits in this area. In addition, the project will provide information on status, highlight the role of governments, provide audit steps, and identify best government practices and case studies. The project team will send out a survey to committee members to clarify goals.

The scope of the project focuses on the governance of agriculture and food production systems including an overview of potential areas for auditing, risks, and related governments actions. The project team has not yet developed the structure in detail because, given the trends and government response, the team wants to have an opportunity to see what challenges SAIs have recently encountered. The team needs to clearly define what we mean by food production—i.e., what is and what is not food production—to make sure the focus sticks to agriculture and food production.

Discussion

Mr. Shakeel Asghar of Pakistan asked about focusing on another aspect of food products—livestock and dairy—and suggested that those areas can also be added. Mr. Moukoko agreed to consider it and stated that it is a discussion to have with subcommittee members. They do not want to make the project too broad. Mr. Moukoko said he wanted to have precise guidance document to make sure it produces tools that can be useful and practical enough for SAIs in the near future.

Mr. Jonathan Keate of New Zealand said the proposal was very good and that it looks like a lot of work has gone into it, and that it is a very important and broad topic. New Zealand has a very strong agricultural economy; many tourists like to visit because of the environment and green appeal. However, there is tension between land use/farming and environmental tourism. There will be a big shift in how food is produced in the next 50 years including, for example, with cellular agriculture (food produced in lab rather than land)— particularly in the United States, where scientists have started making cellular meat patties in the laboratory. Reducing the environmental impact of agriculture might be part of the context of this project. Mr. Moukoko said that he definitely believes so. The experience of both developed and developing countries is needed. Putting things into context is necessary to make sure that countries can use the guidance. He is not sure what approach subcommittee may take, but there definitely is a need to integrate these new approaches.

Mr. Wilfredo Agito of the Philippines stated that the project will address Goal 2 (focusing on hunger), but the project can also address Goal 3 (good health, well-being), Goal 10 (to reduce inequality within and among countries), and Goal 15 (life on land).

Mrs. Xinfang Zhang of China thanked Mr. Moukoko for the presentation on the main challenges of food production and agriculture, noting that it lays a very good foundation. She offered a suggestion to add content of implementation of agriculture especially in poverty elimination under the part of the project objectives and outcomes. Especially with respect to hunger and poverty, this remains a major challenge; for most of the countries, increasing farmers' income and reducing poverty remains the main task that governments are facing now. In order to increase the knowledge of governments in managing food production and agriculture, she recommended highlighting the progress in poverty reduction and poverty elimination and wanted to emphasize that rural farmers should not be ignored or forgotten. Mr. Moukoko said he definitely agrees that it is important to highlight socio-economic issues.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Auditing Land Organization and Soil Quality Management – Combating Desertification: Guidance for SAIs

- **Presentation by Ms. Rukhsana Rafique of Pakistan**

After a brief video about land degradation, Ms. Rukhsana Rafique provided the following background information to help the delegates better understand the focus of SAI Pakistan's proposed project on desertification. Ms. Rafique explained that desertification is the process of degrading land to the point that it turns into desert. Desertification involves the loss of biological and economic productivity and is caused by many factors. These factors may include climate variation, human activities (e.g., deforestation and clearing land for construction), soil erosion, and demographic and economic pressures.

The impacts of desertification are significant. Every year, 24 billion tons of fertile soil—a scarce resource—disappear. According to the United Nations Convention to Combat Desertification, 2.6 billion people depend directly on agriculture, and land degradation affects 1.5 billion people globally. African countries as well as some Asian countries are particularly prone to desertification. Global partners in combating desertification include the United Nations and Global Environment Facility, among others. In particular, the United Nations has established a sustainable development goal (SDG Target 15.3) in this area, and the Convention is working in countries facing increased desertification. [*Note: SDG Target 15.3 calls to, by 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.*]

In addition, 110 countries have committed to setting land degradation neutrality targets.

Management tools to combat desertification include soil quality management; afforestation, which is the process of rehabilitating deforested land; and sustainable land management.

Objectives for this project include orienting SAIs to the topic, developing audit guidelines for SAIs, suggesting suitable auditing approaches, sharing best practices, and providing baseline information to SAIs for future research and further work on improving the guidelines. The

scope of the project will include: (1) an introduction, which will help the reader understand the issue area, as well as the causes of desertification and the significance of combating desertification; (2) a section about international and national responses to the problem, which will address the United Nations' actions, the role of national governments (specifically, how national governments can improve the problem), and management tools to combat desertification; and (3) a section about how audits can influence land management. Specifically, this section will address the role of SAIs in combating desertification as well as the major concerns and ongoing efforts of SAIs.

During the planning phase for the project, SAI Pakistan will identify major threats to land, understand the government's response to these threats, select the audit topic, decide on an audit approach, and establish audit criteria. During the execution phase for the project, SAI Pakistan will conduct the audit using audit criteria and will review aspects of performance measurement and results. During the reporting phase, SAI Pakistan will frame its audit results.

The methodology for this project will involve collecting qualitative data from SAIs through questionnaires and surveys to identify effective legislation, regulations, voluntary partnerships, economic tools, and policy tools (e.g., grants, loans, and subsidies). Key questions will include asking SAIs about initiatives to combat desertification in their countries, as well as who the key players are and what their roles and responsibilities are. The methodology will also involve consulting with international and national researchers and stakeholders, as well as conducting case studies to identify success stories from different SAIs. The format for these case studies will include developing a title, audit objectives, project scope, findings, and recommendations. Pakistan will definitely be included as a case study example since Pakistan is predominantly arid to semi-arid.

Discussion

Ms. Viire Viss of Estonia asked whether SAI Pakistan has already reviewed prior INTOSAI WGEA publication in 2013 on "Land Use and Land Management Practices in Environmental Perspective". She noted that at least one prior INTOSAI WGEA study has addressed some areas of the proposed work. Ms. Viss also asked if SAI Pakistan plans to focus on desertification or soil degradation, as the proposed scope of the project is not clear on this issue. In Estonia and other countries that do not have deserts, the terms "desertification" and "soil degradation" are not synonymous. Mr. Shakeel Asghar of Pakistan responded that during last year's WGEA meeting, the steering committee expressed interest in conducting a project focused on "combating desertification." Therefore, Mr. Asghar presume that the focus of their

project should be desertification. However, they will be sure to clarify the focus of their work as they proceed.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Training Tool by Creating an E-Learning Course (Massive Open Online Course/MOOC) on Waste Management

- **Presented by Ms. Viire Viss of Estonia**

Ms. Viire Viss of Estonia delivered a presentation on a project plan to improve training tools by creating an e-learning course for Waste Management. The purpose for developing the plan is to provide a more practical training to help provide information for auditors in a more modern way. E-learning tools are preferable, as it would be preferable to take a three-day training course rather than read a 100-page PDF document. E-learning would provide and easier, more accessible way to learn through the use of a Massive Open Online Course (MOOC).

Ms. Viss laid out her agenda to describe what a MOOC is, why a MOOC is the right method for training, and what they are planning to do with their project.

A MOOC is an e-learning approach that provides free and open access to content and is fully online. The training tool is being offered as a MOOC. The course will be linked to higher education, offering one college credit. It will be offered in English and will be self-paced over the course of 4 to 6 weeks. Current courses exist on environmental auditing in the public sector and auditing environmental impacts of infrastructure as a result of the 2014-2016 WGEA guide—an effort lead by Norway. The next session for these courses will be 6 November to 3 December 2017 and 5 February to 2 March 2018, respectively.

The future courses being planned include a MOOC on auditing water issues. This course is a EUROSAI-led project that will launch in 2018 in association with the University of Tartu. Estonia, as the secretary of EUROSAI, is leading this effort to develop a course to focus on European issues.

To answer the question of why this MOOC, Ms. Viss stated that surveys have indicated that waste is a big problem in most parts of the world and new approaches are needed. Many auditing offices have an interest in this issue area. There is a need for an interactive way to learn through e-learning courses. SAI Norway was involved in developing the 2014-2016 guidelines and was invited to be a part of this effort.

Ms. Viss said that some of the expected outcomes of this project would result in the course and materials being available online. She anticipates one course being available by the end of the WGEA 2017-2019 working period and more to come in the future. The targeted groups for this course include auditors—such as those starting their first audit on waste—as well as the wider public, such as students, experts, and auditees. However, Ms. Viss said that there will be an expectation that students will have taken a prerequisite introduction course on environmental auditing so that basic concepts will not need to be covered in this new course.

The scope and structure of this course will involve 3 to 4 modules, self-checked exercises, and tests. Ms. Viss said that they will develop a waste guide to incorporate new ideas, as they are always looking for good examples of waste auditing efforts. According to Ms. Viss, while there are other e-learning programs on waste issues, the uniqueness to this MOOC would be the auditing component. There will be an effort to avoid repeating content that can be found elsewhere.

To develop the course, Ms. Viss said that they would use a methodology that consisted of a literature review, consultation with experts, and using information presented in the INTOSAI guidance paper. In addition, to prepare the course, they will need to get acquainted with other e-learning tools on waste issues, collect photos and make videos, identify example audit cases, and prepare exercises and tests. Feedback so far has included a recommendation to explore the possibility to synchronize online discussion to facilitate communication and knowledge sharing and to use acceptable quality standards for e-learning programs. There are several milestones throughout the three-year WGEA cycle, including getting the Steering Committee's approval. The expected launch of the first course is September or October of 2019.

Discussion

Mr. Jonathan Keate of New Zealand said that the training tool will be useful for PASAI Region. He asked whether the course will be available within a year or so. In response to that, Ms.

Viss said that it is available year round and that registration is available for the next class in November 2017.

Ms. Kimberley Leach of Canada asked if this project is a WGEA course or something that Estonia developed. Ms. Viss said that the Introduction to Environmental Auditing in the Public Sector course is an Estonian course, not part of WGEA. Estonia did this in partnership with the University of Tartu.

Mr. Junnius Arifa of Brazil asked about the potential improvements on this idea in the future. Ms. Viss replied that the MOOC Quality Assurance will be incorporated in the development of the course. There remains utility in face-to-face training and this MOOC can serve as a precursor to such training.

Mr. Jonathan Keate of New Zealand asked if there are opportunities for other SDGs to be a topic for future MOOCs. Ms. Viss replied that there is the potential for other MOOC courses to address additional SDGs, and that everything can be there if the steering committee supports it.

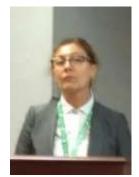Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Training Tool /Pilot Project on the Greening of Supreme Audit Institutions
- **Presented by Ms. Dilyanka Zhelezarova of the European Court of Auditors and Ms. Viire Viss of Estonia**

Under the leadership of Ms. Dilyanka Zhelezarova the European Court of Auditors (ECA) and Ms, Viire Viss, the National Audit Office of Estonia (as well as the SAIs of Cameroon, India, and other WGEA steering committee members) are developing a training tool on Greening SAIs. The objective of the tool is to help SAIs audit and address their own environmental impacts "at the grassroots," thereby strengthening their ability to credibly audit other organizations. Estonia and the ECA offered to lead development of the training tool in response to the INTOSAI Strategic Plan 2017-2022, Crosscutting Priority No. 2: "Contributing to the follow-up and review for the Sustainable Development Goals within the

context of each nation's specific sustainable development efforts and SAIs' individual mandates."

The Green Training Tool will offer SAIs methods, measures, and curricula to reduce their own environmental impact, and to do so affordably. It will include interactive training curricula, suggested activities and green modifications, and online modules to support implementation. Additionally, the tool will provide sample methodologies for applying management and performance measures to evaluate the effectiveness and impact of SAIs' greening efforts. Ms. Zhelezarova later explained during the discussion that the training tool will be affordable to implement, and not require the level of investment needed to gain, for example, ISO 14001 environmental certification. [*Note: According to the International Organization for Standardization, ISO 14001:2015 sets out the criteria for an environmental management system and can be certified to.*] As part of its leadership designing the training tool, Estonia's 100-staff SAI is adopting European Union Green Office Principles, which are a component of the tool kit.

Ms. Zhelezarova explained that there is no one, best approach to greening SAIs, and so Estonia and the ECA will soon convene a brainstorming session with its European Union partners—including private sector partners such as Das Auto—with the aim of conducting a pilot run of the training tool in March of next year (India's SAI has volunteered to conduct a pilot run as well). Estonia and the ECA plan to present the results of the pilot at next year's WGEA meeting in November.

In 2015, ECA management formalized the court's participation in the Eco-Management and Audit Scheme (EMAS)—a green management certification system developed by the European Commission—as part of a broader strategy to support European Union member states reaching the European Union's 2050 goal to reduce CO_2 emissions by 80-95%. Steps the ECA has taken to attain EMAS certification include identifying the organization's paper and water consumption, evaluating staff and operations' reliance on transportation, and measuring carbon impact. The ECA self-reports its CO_2 emissions annually, and is producing periodic reports evaluating its adoption of EMAS. These reports are translated into 26 languages and, as part of its EMAS paper-reduction strategy, are distributed digitally to a 3000-member institutional list serve of targeted non-government organizations, parliaments, and partner organizations.

Discussion

Mr. Sunil Shreekrishna Dadhe of India reiterate their intention to cooperate in the development of the training tool through pilot training on the topic.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Training Tool on Environmental Data: Resources and Options for SAIs
- **Presentation by Mr. Sunil Shreekrishna Dadhe of India**

Mr. Dadhe opened the session by explaining the training toolkit the team developed to enhance an SAI's use of environmental data. The initiative comes in response to the INTOSAI WGEA Working Group study, "Environmental Data: Resources and Options for SAIs," which concluded that there are various sources for environmental data available at regional and national levels that should be used.

The training toolkit will be developed among SAIs conducting audits related to public utilities, environmental restoration/remediation, and land-use strategies. To accomplish this, the training will share leading sources of environmental data, tools and methods for analyzing the data, and auditing strategies when sufficient or reliable data is unavailable. Mr. Dadhe explained that the training is estimated to take three days and will likely include field visits to environmental remediation projects, and video and online modules. Feedback received will help determine where the toolkit proceeds.

Mr. Dadhe said that he has begun surveying WGEA members on their use of environmental data, collecting case studies, identifying leading software and publicly available datasets such as Google Earth, and exploring the use of Geographic Information Systems (GIS). Development of the toolkit began in May 2017 with timelines being more or less similar to most of the other projects. An important stage of development will result from the focus group discussion at the 18th WGEA Assembly in March 2018. He anticipates the toolkit will be completed in June 2019.

Mr. Dadhe explained that the use of GIS will be a prominent component of the training toolkit, as maps are easy to understand and compelling. GIS is particularly useful when the government's own records are doubtful and also when the government itself has not collected

any data or conducted any assessment of the issue at hand. Mr. Dadhe stated that GIS data will be borrowed from the 2013 research paper but will be modified to include current research. The use of GIS technology can compare locations of different things to discover how they relate to each other. For example, using GIS can show sites that produce pollution, such as gas stations, and sensitive areas to pollution, such as wetlands. Showing sites on one map can show what areas are most at risk. Illustrative GIS sources can show data in many different forms. Google Earth, for example, can be used to acquire the maps, and data from remote sensing agencies can also be used to capture GPS tagged assets.

Mr. Dadhe provided example maps from India's audits showing environmental impacts for which the Indian government had no proprietary data. One example is a GIS map of deforestation trends (using color layers) adjacent to endangered species habitats in the Bandipur Wildlife Sanctuary from 1970 to the present; another showed the impact of a hydro power plant on a watershed using satellite imagery. In the Bandipur case, the government had no choice but to accept the evidence and take action to correct the deforestation dynamic.

Discussion

Mr. Alfredo Gomez of the United States explained the importance of big data through an example in which GAO worked with students of a nearby university to look at areas where a storm surge may reach a hazardous waste site and affect the environment. The recent Houston hurricane disaster demonstrated the predictive power of this data.

Ms. Juska Meidy Enyke Sjam of Indonesia summarized the session.

The Steering Committee Members approved the project plan by acclamation.

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Training on Environmental Audit at the International Centre for Environmental Audit and Sustainable Development (iCED)

- **Presented by Mr. Sunil Shreekrishna Dadhe of India**

Mr. Dadhe opened the session by explaining that, at the 10th WGEA meeting in 2011, it was decided to synthesize environmental auditing training materials from SAIs for a Global Environmental Auditing Training to be held at the Global Training Facility. India's International Centre for Environmental Audit and Sustainable Development in Jaipur, India was declared to be the site for the training.

Mr. Dadhe explained the expectations and expected outcomes of the facility, which involves the review of existing modules of environmental auditing training courses, organizing the training program, and addressing the interaction needed through the managerial level. The new Global Training Facility will use previous work plan research papers, recent developments and practices, and case studies to assist in development. WGEA Member SAIs from India, Estonia, and Indonesia led work on development of the new facility curriculum from 2014-2016. Completion is expected in 2019 with further contributions by WGEA Steering Committee members, including Cameroon, Lesotho, and South Africa.

The International Centre for Environmental Audit and Sustainable Development (iCED) is leading the development of the training program, titled "Introduction to Environmental Audit," by reviewing existing training courses used by SAIs worldwide, holding workshops with SAI instructors for—or participants in—such courses (including those who have attended MOOCs), and conducting workshops with SAI managers working in specific environmental areas, such as waste and water quality. WGEA plans to conduct a workshop on auditing water issues in January 2018.

Feedback was received on the previous program and showed that the trainer rating was generally positive and showed that the course was both interesting and helpful and had a combination of classroom teaching sessions and field trips. The overall perception was that the platform was appropriate to share best practices in their respective SAI countries.
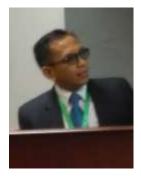
Course review shows that there is a need for enrichment, including the need for current developments in technology, and that an element of sensitizing auditors to SAI greening should be brought in along with new auditing techniques and global environment framework.

Mr. Dadhe then described other updates from iCED, including bilateral training programs for specific SAIs and upcoming programs on performance audits in December 2017. Mr. Dadhe then shared contact information for iCED and played a video on iCED's Global Training Facility for participants.

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Annual Training on Forestry Audit at the SAI of Indonesia's Training Center

- **Presented by Mr. Yudi Ramdan Budiman of Indonesia**

The objective of the forestry training is to build the capacity of SAI auditors to use a performance audit approach in conducting forestry audits and to provide hands-on experience in collecting and analyzing the audit evidence using geospatial technologies such as GIS and the global positioning system. This training is part of SAI Indonesia's commitment to INTOSAI WGEA as chair from 2017-2019.

The training on forestry audit includes pre-training, in-class training, and post-training. Pre-training involves reviewing online materials prior to in-class training, which enables all the participants to have a common understanding of performance audit, forestry concepts, and the applicable technological tools at the outset of the training. This phase of the training also involves the preparation of a country paper by each participant which describes forestry conditions and forestry audit in their respective country.

In-class training takes place over the course of five days and emphasizes hands-on learning. The course covers business process and risks, audit techniques, a field trip to apply learning and tools, and preparation of action plans by each participant.

For post-training, each participant joins the forestry audit community so that they can continue to communicate, share experiences, and report out on the implementation of action plans. Trainees are also expected to inform subsequent forestry audit trainings by advancing new concepts and enriching the modules in audit practices.

The fourth forestry audit training was performed in September 11-15, 2017 in Jakarta, Indonesia. There were 20 participants enrolled in the training from SAIs including Saudi Arabia, Philippines, Tanzania, Laos, Bangladesh, Chile, Iran, Thailand, Sri Lanka, and Ecuador.

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THURSDAY, 14 SEPTEMBER 2017

Recap of Second Day of the Meeting

SAI Indonesia, as the steering committee chair, welcomed attendees back to the INTOSAI WGEA meeting and recapped what was discussed the day before, including the seven project plans the SAIs had approved thus far: (1) updating the auditing biodiversity guidance by SAIs Lesotho and Indonesia; (2) audit guidance on delivering the 2030 agenda of Sustainable Development Goals (2030 agenda) with SAIs Canada and Indonesia; (3) audit guidance on agriculture and food production, presented by SAI Cameroon; (4) audit guidance on combating desertification and soil quality management by SAI Pakistan; (5) MOOC on waste management led by SAI Estonia; (6) the Greening SAIs Training toolkit led by ECA; and (7) environmental data toolkit by SAI India.

Presentations on Progress in Regional Working Groups on Environmental Auditing (RWGEA)

Status Update for PASAI, Presented by Mr. Jonathan Keate of New Zealand

Mr. Keate provided an update on activities in the PASAI region, including a background on the region, the overall WGEA strategy, and the regional WG contributes to the strategy.

The PASAI region includes a large chunk of the Pacific Ocean, Australia, and New Zealand, and is divided further into the Northern region and Micronesia region. Melanesia is the Middle region and Polynesia is in the Southern grouping. Most members apply the Westminster model, but for the French territories (New Caledonia and French Polynesia) and Micronesia and Guam (which follow the American approach).

When Mr. Keate joined this group, there was very little environmental auditing done by the Pacific members, but New Zealand and Australia have been reasonably active. Over a 10-12 year period, they have made progress in the Pacific region. The regional working group formed around 2000, endorsed by the PASAI region at that time. SAI New Zealand has been the coordinator, and the group is open to any SAI in the region. It holds a meeting every two years, hosted by Australian states. The group contributes to the broader PASAI strategy as well. The most recent meeting was held last year taking place in Melbourne. The focus of that meeting was SDGs, opportunities for cooperation, the impact of the group's work, and audit approaches.

PASAI has a 10-year strategic plan that tries to strengthen the SAIs' independence. SAIs are working to achieve leadership changes that support this goal. PASAI has an advocacy role to try to strengthen audit reporting, improve the quality and timeliness of audits, and strengthen SAI capabilities. A focus has been on building capability in environmental auditing. This effort started in 2009, and the first four cooperative audit topics were environmental ones solid waste management, access to safe drinking water, sustainable fisheries, and climate change adaptation. A regional overview report was disseminated for each of these topics. It is hard to know the impact of these efforts, but the sustainable fisheries report was one of the strongest reports, with the most impact. Some of the individual audits strong good findings about fraud and the management system. With the fisheries work, auditors could see where Pacific countries were getting benefits, which is not always the case.

Seventy-six staff members from 16 SAIs have taken part in the cooperative audit program. Usually 10 staff are involved in each audit. Some SAIs established their own performance audit capacity in the office. In 2016, SAIs conducted a "stock take" of performance auditing in the Pacific—an assessment of performance audit capacity in the region. This work has been done partly around thinking about SDGs on the horizon, to make sure SAIs were we ready to do the audit work under the SDG framework. The "stock take" worked well, as it promoted the design of a regional quality assurance process. In the future, SAIs in the Pacific will initiate their own environmental audits rather than only through the cooperative program.

Mr. Keate provided an overview of current activity around SDGs. The hope is that the PASAI performance audit on preparedness for SDG implementation will provide a platform for future audits. Mr. Keate said that the group will keep in mind the objectives that IDI has outlined for auditing SDGs, and that participants are currently completing an 8-week learning course about these objectives. This joint effort is a very supported and elaborate process, involving e-learning, meetings, peer reviews from other offices. The ultimate outcome will be a regional report on findings from the region.

PASAI has made good progress in building environmental capacity in the Pacific—from little activity to four successful cooperative audits. There is a more recent cooperative audit on public debt, and the current one is on SDGs. Possible future audit topics and opportunities for cooperation could include: climate change, water, natural disasters/emergency preparedness/risk management, forestry, environmentally-focused SDGs, recovery from extreme weather, forestry (for some countries), oceans, and importing diesel. Challenges include how to keep up momentum, getting SAIs to the point of being able to initiate their own environmental audits, and performance audit capacity.

The next group meeting will be held around May 2018. It will likely involve a briefing on the progress of the SDG preparedness audit, a training aspect, and thinking about how Australia and New Zealand can contribute. For example, SAI New Zealand is planning its own audit on SDG preparedness and may be able to contribute to the regional audit. SAI New Zealand is also conducting eight performance audits on water and it could update the RWGEA meeting on this work. PASAI also has an active Facebook page and website where visitors can see some of the group's activities.

Status Update for ARABOSAI: Presentation by Mrs. Shekhah Aladwani and Mr. Sultan Alotaibi of Kuwait

ARABOSAI was initiated in 2009, and the group members meet every year. The group approved three plans, two of them are fully achieved and the group is working on the third. The work plan for 2016-18 consists of seven topics that cover a range of issues and SAIs and is the result of research papers, training programs, and activities. Work on the seven topics have produced results on the following:

(1) SAI rule on Liquid and Industrial Waste, Environmental Law, and Public Parks. This effort culminated in a research paper on liquid industrial waste, presence of wastewater discharged into the sea, and the resulting damage.

(2) Comparing environmental laws across Arab countries.

(3) Public parks and landscapes—some of the planned targets within the parks department operational plan are not comparable with what is actually implemented. This work was finished recently.

(4) Preparing procedural guidance on environmental auditing.

(5) Impact of communications towers on the environment and humans.

(6) Auditing the coastline.

(7) Auditing natural reserves.

ARABOSAI plans and participates in different activities. For example, representatives attended the 14th annual meeting of EUROSAI, attended the 17th meeting of WGEA, and gave presentations or workshops at key SAI meetings, such as a workshop on protecting fishing.

SAI Kuwait presented an overview of audit planning, in which the group agreed to participate. SAI Iraq has chosen to participate in efforts on the subject of wastewater. In addition, the group's suggested training program covers four topics that will be led by Jordan, Egypt, or Kuwait. These topics are: (1) energy auditing, (2) environmental standards program; (3)

evaluating efficiency of medical waste disposal program, and (4) joint collaboration review procedures (ISSAI standard 5140).

Discussion

Mr. Wilfredo Agito of the Philippines said that ARABOSAI may also want to consider standard 5800 on cooperative audits. He would like to highlight other standards that can be used when discussing a cooperative approach in the audit.

Status Update on ASOSAI, Presented by Mr. Jianfeng Xing of China

As the coordinator of ASOSAI WGEA, SAI China was pleased to provide a report on the last two years of ASOSAI activities. ASOSAI is comprised of 32 members and 1 observer. Major activities can be found on the website: www.asosaiwgea.org.

SAI China provided an overview of major ASOSAI activities, which included attendance at the 6th seminar on environmental audit: October 17-19, 2016, and attendance at the 5th ASOSAI working meeting, attended by 18 SAIs. At the meeting, attendees discussed and approved the work plan for 2017-2019 as well as the division of duties of ASOSAI WGEA activities among the chair, Secretariat, and host SAI. More and more ASOSAI members are interested in participating in the group, and SAI Thailand will host the 7th seminar on environmental audit and 6th working meeting of ASOSAI WGEA near Bangkok in early 2018. ASOSAI has sent out an announcement and invitations to its members, EUROSAI, AFROSAI, and the other regional SAIs.

SAI China tries to promote environmental audit achievements. For example, last year, Mr. Liu Jiayi published an article on this topic. As the Chair of ASOSAI, SAI China promotes environmental audits. Members of the group participate in WGEA research projects and also contribute to the WGEA's *Greenlines* newsletter.

With regard to regional cooperation, ASOSAI delegates attended the 14th meeting of EUROSAI WGEA in September 2016 in Macedonia, and representatives attended the spring session on audits of waste management held in April 2016 in the Czech Republic. In addition, ASOSAI delegates attended the 7th meeting of AFROSAI WGEA – for the first time – , two months ago, another delegate attended a meeting in Democratic Republic of the Congo, where they shared experiences of Asian SAIs on the role of environmental audit in promoting sustainable development and city management.

Future efforts will involve implementation of the 2017-2019 work plan of ASOSAI. SAI China would like ASOSAI members to support the work of the group. ASOSAI supports all of its members and stakeholders and is here to support.

Status Update on EUROSAI, Presented by Ms. Viire Viss of Estonia

There are 42 members of EUROSAI, including almost all European countries. The group was formed in 1999, and SAI Estonia has held the Secretariat since 2014. This role will end when this period is over in 2019. SAI Estonia will pass the role to the next national office at the EUROSAI conference.

The group has nine steering committee members and a strategic focus on cooperation and experience sharing. EUROSAI organizes events every year, and the group meets twice every year. It usually has a spring session every year on a topic, then an annual meeting in the fall. In between, the group offers training. In 2016, the group held a training session and annual meeting in Slovenia. The topic was sustainable development, challenges for national SAIs, market-based instruments for environmental protection, and ISSAIs of environmental auditing. A paper on the training and discussion are available on the EUROSAI website. The 2017 spring session in Macedonia focused on water quality and management, a very important topic that comes up every year. Next month there will be a training session on data and analysis in environmental auditing, as well as the annual meeting on land use and development and greening the SAIs. Quality of data is an issue again.
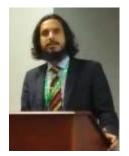
EUROSAI is proud of its three ongoing cooperative audits that should be published in 2018: air quality (by Poland and the Netherlands), energy efficiency in public buildings (by Estonia and Latvia), and Mediterranean marine protected areas. The group's website, EUROSAIWGEA.org, is very well-updated with information and upcoming events. The group also issues a newsletter twice a year; the most recent one was 15 pages long. Further, the group cooperates a lot with other regional SAIs. SAI Estonia attended the Asian meeting last year.

Discussion

Mr. Keate of New Zealand asked whether EUROSAI has a strategic plan, and Ms. Viss stated that the group has a short, simple document on its website.

Status Update on OLACEFS, Presented by Mr. Junnius Arifa of Brazil

SAI Paraguay is the coordinator of OLACEFS's Special Technical Commission on the Environment (COMTEMA), but Mr. Arifa presented on their behalf. There is strong leadership, transparency, and community in the OLACEFS region, and it has very effective efforts in cooperative initiatives and capacity building.

COMTEMA includes about 19 countries in the Latin American and Caribbean region. There are coordinated audits in progress, as well as other initiatives, and the group's work plan spans 2015-2017. COMTEMA conducted a coordinated audit of SDG target 2.4, with a preparation meeting held in Chile in December 2016 that involved 11 countries. [*Note: SDG target 2.4 calls to, by 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality*.] Then a planning meeting was held in Mexico in May of this year. The team is very big. At the December meeting, there was an opportunity to develop capacity around the duplication, overlap, and fragmentation approach during a training given by Mr. Christopher Mihm of the United States. In addition, COMTEMA intends to have a workshop in November to consolidate information and will hold an election for the new chair term for 2018-2020.

INTOSAI has four approaches to auditing SDGs, including auditing national systems of follow-up and performance audits. COMTEMA's approach to coordinated audits relates to the other two approaches as well, but these are the two main approaches taken by COMTEMA. The main goal of the SDGs approach is to build capacity and develop methods and tools There is a focus on coordinated audits and capacity building with a whole-of-government approach and attention paid to the duplication, overlap, and fragmentation framework. The method to assess preparedness for auditing SDGs is aligned with the seven steps of IDI and the INTOSAI initiative. The intent behind this is to improve the audit approach and identify potential blind spots, such as conflicting policies.

Another objective is to align crosscutting issues by gaining a wider perspective and, again, identify potential blind spots. For example, SAI Brazil has conducting a pilot audit on organic agricultural production, during which it has begun to see crosscutting issues and find some conflict with current policies. The plan is to now maintain this approach in the region.

The main output of the approach is SDG prioritization and s selection matrix. This gives SAIs a way to analyze the prioritization of targets based on criteria: relevance (international treaties, planning, government initiatives, treatment of inequalities, links to other goals), materiality (budget allocation), criticality (critical factors, public policies, reality observation, goal deadlines), and value aggregation (regional group initiatives, SAI initiatives).With regard to the SDG prioritization and selection matrix, SAIs have to establish a common language to make sure the data make sense from a global perspective. SAIs should choose some criteria; each SAI can decide on what is important, such as government initiatives, the number of policies, and how many citizens benefit. When SAIs take this approach, they identify some places on which to focus.

Materiality may also include international agencies, donations, and programs that are larger than some nations' budgets. Mr. Arifa suggested that SAIs could look at the impact of the Olympic Games on the environment. SAIs can also look at efforts from different perspectives and at different levels, such as a regional level. This matrix is an example, not a model, of a tool that each SAI can use to identify what is more important and which criteria to apply. Through this matrix SAIs can give grades and they have a standard level to consider relative importance. SAIs can look at this and ask whether it makes sense.

Mr. Arifa said that he thinks capacity building is the most important output of the audit. COMTEMA would like to have e-learning on performance audits available in 2017-2018. The group will have to look at funding from other agencies. The first e-learning will be in MOOC, based on a budget from the German Agent for Capacity Building. Another related environmental audit will be conducted next year, through which SAIs will start to follow up on protected areas and issues. A coordinated audit involving 11 countries in Latin America is being planned for 2019. Follow-up has begun in the region together with other regions. This effort will bring the approach of SDGs and protected areas together in the coordinated audit.

Status Update on AFROSAI
Due to a certain reason, the AFROSAI report could not be presented. However, the report was submitted to Secretariat and below is the summary.

The AFROSAI WGEA was established in 2002 with current membership of 30 SAIs. The main objective of the RWGEA was to build the capacity of SAIs in environmental auditing, knowledge sharing through cooperative audits and other initiatives, and information dissemination about environmental issues. Several achievements of the RWGEA were as follow: 1) accomplishment of the Work Plan 2014-2016; 2) development of Work Plan 2017-

2020; 3) draft of Green Charter of African SAIs to encourage SAIs to be exemplary in environmental matters; 4) Launched of the Congo Basin Forest cooperative audits; 5) Review of the Nile and River Niger Basins cooperative audit projects; 6) Ongoing translation of ISSAI 5100 series into French language; 7) capacity building activities such participation in trainings; 8) other activities which include: newsletter and 7th annual meeting in Congo last July 4th – 7th which was also attended by representatives from other RWGEA.

With regard to the upcoming activities, AFROSAI WGEA will: 1) organize the consultative and planning meetings for River Nile and River Niger cooperative audit; 2) proceed the cooperative audit of the Congo basin forest; 3) encourage SAIs to follow up the recommendations of the Lake Chad joint audit; 4) continue supporting the INTOSAI WGEA projects; 5) continue sharing about environmental auditing; 6) strengthening cooperation with donors and other stakeholders.

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WGEA International Standards of Supreme Audit Institutions (ISSAI) Alignment with INTOSAI Framework of Professional Pronouncements (IFPP)

- **Presentation led and moderated by Ms. Juska Meidy Enyke Sjam of Indonesia**

Ms. Sjam of Indonesia provided a summary of information presented by Ms. Beryl Davis of the United States, during the previous day's session on WGEA ISSAI alignment with the IFPP. Ms. Davis had said that WGEA's ISSAIs were moved to the GUIDs (i.e., INTOSAI guidance) and the working group does not need to take any action on those ISSAIs that were recently developed. However, WGEA needs to finalize 5140 (how SAIs may co-operate on the audit of international environmental accord) and needs to revise 5130 (the role of SAIs in sustainable development). In the process of revising 5130, during the exposure draft there were a number of international issues and the working group received comments about the consideration to postpone 5130 from the endorsement at INTOSAI. The Indonesia delegation has asked SAI Canada to lead the 5130 project until it is finalized. ISSAI 5130 is in the Strategy Development Plan placed under priority 3.1, which is the global INTOSAI Framework on Professional Pronouncements for guidance.

Ms. Kimberly Leach of Canada, as the leader of the revision to 5130, provided an update on the project to the working group. This included an overview of the 5130 revision, which was

included in the last WGEA work plan from 2013-2014. It was difficult to finalize the 5130 revision because of the effect it has on the SDGs. WGEA was trying to bring some clarity for SAIs auditing of these issues. SAI Canada was not involved in the development of the guidance. The SDGs became front and center in September 2015. When SAI Canada became involved, they realized the revisions to 5130 are critical and that they define what WGEA means by sustainable development across all of the group's work.

Many of the working group participants had given input on the revisions to 5130. The steering committee of INTOSAI and the Austrians leading INTOSAI said that the group needs to think about how the revision impacts sustainable development. Given that, the group decided to put the guidance on hold, as the group's position is that the SDGs are very important to the work the members are doing as auditors. Over 100 countries are doing audits and have regional working groups. There will be a compendium of lessons learned related to SDGs. Ms. Leach said that the group's position and suggestion is to wait until all of this work is done and assembled in order to take the lessons learned from audit work and bring it together in the guidance. If the group were to issue the guidance now, before assessing the lessons learned, it is not really effective. SAI Canada is happy to continue with to work to revise 5130, but would like to wait until the seven steps and some other work is more underway, and thus would like to have 5130 as part of WGEA's next work plan.

The meeting chairs agree with SAI Canada's position on the 5130 revision and would like to postpone the revision until the next work plan so that it can be properly finalized and revised.

Discussion

Ms. Viire Viss of Estonia asked if Canada will complete the 5130 revisions by the end of our next work plan. The meeting chairs replied that there was no activity regarding 5130 in the current work plan, and so they will work it into the next work plan. Ms. Leach said that the 5130 revision was something that they worked on in the last work plan. It is not in the current work plan, but they would like to include it in the next one. Mr. Jonathan Keate of New Zealand asked about the timeline for finalizing 5130. Ms. Leach replied that she believes that 2018 is when the compendium of lessons learned could be started, and they will pick it up again in 2019.

In respond to that, Mr. Sunil Dadhe of India suggested that the ISSAI 5130 could be included within the next WGEA Work Plan of 2020-2022. Mr. Shakeel Asghar of Pakistan agreed that by 2019, all audit reports with regard to SDGs are expected to be finalized and it would be perfect time to review the ISSAI 5130. Mr. Junnius Marques Arifa of Brazil said that there

would be a possibility that by that time the ISSAI 5130 will no longer needed and have to be withdrawn. Mr. Michal Rampir of Czech Republic expressed his concern for the uncertainty whether the document will still be needed or not by 2019. Ms. Kimberley Leach, SAI of Canada explained that the current updated ISSAI 5130 has already included about the discussion on SDGs within INTOSAI community. Lastly, Ms. Juska Sjam ask for SC members approval to include the review of ISSAI 5130 will be continued in the next Work Plan 2020-2022.

Meeting attendees agreed that the next WGEA meeting will pertain to ISSAI Section 5130. The secretariat will note delegates' comments for future discussion, including questions regarding whether certain guidance and standards are necessary.

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Quality Assurance Standards for non-IFPP Work

- **Presented and moderated by Ms. Juska Meidy Enyke Sjam of Indonesia**

At a recent INTOSAI Knowledge Sharing Committee Meeting meeting in Bali, Indonesia, and based on a joint paper of INTOSAI's IDI and working group chairs, the WGEA chair asked the project leaders to begin considering quality assurance criteria for ongoing non-IFPP projects conducted outside of INTOSAI's general framework and standards. Ms. Sjam said that there is a sufficient time remains to accommodate this request, and proposed three possible quality assurance levels: (1) equivalent to IFPP—that is, standards equivalent to INTOSAI due process, including a 90-day public comment period; (2) outside stakeholder involvement—while public exposure would not be necessary, product development must involve outside stakeholders, though mechanisms such as piloting, testing, or commenting opportunities; (3) within a working group, in which all quality assurance occurs internally, within the body or working group.

Ms. Sjam suggested that INTOSAI WGEA projects utilizes Level 2, which balances quality assurance standards with project time constraints. For some projects, Level 3 quality assurance could be sufficient, depending on risk levels and impact on others. According Ms. Sjam, the process WGEA chooses should be sensible and avoid excessive bureaucratic requirements. They advised that documents should contain a statement summarizing quality assurance criteria used.

Discussion

Ms. Viire Viss of Estonia voiced concern regarding deadlines and asked whether there was any guidance that we could use with regard to quality assurance process.

Mr. Shakeel Asghar of Pakistan ensure whether when the process should be performed, should it be after the completion of the drafts. He added whether it should be done internally or externally.

Ms. Rukhsana Rafique of Pakistan asked whether there was any specific time period in performing the quality assurance.

Mr. Jose Alfredo Gomez of United States of America suggested quality assurance level 2 would be appropriate for current WGEA projects as it involved other stakeholders outside the INTOSAI WGEA. WGEA is considering subject matter experts, academics, and identifiable project users.
In line with Mr. Gomez, Mr. Shakeel Asghar of Pakistan said that level 2 would be appropriate as it could involve peer review from other working group.

Mr. Sunil Dadhe of India agreed with the level 2 as in the project of developing training tools, it will involve users outside the WGEA and possibly outside INTOSAI. Mr. Dadhe further explained about the currently developing quality assurance guidance document and said it was still evolving time to time. He added, as soon as the document endorsed, we could set a proper timeline for the projects. Thus, it will be fine to keep the timeline flexible and subjected for revision. He considered that all of the projects were now in the level 3 of the quality assurance. He inquired about possible use of the quality assurance criteria in other working groups, suggesting WGEA utilize either Level 2 or Level 3

Mr. Shakeel Asghar of Pakistan said it would be proper to give time for all project leaders to consider whether their projects will be included in the level 2 or level 3.

Mr. Sunil Dadhe of India considered the project of training tool development will be included in the level 2.

Mr. Yudi Ramdan Budiman of Indonesia suggested that the Secretariat should perform an intense communication with the KSC and map the projects into the appropriate level of quality assurance. He also suggested to use the INTOSAI GB 70 in Austria as a good opportunity to communicate this matter to INTOSAI KSC Chair.

Mr. Wilfredo Agito of Philippines agreed to include the Air Quality project to be reviewed under level 2. They explained that the criteria will cover two categories of projects – external projects (involving organizations other than WGEA) and internal projects (some of which are conducted within specific SAIs). Even internal projects will have numerous government and environmental stakeholders.

Mr. Junnius Arifa of Brazil requested further discussion on the matter of quality assurance. Per procedures described in internal publications, he suggested each working group communicate with the INTOSAI board to find a solution. INTOSAI working groups already utilize such internal communication when considering whether to implement Level 1 or Level 2 criteria. Mr. Arifa also feels that it is important to include the United Nations, which WGEA has already engaged, as an external expert. Project research and methodology should align with the United Nations' approach and agreements. WGEA should listen to the United Nations' perspective and determine the extent to which projects must meet external expectations. Mr. Arifa also said utilizing project review to address any problems.

Mr. Mark Gaffigan of the United States suggested allowing for flexibility in project elements, procedures, and quality assurance. Working group discussions should cover levels at which projects will seek stakeholders. Stakeholders should be tailored to various types of projects, and cross-referencing between stakeholders could maximize feedback received. Similar to GAO's own practices for determining engagement scope and methodology, project leaders would determine and explain their quality assurance criteria. Mr. Gaffigan feels Level 2 criteria are appropriate for some projects, and Level 3 for others.

Ms. Dilyanka Zhelezarova of ECA supported the idea of an independent review process as the documents will be used by the auditors. She added, even internally, it will be worthwhile to ask an independent group outside the steering committee or subcommittee to give their independent review about the documents drafted by the subcommittee. Ms. Zhelezarova suggested considering auditors' capacity and knowledge when determining quality assurance. She added that it really depends on the working process of the group and it will be necessary to all project plans to include what they will perform to ensure the quality assurance process being performed. There should be a criteria of work that could categorize into what level of quality assurance a document should be reviewed. They also voiced concerns regarding deadlines, and feel that clear criteria for each level should be drafted—comments that the meeting chairs plan to forward to INTOSAI's secretariat.

In respond to Ms. Zhelezarova, Mr. Mark Gaffigan of United States of America said that some project plans have stated in their key milestone/timelines.

Ms. Ma. Corazon Gomez of the Philippines voiced support for additional discussion with experts and other stakeholders. The meeting chairs explained that this is doable if project timelines change or if a project is complex (as is the case with Brazil's review of all SDGs). While INTOSAI does not plan to change the final deadline of its next meeting, it can allow for flexibility in interim deadlines prior to then.

Mr. Jonathan Keate of New Zealand explained how current projects have already identified relevant agencies that could be involved in the quality assurance process. He said that as all products will naturally incorporate some level of peer review (such as government agency or subject matter expert involvement), effects of quality assurance criteria on project timelines will likely be small.

Mr. Junnius Marques Arifa of Brazil said that the quality assurance level might be upgraded later along with the guidance development process. Thus, it should not be decided now as it might have problems in finding the right reviewer during the process.

Mr. Mohammad Diyer of Morocco suggested the Secretariat to reach KSC to get clarification regarding the quality assurance process.

According to Ms. Sjam, all working groups should typically use at least Level 2 criteria. They noted that WGEA has not finalized the criteria, and clarified that the chair and secretariat will be involved in the process. WGEA will also determine whether Level 3 criteria are permissible for certain projects. Level 2 criteria would require adjustments to project timelines, though resulting benefits to product users could justify this. It is suggested allowing for timeline flexibility within the projects' timeline as quality assurance criteria are not yet finalized, then making adjustments or revisions as necessary.

Concluding the discussion, Ms. Sjam explained that although project leaders agreed that some form of quality assurance criteria is necessary, currently such criteria are unclear and no guidance is available. She encouraged project leaders to consider such criteria when developing their projects, clarifying quality assurance processes in all documents, regardless of their level. Due to the lack of guidance, the criteria for the quality assurance level of the WGEA projects cannot yet be finalized . It is expected that there will be a consistent standard

for future WGEA projects. Ms. Sjam suggested project leaders continue considering this after returning home and invited them to discuss further via e-mail.

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Secretariat Matters

- **Presented by Ms. Ami Rahmawati of Indonesia**

Ms. Rahmawati's presentation covered three main areas main areas: WGEA's 9th Environmental Audit Survey, audit collection, and WGEA's new website.

With regard to the 9th Environmental Audit Survey, Ms. Rahmawati explained that she is working to simplify survey questions and to ensure they cover SDG-related issues. WGEA has finalized its draft survey and is currently testing it internally. In October 2017, they plan to send out the draft and solicit comments from SAIs, which they will accept until the end of the month. They then will incorporate SAIs' feedback to finalize the survey by February 2018.

With regard to audit collection, Ms. Rahmawati encouraged meeting attendees to submit audits prior to the March 2018 collection deadline. In 2016, the most recent collection period, WGEA received 167 audits from 47 SAIs, a decrease from past years. The organization hopes to see more participants this year.

WGEA is currently migrating to a new website, www.wgea.org. The new website is intended to have a more modern appearance and be more user-friendly than the current one. It will allow SAIs to upload and share current activities. Ms. Rahmawati demonstrated the new site, explaining that WGEA staff are currently moving content from the current site. The official shift will occur soon after the meeting.

Discussion

Ms. Viss of Estonia suggested allowing for online, electronic completion of the survey and encouraged SAIs to upload links to their reports, maximizing user-friendliness. Ms. Rahmawati explained that WGEA already does this and will continue to do so. Additionally, Ms. Viss suggested including questions soliciting information on common audit issues in the survey, explaining that stakeholders, such as academic institutions, would appreciate them. According to Ms. Rahmawati, such questions are currently not included in the survey draft, but she will

solicit suggestions regarding such changes, including updates to water- and air-related questions, from steering committee members.

Ms. Kimberley Leach of Canada also supported the possible addition of questions pertaining to common audit issues, specifically questions pertaining to SDG targets and indicators. She also suggested dedicating a section of the WGEA website to SDG-related audit work.

Mr. Hassan Namrani of Morocco suggested drafting a 3-4 question mini-survey. Ms. Rahmawati clarified that this survey is distinct from such smaller surveys pertaining to project content. Mr. Arifa of Brazil suggested presenting the survey as a web link, reporting results with graphics and indicators helping separate preparedness from performance. He feels this would maximize the survey's benefit to INTOSAI research. Ms. Rahmawati will consider this suggestion and discuss it further with the survey team.

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Greenlines

- **Presented by Ms. Barbara Patterson of the United States of America**

WGEA recently issued a new issue of *Greenlines*, a newsletter published twice annually. The publication is distributed to approximately 400 different e-mail addresses, and past issues also remain available. *Greenlines* can be a useful resource for identifying case studies. It contains a message from the WGEA chair, a featured story, and news pertaining to the working group.

WGEA is considering modernizing the appearance of *Greenlines*, though it may not be able to implement the changes for the next couple of issues. Ms. Patterson plans to implement the changes soon.

Ms. Patterson encouraged meeting attendees to submit news briefs for the upcoming early 2018 edition of *Greenlines*. *Greenlines* accepts submissions at any times, although submissions by November are preferable. Recent editions have contained 10-15 briefs (the current edition contains 12), short of the goal of 15-20 briefs. Ms. Patterson also welcomes suggestions regarding possible topics for future *Greenlines* stories.

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Meeting Conclusion

- **Session Led by Dr. Moermahadi Soerja Djanegara, CA, CPA and Ms. Juska Meidy Enyke Sjam of Indonesia**

WGEA has not yet selected a host SAI for the 2018 meeting. The organization is discussing the possibility with the Cameroon Supreme State Audit Office and has also approached other SAIs. WGEA will update its members once the location is finalized. WGEA also is seeking presenters for future WGEA assembly and steering committee meetings.

Project leaders are expected to adjust their project plans based on feedback received at the meeting and submit revised plans to the secretariat by the end of October 2017. Project leaders are also suggested to implement quality assurance criteria appropriate to their own project plan.

The Secretariat will distribute a summary of meeting comments to all project leaders within two weeks. Meeting minutes will be distributed shortly after that. The Secretariat will map the projects of current Work Plan based on its relation with Goals of SDGs and will distribute it to all Steering Committee members for input. The project leaders are invited to submit their questions for the mini survey of the projects by November/December to the Secretariat and the Secretariat will compile the questions to be distributed to SAIs for responses.

Concluding the meeting, Dr. Djanegara conveyed his confidence that the initiative will succeed, stating that WGEA aims to help preserve and protect the environment through its work. They then thanked all attendees and declared the meeting closed.

END

*   *   *   *   *

List of abbreviations

AFROSAI – African Organization of Supreme Audit Institutions
ARABOSAI –Arab Organization of Supreme Audit Institutions

ASOSAI – Asian Organization of Supreme Audit Institutions

CBD – Convention on Biological Diversity

COMTEMA - OLACEFS's Special Technical Commission on the Environment

ECA – European Court of Auditors

EMAS – Eco-Management and Audit Scheme

EUROSAI – European Organisation of Supreme Audit Institutions

GAO – The United States Government Accountability Office

GIS - Geographic Information Systems

iCED - The International Centre for Environmental Audit and Sustainable Development

IDI – INTOSAI Development Initiative

IFPP – INTOSAI Framework of Professional Pronouncements

INTOSAI – International Organisation of Supreme Audit Institutions

ISSAI – International Standard of Supreme Audit Institutions

KSC – Knowledge Sharing Committee

MOOC – Massive Open Online Course

OLACEFS – Organisation of Latin American and Caribbean Supreme Audit Institutions

RWGEA - Regional Working Groups on Environmental Auditing

SAI – Supreme Audit Institution

SDG – Sustainable Development Goal

UNDP – United Nations Development Programme

UNEP – United Nations Environment Programme

WGEA – Working Group on Environmental Auditing