



Message from the Chair of WGEA

Dear Colleagues,

On this occasion, I am pleased to inform you that the 16th INTOSAI WGEA Assembly Meeting, held 29 September to 2 October 2014 in Manila, Philippines, reached a successful conclusion. We highly appreciate the attendance of 116 participants from 46 SAIs and local and international organizations. The meeting was an opportunity for project leaders to provide input that will enrich the projects of the WGEA 2014-2016 Work Plan. It seems that the best ideas always emerge when people from different parts of the world come together to discuss common issues. Project leaders and other meeting participants collaboratively discussed many aspects of the projects' topics and shared their experiences and knowledge. WGEA's partners also made presentations, including the United Nations Environment Program, the United Nations Framework Convention on Climate Change, the Canadian Comprehensive Audit Foundation, and the European Environment Agency. I would also like to convey my highest appreciation to the Commission on Audit of the Republic of the Philippines for its hospitality in hosting this successful and memorable meeting.

As the new Chairman of the Audit Board of the Republic of Indonesia, I am glad to have the opportunity to be involved in this working group. I look forward to being a part of the INTOSAI WGEA family and working together to complete the WGEA 2014-2016 Work Plan.

This edition of *Greenlines* includes feature stories authored by the SAIs of Indonesia and Cameroon. In WGEA News, the Secretariat gives short overviews of the 16th INTOSAI WGEA Assembly Meeting; regional meetings, including the 12th EUROSAI WGEA Annual Meeting and the AFROSAI WGEA Annual Meeting; the KSC Steering Committee meeting in Cairo; and other secretariat activities. And as always, the News Briefs submitted by SAIs offer information and insights about recent environmental issues important to their countries.

Harry Azhar Azis, Ph.D.
Chairman of the Audit Board of the Republic of Indonesia

Feature Stories

First International Training on Forestry Audits in Jakarta, Indonesia

Forests have many functions and roles. Forests are home to diverse flora and fauna and their essential ecosystems. They also serve as lungs for the world by absorbing carbon dioxide and releasing oxygen. In addition, wood obtained from forests is an important source of income for governments and society. The forest is also a place to live for many communities.

Forests have to be managed sustainably to continue to perform these functions and roles. To support this issue, the WGEA 2014-2016 Work Plan includes a project to conduct training on forestry audits. The objective of this project is to build the WGEA's auditor capacity by disseminating the WGEA guidelines for auditing the forestry sector through a hands-on training program. The first training as part of this program was successfully delivered by the Audit Board of the Republic of Indonesia (BPK) from 15-19 September 2014 in Jakarta, Indonesia. (*Read more on the following page.*)

Cameroon, Chad, Niger, and Nigeria Join Forces on an Environmental Audit of Lake Chad

"Man is trashing the planet and leading a war against nature. If he wins, he will be lost!"—Hubert Reeves

In 1964, Chad, Cameroon, Nigeria, and Niger signed the Convention of Fort Lamy to cooperate on the utilization of the resources of the Lake Chad Basin. At that time, the Lake covered a surface of 25,000 km². Subsequent droughts and inefficient water management reduced its size to a tenth of this area. With a widely rural population in the basin of about 30 million people scattered over four countries, the dry-out of Lake Chad threatens a vulnerable population. (*Read more on page 3.*)

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UKRAINE: EUROSAI Working Group on the Audit of Funds Allocated to Disasters and Catastrophes is established

UNITED KINGDOM: NAO is auditing nuclear power and flood risk management and recently reported on environmental protection and renewable energy contracts

UNITED STATES: GAO identifies improvements needed to manage underground injection of fluids associated with oil and gas production

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The 5-day training was attended by 21 participants from 9 countries, including Fiji, Malaysia, Micronesia, Nigeria, the Philippines, Tanzania, Thailand, Timor-Leste, and Indonesia. Dr. Masykur Ali Musa, a former member of the Audit Board of the Republic of Indonesia, officially opened the training. The training was facilitated by certified instructors and training specialists, experienced auditors, and subject matter experts from the SAIs of Indonesia and Kenya.



The training participants and instructors at the opening ceremony

The training participants discussed the concept of sustainable forest management and learned to develop and manage performance audits in the forestry sector, from the planning stage through follow-up. They practised their skills with relevant exercises and study cases and discussed other issues related to forests and forest management. Participants learned how to choose audit topics and key areas using a risk-based audit approach and how to design an audit using the audit design matrix. Participants also learned how to apply geo-spatial technology—remote sensing, Geographic Information System (GIS), and Global Positioning System (GPS)—to help collect and analyze audit evidence while conducting forestry audits.

Implementation of GIS and GPS in Auditing Forests

Conducting audits in the forestry sector is challenging, even for those who have a lot of experience in the field of auditing. The auditor may face a vast audit scope and limited resources to observe the condition of the sample area. Auditors need to develop techniques to conduct such audits efficiently and effectively. By using geospatial technology, auditors will be equipped with a tool that can help analyze data more comprehensively when developing the audit plan, gathering audit evidence, executing a more focused audit, and finally enhancing the quality of audit results. This means these tools can be applied from the audit planning phase through analyzing the data or evidence that was collected.

The training not only took place in the classroom, but also in the field for hands-on-training to practise using geospatial technology. Participants visited a forest near the city and experienced a real situation where GPS and GIS are being used. Facilitators included this field training as a case study, and participants had to collect evidence hidden in a particular location after analyzing a satellite image given to participants as a clue. Participants then compared this evidence with the facts found in the area. At the end of the day, the participants had learned how to analyze and use the data they collected, and they presented their findings to the class. During the field training, each group of participants were equipped with GPS and assisted by a forest ranger and BPK's facilitator. All of these activities were done at Gede Pangrango National Park, in a suburb of Jakarta. It was very exciting to have this opportunity to learn while also enjoying the beautiful scenery in the location.

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The participants practised using a GPS in a forest of Gede Pangrango National Park

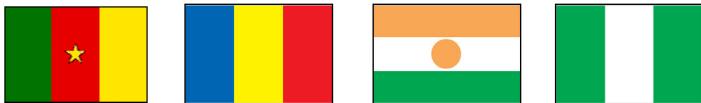
The training significantly improved participants' abilities. At the end of the training, participants with no prior knowledge about GIS and GPS were able to use them to analyze audit evidence and draw better conclusions. After returning to their countries, participants are encouraged to implement GIS and GPS tools to develop more effective and efficient forestry audits.

Exchange of knowledge and experiences

Participants who attended the training came from three different regions with different forest types, such as tropical forests and arid zone forests. During the training, the participants had opportunities to discuss their respective forests and experiences in conducting forestry audits and developing audit reports. Participants also discussed the advantages, disadvantages, and challenges of using GIS and GPS technologies in their countries. Through moments of shared experience, participants enriched their understanding and knowledge about other countries' cultures.

Participants agreed that forestry audits are an important tool for supporting forests and encouraging forestry management to become more sustainable. Some participants were already planning to conduct their SAIs' first forestry audits. At the end of the training, the participants gave some positive feedback and stated that the training enhanced their confidence to perform their first forestry audit. They also said that the training was well structured and sufficiently detailed to help them to improve their knowledge of forestry audits and how to plan and execute them.

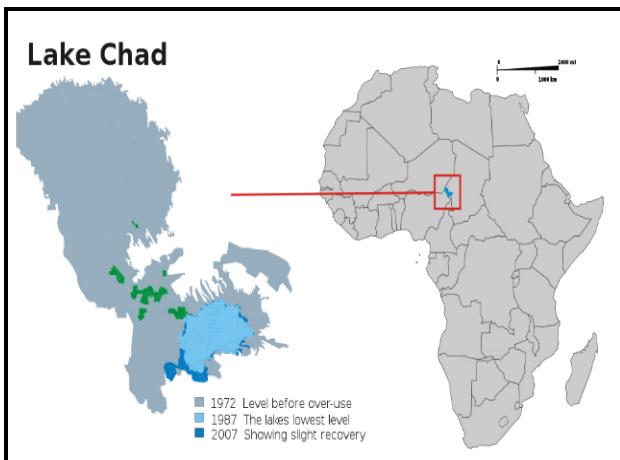
SAI Indonesia encourages SAIs with interests in this program or in a customized program to send requests to Mr. Wahyudi at international@bpk.go.id and wahyudi.bpk99@yahoo.co.id.



Cameroon, Chad, Niger, and Nigeria Join Forces on an Environmental Audit of Lake Chad

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In 1964, Cameroon, Chad, Niger, and Nigeria signed the Convention of Fort Lamy to cooperate on the utilization of the resources of the Lake Chad Basin. At that time, the Lake covered a surface of 25,000 km². Subsequent droughts and inefficient water management reduced its size to a tenth of this area. With a widely rural population in the basin of about 30 million people scattered over 4 countries, the dry-out of Lake Chad threatens a vulnerable population.



An overview of water decrease in Lake Chad.

Against this backdrop of a pressing need to act, the second annual meeting of AFROSAI's WGEA in Yaoundé, Cameroon, in 2012 concluded that the four countries would conduct a joint environmental audit on the drying up of the Lake. To that effect, a Memorandum of Understanding was signed in November 2012 by the four participating SAIs.

The aim of the audit was to verify whether the four countries have effectively implemented control, monitoring, and enforcement practices and systems to achieve a sustainable use of Lake Chad's water resources. Weaknesses and shortcomings in the management of water resources of the Lake Chad Basin were highlighted and recommendations to preserve Lake Chad were made.

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The joint audit also served as an opportunity for the four SAIs to strengthen their capacities in performance and environmental auditing. Over the course of the audit, three training and capacity building workshops were organized. These workshops aimed to enhance the SAIs' performance and environmental auditing capabilities at each audit stage and focused on water resources.



Audit data analysis workshop in N'djamena, Chad.

At the end of this project, several outcomes were achieved. The four audit teams finalized a joint report consisting of four reports looking at management at a national level and a joint chapter focusing on the performance of the Lake Chad Basin Commission. The report contains recommendations aimed at reversing trends in the drying up of Lake Chad. These recommendations are to be presented to the national parliaments and governments, as well as to the Commission and Parliament of the Central Africa Economic Community, the Commission and Parliament of the Economic Community of West African States, the African Union, and the Pan-African Parliament.

The project also identified several lessons learned. First, the audit served as proof that, despite the diverse types of four SAIs' models and varying languages involved, the execution of cooperative audit activities is possible and should be encouraged in Africa.

Second, the use of scientific experts improved data quality. To ensure the quality of data collected, the four SAIs executed their audit activities with assistance from scientific experts in hydrology and water fields.

Third, the project highlighted an innovative cooperation and mentoring process. The four participating SAIs benefited from the methodological support of the SAIs of Kenya, Tanzania, Morocco, Canada, and Belgium, as

mentors and quality reviewers. Experienced environmental auditors from these countries provided support through all stages of the audit. In addition, technical and financial cooperation was provided by the German International Cooperation and by the Canadian Comprehensive Auditing Foundation. The support provided by experienced SAIs in performance and environmental auditing resulted in the satisfactory use of professional audit standards, and the process of mentoring should be popularized within African SAIs and across the entire INTOSAI community.



The audit teams at the lake side in N'djamena, Chad.

A seven-minute video presenting the results of this joint environmental audit can be found on AFROSAI's website: www.afrosai.com.

Finally, the major lesson learned from the joint environmental audit is about Lake Chad's future and can be summarized in the following words from Philippe St. Marc:

"Man must be the guardian of nature, not its owner... the cost of protecting the natural environment is much lower than the cost of its reconstruction. The protection of nature is profitable for the nations."

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WGEA News

Highlights of the 16th INTOSAI WGEA Assembly Meeting, Manila, Philippines

The 16th INTOSAI WGEA Assembly Meeting was held 29 September-2 October 2014 in Manila, Philippines. The meeting was attended by 116 delegates from 46 SAIs and 7 delegates from international organizations as guest speakers. The meeting had plenary sessions reviewing International Standards of Supreme Audit Institutions (ISSAIs), cooperative audits, an audit series on improving the quality of environmental auditing by utilizing IT-based data analysis, and other issues, such as opportunities for auditors in the implementation of environmental law, environmental performance audits, recommendations with a “domino effect,” and citizen engagement in environmental auditing. The meeting also had parallel sessions for each of the WGEA projects, including focus groups for each of the ISSAI reviews. The program began with an excursion to Marikina City and continued with a welcome dinner hosted by SAI Philippines.



Participants of the 16th INTOSAI WGEA Assembly Meeting

Key points of the meeting follow:

- The meeting was a success, and participants gained knowledge and learned new information on environmental issues from the meeting's guest speakers.
- Participants shared experiences in conducting coordinated audits by SAIs. Examples of coordinated audit topics included biodiversity protection in Brazil, measures to fight illegal fishing in Africa's Lake Victoria, and audits of Lake Chad and the Nile River.
- Project leaders will accommodate participants' input and comments as they finalize the projects.

- Upcoming meetings include:

- 14th Steering Committee Meeting in September - October 2015.
- 17th INTOSAI WGEA Assembly Meeting in mid-2016

The BPK salutes meeting participants for their efforts and hopes that the meeting was productive for all WGEA members in improving the quality of environmental audit worldwide.

Regional WGEA Meetings

Two Regional WGEA meetings were held during the past six months: the 4th Annual Meeting of AFROSAI WGEA, held 26-30 May 2014 in Mombasa, Kenya; and the 12th Annual Meeting of EUROSASI WGEA, held 7-9 October 2014 in Vilnius, Lithuania. INTOSAI WGEA presented its 2014-2016 Progress Report at both of these events.

4th Annual Meeting of AFROSAI WGEA

Co-organized by its Secretariat and the SAI of Kenya, AFROSAI WGEA held its 4th annual meeting 26-31 May 2014 in Mombasa, Kenya. This meeting brought together 100 participants representing SAIs and other organizations from 28 countries in Africa, Europe, and Asia, including a dozen heads of SAIs. The objective of the meeting was to improve participants' knowledge of best practices and standards applied in environmental audits and allow them to share knowledge and experiences in the field of environmental auditing. Participants discussed the following topics:

- The various dimensions of the environment
- Trends and developments in environmental auditing
- AFROSAI WGEA's draft work plan for 2014-2016
- Natural resources, waste, and water issues
- Environmental governance and the impact of human activities on the environment
- Air pollution, wetlands management, and management of ecosystems and their changes;
- Experiences of other regional working groups

12th Annual Meeting of EUROSASI WGEA

The 12th Annual EUROSASI WGEA Meeting was held in Vilnius, Lithuania. The primary environmental topic of the meeting was biodiversity, and the primary methodological topic was survey data analysis. Keynote speakers addressed these topics, including a speaker from the global initiative, *The Economics of Ecosystems and Biodiversity*.

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The meeting was preceded by training on auditing environmental issues related to infrastructure. The training seminar—held one day prior to the meeting—was largely based on the INTOSAI WGEA *Guidance on Environmental Issues Associated with Infrastructure Development*, published in 2013. The seminar was organized in cooperation with the SAIs of Estonia and the United Kingdom.

The 8th Environmental Audit Survey

According to the WGEA 2014-2016 Work Plan, the Secretariat is to conduct the 8th Survey of Environmental Audit in 2015. The format of the survey will be similar to the previous survey but with proposed additional questions related to disaster management, audits of disaster-related aid, fraud and corruption in environmental management, and market-based instruments for environmental protection.

After finalizing the survey and translating it into the five INTOSAI languages, the Secretariat will distribute the survey to all INTOSAI members in February 2015. The deadline to respond is 1 April 2015. The Secretariat will analyze the survey results and publish the report on the WGEA website by September 2015. Responses from the INTOSAI community will be much appreciated and will help form the basis of the next WGEA work plan.

Annual Environmental Audit Collection (2014)

According to the WGEA 2014-2016 Work Plan, the Secretariat is to conduct 3 annual collections of environmental audits to populate the WGEA website. This year, the Secretariat received numerous environmental audit collections from various SAIs worldwide. These new audit collections are currently available on the WGEA website along with previous audit collections.

Environmental audit collections can be sent to the Secretariat at any time using the form available on the WGEA website. The Secretariat thanks all SAIs for their contributions and cooperation.

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News Briefs from Around the SAI World



AUSTRALIA: SAI completes audit of compliance with environmental approval conditions

In June 2014, the Australian National Audit Office concluded a performance audit of the Department of the Environment's oversight of compliance with Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act generally prohibits actions likely to have a significant effect on matters of national environmental significance without approval from the Minister for the Environment. When approving a controlled action under Part 9 of the EPBC Act, the Minister or delegate may attach conditions to the action's approval that its proponents, such as landholders, developers, and miners, are bound to comply with.

The audit found that, nearly 14 years after the enactment of the EPBC Act, the department had yet to establish mature administrative arrangements to effectively discharge its regulatory responsibilities in relation to approved controlled actions. As a consequence, the department has limited assurance regarding proponents' compliance with approval conditions. The shortcomings and challenges facing the department's regulation of approved controlled actions—particularly in relation to compliance monitoring—do not instil confidence that the environmental protection measures considered necessary as part of the approval of controlled actions have received sufficient oversight.

The Department of the Environment acknowledged the shortcomings in its regulation of approved controlled actions and has initiated a broad program of work to address the shortcomings identified over recent years, including those identified in earlier reviews and the Australian National Audit Office's audit.

The audit report is available in English at <http://www.anao.gov.au/~media/Files/Audit%20Reports/2013%202014/Audit%20Report%2043/AuditReport_2013-14_43.PDF>

For further information, please contact Grant Caine at grant.caine@anao.gov.au.



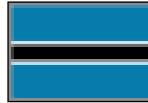
AZERBAIJAN: Chamber of Accounts expands its environmental audits

The Chamber of Accounts of the Republic of Azerbaijan has conducted six audits of the Ministry of Ecology and Natural Resources and its departments responsible for environmental protection, use of the natural environment,

effective and sustainable use of surface and subsurface resources, and meteorological observation and forecasting. The audits focused on

- environmental protection,
- forest protection,
- restrictions on the use and disposal of substances that are harmful to the environment,
- estimates of the environmental impact of several construction projects,
- agreements on ecological management,
- pollution prevention in the Caspian Sea,
- sustainability, restoration, and monitoring of biological resources, and
- Exploration of underground geological resources by the National Geological Exploration Service.

The audits found that purposeful environmental policies resulted in important progress, such as the establishment and successful operation of government ecology programs. The Chamber made recommendations that the audited departments accepted for implementation.



BOTSWANA: OAG audits incorporation of non-motorised transport facilities by the City of Gaborone

In September 2014, Botswana's Office of the Auditor General (OAG) completed a preliminary audit of the incorporation of Non-Motorised Transport (NMT) Facilities by the Gaborone City Council. The NMT Facilities was a pilot project funded by the Botswana Government in collaboration with the United Nations Development Programme and Global Environment Funding. The objective of the NMT is to reduce greenhouse gas (GHG) emissions by encouraging a shift from motorised transport—the second largest contributor of GHG emissions in the country—to non-motorised transport such as walking and cycling. The project was to be implemented in Gaborone and, if successful, replicated by other local authorities countrywide.

The OAG undertook a preliminary study to assess whether Gaborone effectively implemented the project and found that:

- Gaborone had not appropriately implemented the project to ensure that its objectives were achieved and that desired outcomes were realised. For instance, Gaborone had not developed a plan to direct project implementation and identify milestones and key

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performance indicators related to project objectives. Additionally, the constructed NMT network and other facilities were inadequate in terms of number and quality and not maintained to an acceptable standard.

- Three factors contributed to poor implementation and outcomes: (1) the lack of a strategic approach to measure the project's effect on GHG emissions, without which GHG emission reductions are unknown; (2) the absence of continuous promotion to encourage the public to use NMT, and (3) the absence of a comprehensive strategy that defines both the short- and long-term objectives for integrating cycling into the local transportation system.

The report found that, if the objective of the project is to be achieved, two underlying and ongoing issues must be addressed. The first is the need to pay greater attention to the global commitment of reducing growth of GHG emissions. This would contribute to the United Nations Framework Convention on Climate Change's ultimate objective of preventing climate change. The second is the need to have sustained awareness programmes to promote and enhance NMT to change the behaviour of transportation users and to reduce the growth of GHG emissions.

For further information, please contact Mrs. Botho Entaile at bentaile@gov.bw.



BRAZIL: Coordinated audit assesses protected areas in the Brazilian Amazon

Between 2012 and 2013, the Federal Court of Accounts of Brazil (TCU) and the nine state Courts of Audit in the Brazilian Amazon carried out a coordinated audit to systematically assess the 247 protected areas in the Amazon biome, which are divided into 107 national areas and 140 subnational areas. TCU believes joint audits contribute to the exchange of experiences and capacity building among participants, thus strengthening SAIs.

To assess these protected areas, TCU created the Protected Areas Implementation and Management Index (Indimapa), an instrument to evaluate, communicate, and monitor protected areas through geo-referenced maps. The instrument classifies protected areas in three levels—red, yellow, and green—using 14 indicators: management plan; managing board; public use; financial and human resources; research; biodiversity monitoring; access to public policy; local articulation; territorial consolidation; physical infrastructure; surveillance; community management; and forest concessions. Since the indicators established are common and based in international methodology, Indimapa can be used to assess protected areas over the world.

An international biodiversity audit focused on protected areas in Latin America is being carried out in 2014 by 12 SAIs in accordance with the work plan of the Organization of Latin American and Caribbean Supreme Audit Institutions' Special Technical Committee on the Environment. Participating SAIs are building on TCU's work and evaluating more than 900 protected areas and to expand Indimapa. This coordinated audit will provide an unprecedented view of the management of protected areas in Latin America.

For further information, please contact secexamb@tcu.gov.br.



CHINA: NAO conducts research on environmental audit theory

To strengthen its understanding of environmental audit theory and provide better support for environmental audits, the National Audit Office of the People's Republic of China completed "Research on Environmental Audit Theory." The Department of Environmental Audit successfully completed the year-long review in 2014. The review defined environmental auditing and included research on important aspects such as recognizing the motivation behind such audits, selecting audit objectives, establishing normative standards, carrying out the audit work, and ensuring quality control. The review was based on the practical experiences of environmental auditors at home and abroad. Using this research, the National Audit Office established a basic framework for conducting environmental audits. The National Audit Office will also apply the research results of the review to the training of its environmental audit staff.

For further information, please contact ea@audit.gov.cn.



COSTA RICA: Audit assesses controls for ensuring compliance with Convention on International Trade of Endangered Species

In 2014, the Office of the Comptroller General of the Republic of Costa Rica conducted an audit to assess the Costa Rican government's controls for ensuring compliance with the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES). The audit found weaknesses in the control performed by the National System of Conservation Areas (SINAC). The weaknesses included a lack of national parameters for including or excluding native species in any of the three CITES Appendices according to the species' degree of threat or vulnerability in terms of biological and trade criteria. The weaknesses also included the absence of records documenting the criteria of the Scientific Authority

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for including, excluding, or keeping species in Appendix III. The absence of records makes it difficult to apply the criteria established in CITES Resolution 9.25.

The Office of the Comptroller General also examined the issuance of CITES permits, and identified several findings. Specifically, the Scientific Authority is required to issue non-detriment findings to allow for trade in CITES species. However, 62 percent (76 of 122) of export and import permits analyzed did not have an opinion of non-detriment findings. In addition, 87 percent (74 of 85) of export permits analyzed did not meet the requirement to state that the specimens were obtained in accordance with legal regulations. Also, there was no evidence that 57 percent (31 out of 54) of export permits regarding the transport and handling conditions of live specimens complied with regulations. Moreover, SINAC's monitoring of the population status of CITES species occurs in only 9 percent (15 of 166) of protected areas in the country, and only for Appendix I and II species. Furthermore, the Office of the Comptroller General found a lack of standardized information about government entities and protocols for conducting seizures.

The report's recommendations focused on five topics: (1) developing records that document the biological and trade national parameters for the seven CITES species of Costa Rica, and that support including, excluding, or keeping species in CITES Appendix III; (2) developing and implementing a procedure to standardize seizures of species and supervision of local wildlife; (3) enforcing CITES requirements that have been omitted from permits; (4) establishing mechanisms to allow the tracing of CITES permits; and (5) implementing a system to monitor the status of populations of vulnerable species, including CITES species.

To conduct this audit, the Office of the Comptroller General used audit criteria, the expert judgment of a biologist, and a statistically selected sample of permits.

For further information, please contact Mrs. Lilliam Marín Guillén, Manager, Environmental and Energy Area, at lilliam.marin@cgr.go.cr.



CYPRUS: SAI reports on coastal management

The Audit Office of the Republic of Cyprus has completed an audit on coastal management. Tourism is important to the economy of Cyprus, making its coast susceptible to excessive development. Therefore, proper and sustainable coastal management is important for both environmental and financial reasons. The audit examined the financial management of beaches (e.g., beach facility rentals); beach habitat preservation for key marine species, such as sea turtles and Mediterranean monk

seals; potential pollution from vessels; interventions in beach protection zones (BPZ); and coastal erosion.

The Office conducted the audit using both traditional techniques (e.g., questionnaires, on-site visits, collection and analysis of data and information), as well as more innovative techniques, such as the use of a digitized cadastral base on which the BPZ was superimposed in conjunction with satellite imagery to identify constructions or interventions within the BPZ.

The audit revealed weaknesses in the implementation of national and European Union legislation and International Conventions and Protocols relating to coastal ecosystems management. In particular, the audit noted that the designation of coastal areas as Special Areas of Conservation under the European Union's Natura 2000 program was pending in national legislation, along with the issuance of Nature Management and Protection Decrees. The audit also revealed numerous cases of illegal or insufficiently justified constructions within the BPZ and/or Natura 2000 coastal areas. It also found that a permit was granted for the development of a golf course with villas that affects one of the most significant turtle nesting beaches in Cyprus.

The full report in Greek and a summary in English are available on the website of the Audit Office, www.audit.gov.cy.

For further information, please contact Mr. Akis Kikas, Senior Principal Auditor, at akikas@audit.gov.cy.



FINLAND: NAO audits management of and responsibilities for oil spills in the Gulf of Finland

The volume of oil tanker traffic in the Gulf of Finland has increased in recent years as Russia has built new oil ports in the area. Given this increase in traffic, and due to the physical and climatic challenges of shipping in the Gulf, the risk of a major oil spill is high.

The National Audit Office of Finland (NAOF) conducted a performance audit on the management of and responsibilities for oil spills from vessels in the Gulf of Finland. The audit highlights many positive features of oil spill management in the Gulf. For example, oil spill response preparedness is based on offshore response which, when successful, reduces the need for expensive onshore clean-up operations. In addition, Finland has acquired a reasonably large fleet of multi-purpose oil spill response vessels that are a cost-effective resource. Finally, NAOF found that systems that preventing shipping accidents, including the Vessel Traffic Service and aerial surveillance, have also proven cost-effective.

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However, NAOF also found that an international compensation fund for oil spills from vessels applies only to oil tanker accidents. NAOF estimated that tanker insurance policies and the international compensation fund may not be adequate to compensate for all costs resulting from a major oil tanker accident. The compensation processes are also lengthy, and a major oil spill would thus be a burden for local and central government finances. In some cases, the state may end up footing the bill.

NAOF recommended that Finland develop a new strategy and national contingency plan for oil spills from vessels. In addition NAOF recommended that Finland's Ministry of the Environment consider setting up an extensive cooperative forum for managing the risks of oil spills from vessels.

The audit report can be found at:

http://www.vtv.fi/en/publications/performance_audit_reports/management_of_and_responsibilities_for_oil_spills_from_vessels_in_the_gulf_of_finland.5079.xhtml

For further information, please contact Markku Turtiainen at markku.turtiainen@vtv.fi or Vivi Niemenmaa at vivi.niemenmaa@eca.europa.eu, currently with the European Court of Auditors.



INDIA: SAI reports on hydropower development through private sector participation

One of India's national electricity strategies is to develop hydropower with participation from the private sector. SAI India reviewed the implementation of hydropower projects through the private sector between 1991 and 2012 in the state of Himachal Pradesh, one of India's 29 states.

Power is a critical infrastructure requirement for the social and economic development of the state of Himachal Pradesh. Himachal Pradesh is located in the western Himalayas and its glaciers are a source of the Indus and Ganges basins as well as many other rivers. As a result, Himachal Pradesh is rich in hydropower resources and can potentially contribute 25 percent of India's hydropower. The basic challenge for the power sector in Himachal Pradesh is to provide adequate and reliable power at an economical cost.

The audit objectives were to determine the efficiency and effectiveness of the processes for planning projects—identifying project sites, estimating potential power capacity, selecting individual power producers, and establishing allotment procedures—and for implementing and monitoring projects. SAI India found the state government's planning and implementation of hydropower projects through the private sector was

inefficient. Namely, between 1991 and 2012, only 10 percent (559) of the funded projects were completed and operational. Projects that could not progress suffered from a lack of feasibility studies, missing approvals by the relevant department, or delays in the signing of implementation agreements. The audit also found that implemented projects included a project without an adequate flow of water and projects with improperly installed continuous flow measurements and data logging devices. It also found that Himachal Pradesh did not have a multidisciplinary committee to monitor issues that arose during project implementation. In addition, the audit noted that projects dried up riverbeds and reduced waterflow needed to sustain ecosystems. Finally, the audit found that required oversight of project design and construction, safety and management systems, the release of water downstream, and other matters was not always conducted.

The report recommended that the state government conduct studies with due diligence to produce reliable data and also create a committee to monitor issues that arise during project implementation.

The audit report can be found at:

http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/state_audit/recent_reports/Himachal_Pradesh/2012/Report_2/Chap_1.pdf

For further information, please contact iCED at iced@cag.gov.in and icedjaipur@gmail.com.



IRAQ: FBSA presents at the 16th INTOSAI WGEA Assembly Meeting

The Federal Board of Supreme Audit of Iraq (FBSA) attended the 16th INTOSAI WGEA Assembly Meeting held September 29 to October 2 in the Philippines. As a member of the subcommittee, FBSA submitted a presentation titled, "Performance Audit on Renewable Energy in Iraq" during the parallel session led by the SAIs of Indonesia and Morocco. The presentation reflected Iraq's experience in the field of renewable energy auditing.

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KUWAIT: SAI evaluates procedures for protecting against radiation exposure

The State Audit Bureau of Kuwait issued a report evaluating the efficiency and effectiveness of the Radiation Protection Department of the Ministry of Health.

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The report's objectives included confirming compliance with requirements developed to provide protection and safety from radiation that causes environmental pollution, and reviewing the willingness of the State Department to implement response plans in case of a radiation emergency. The report examined the network of radiation monitoring stations that covers all areas of Kuwait and a departmental commitment to collaborate with experts from the International Atomic Energy Agency. The report also highlighted the importance of information exchange among the concerned departments and the State's relevant authorities. The report recommended the development of a simulation system to assess the probability of exposure to radiation in a timely manner.



LITHUANIA: Audit finds biodiversity in Lithuanian national parks is protected but risk persists

The National Audit Office of Lithuania conducted a performance audit of five Lithuanian national parks to evaluate the effectiveness of the parks in ensuring the preservation of biodiversity.

The audit is part of an international cooperative audit involving the SAIs of Bulgaria, Croatia, Denmark, Lithuania, Norway, Poland, Sweden, and the Ukraine. The objectives of the audit are to analyse similarities and differences between the conservation of biodiversity and performance of the national parks, share audit experiences, and apply lessons learned.

The audit identified several findings. First, the administrations of the national parks in Lithuania are unable to regulate the flow of visitors, which makes it difficult for them to assess the impact of visitors on the landscape and biodiversity. In addition, administration staff levels have declined, yet both the areas supervised and the number of additional functions assigned to staff have increased with no additional resources allocated to address these issues. Further, the funding of the administrations of the national parks is derived from state budget appropriations allocated by the Ministry of the Environment and the Ministry of Culture, rather than the area under supervision. According to the audit, these appropriations are sufficient only for implementing the basic functions of the administrations. Moreover, while the administrations are involved in various projects funded by the EU and other international organisations and pursue other means to obtain additional funding, funding from these efforts represents only a small part of all funds received by the national parks.

The National Audit Office made recommendations to the Ministry of Environment, the Ministry of Culture, the State Service for Protected Areas, and the administrations of the national parks to assist with ensuring the efficient management of the national parks and the preservation of biodiversity. Specifically, the office recommended: (1)

updating their biodiversity strategies; (2) continuously assessing the impact of tourism on biodiversity; (3) assigning additional functions to administrations while taking into account their resources; and (4) increasing cooperation and the level of information sharing.

For further information, please contact Ms. Vaida Barizienė at Vaida.Bariziene@vkontrole.lt.



LUXEMBOURG: Audit finds Luxembourg missed the Kyoto Protocol's greenhouse gas target

On 24 February 2014, the Luxembourgish Court of Auditors presented to the Parliament its special report on Luxembourg's implementation of the Kyoto Protocol. Luxembourg's target under the Kyoto Protocol was to reduce its greenhouse gas emissions to 28 percent below 1990 levels between 2008 and 2012. This was the most ambitious emissions reduction target set by a European Union country.

The Court found that, by 2011, Luxembourg had reduced its emissions by about 8 percent—far short of its target. According to the report, the target was too optimistic. In addition, Luxembourg largely used flexible mechanisms to reduce emissions rather than domestic measures. This policy was not consistent with the rules of the Kyoto Protocol, which require flexible mechanisms to supplement domestic actions. Furthermore, the majority of projects supported by Luxembourg through the Clean Development Mechanism were based in fast growing, newly industrialised countries (China and India). Very few projects were based in partner countries of Luxembourg's development cooperation, despite one of the main objectives of the mechanism being the transfer of technologies to developing countries.

The Court also examined national measures implemented to reduce greenhouse gas emissions. Specifically, the Court examined subsidy mechanisms for the transportation and construction sectors—such as efforts to replace carbon-intensive vehicles with more energy efficient vehicles and conduct vehicle scrapping programs—and subsidies to encourage energy efficient home improvements. The audit found that data were not sufficient to determine whether the objectives had been reached, and that evidence was inconclusive on the environmental effectiveness and economic efficiency of the subsidies.

In its report, the Court agreed with the conclusion of the Organisation for Economic Co-operation and Development that “environmental policies lack a long-term vision” and recommended a comprehensive green tax reform to address the issue of climate change.

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The report is available at: http://www.cour-des-comptes.lu/rapports/rapports_speciaux/2014/kyoto.pdf.

For further information, please contact Ms. Isabelle Nicolay at isabelle.nicolay@cc.etat.lu.



NETHERLANDS: Audit examines tradable allowances and the environment

The Netherlands Court of Audit has published an English translation of its 2013 study on tradable allowances and the environment. A system of tradable allowances is a market-based instrument where the government grants permits to private companies to conduct activities that are, or may be, harmful to the environment. These activities include emitting carbon dioxide (CO₂), owning cattle that produce manure, or fishing. Such permits are tradable, as companies holding them may sell them to other companies. The Dutch government introduced the first trading systems in the 1980s for fishing and livestock-ownership quotas.

The study examined the trading systems for CO₂ and nitrogen oxide (NO_x) emission permits, and for fishing, milk, and livestock quotas. The report, based on a literature survey, takes the format of 25 questions and answers and describes the conditions required for an efficient and effective system of tradable allowances.

For further information, please contact Ms. Willemien Roenhorst of the Netherlands Court of Audit at w.roenhorst@rekenkamer.nl



NEW ZEALAND: One size does not fit all – auditing climate change in the Pacific

The Pacific Association of Supreme Audit Institutions (PASAI) Auditors-General recently undertook a Cooperative Performance Audit on climate change adaptation and disaster risk reduction. The countries of the Pacific are among the most vulnerable to the real and daily threats of climate change, including rising sea-levels, cyclones, tsunamis, food security, and coastal erosion. Pacific governments also face challenges in recovering from natural disasters and extreme weather events. While all countries in the Pacific are exposed to climate change, their vulnerabilities are not uniform—one size does not fit all.

Themes and issues

The audit was the fourth in a program of cooperative audits on environmental topics undertaken by PASAI Auditors-General, which has had ongoing support from the Asian Development Bank, the INTOSAI Development

Initiative, and the Australian and New Zealand governments. The approach adopted enabled the ten SAIs involved in PASAI to develop country-specific objectives and lines of inquiry. Three main themes emerged: (1) preparedness for climate change, (2) planning for and managing climate change effects such as coastal erosion, and (3) managing climate change effects on food security. Eight of the ten SAIs have published their individual country audits. The regional overview report, due for release in February, 2015, found that the audited Pacific Island governments are not sufficiently prepared for current or future impacts of climate change and do not have adequately funded or planned responses in place to adapt to negative effects of climate change.

Country-specific responses

Positive impacts from the Cooperative Performance Audit are already emerging at the country level. For example, the Federated State of Micronesia–Kosrae has finalised a disaster and preparedness plan. In addition, the Federated State of Micronesia–Pohnpei has draft legislation on climate change and has rolled out public education and awareness programs throughout the country.

A continued focus

Environmental auditing has gone from strength to strength in the Pacific region under PASAI's Cooperative Performance Audit program, with notable gains in capacity and improved environmental outcomes. SAIs are keen to see that the gains from the program continue. Environmental topics remain highly relevant for the Pacific region and need continued focus and attention.

For further information, please contact the coordinator of the PASAI Regional Working Group on Environmental Auditing, Jonathan Keate at jonathan.keate@oag.govt.nz.



ROMANIA: Court of Accounts audits the National Forest Fund

In 2014, the Romanian Court of Accounts conducted a performance audit of the national forest fund between 2010 and 2013. The audit team analyzed the following:

- evolution of the national forest fund structure and the external forest vegetation;
- institutional capacity of the entities entrusted with managing the national forest fund;
- administration, development, and management of forests under the forestry regime; and
- exercise of powers by auditees in controlling illegal logging, timber movement, sawmills, and warehouses.

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The audit team found:

- The public forest property administered by the *National Forest Administration Romsilva*, representing about 49 percent of the national forest fund, decreased by over 3.1 million hectares since 1990. This decrease was due mainly to repossession of property by former owners or their heirs, including, in many cases of areas larger than those to which they were entitled.
- Forestry policies are incoherent and inconsistent.
- Excessive fragmentation of forest properties has hampered their management and sustainable development.
- Regeneration has failed to offset the effect of wood harvesting, including illegal logging.
- From 2005 through 2013, 156,000 hectares of degraded lands were planned of reforestation, of which only 18,500 hectares were actually forested (i.e., about 12 percent).
- In this same period, only 388 hectares of forest belts were funded, meaning that at the beginning of 2014, the area of forest belts in Romania was less than in 1957 by 5,500 hectares.
- The forestry sector could have taken advantage of an almost EUR 800 million grant under the Rural Development Programme for 2007 through 2013. This funding would have provided significant financial support if conditions for absorbing these funds had been created.

The audit team recommended actions that would help the recovery of the national forest fund, such as ensuring the development and functioning of an integrated information system for tracking wood materials.



TANZANIA: NAO audits management of wildlife hunting activities

Tourism for wildlife hunting and game viewing is an important contributor to Tanzania's economy, but increases in poaching threaten this economic sector and the livelihood of communities near hunting and game areas. In 2013, the National Audit Office published the results of an audit of the Ministry of Natural Resources and Tourism's (MNRT) management of wildlife hunting activities. The objective of the audit was to determine whether MNRT appropriately monitored wildlife hunting activities and managed revenue generated from game reserves and controlled areas from 2009 through 2012. The National Audit Office concluded that MNRT failed to

adequately enforce wildlife law, monitor and manage resources for hunting activities, and ensure that revenues were fully collected and distributed.

The audit's key findings include:

- *Enforcement of wildlife conservation law*
 - MNRT had not identified and mapped areas prone to poaching.
 - MNRT did not meet the required coverage levels for surveillance in 2010 thorough 2012. In particular, patrols were not regularly conducted during the rainy season, despite consistent poaching incidents.
 - Persons found guilty of poaching were given fines that fell below the amount prescribed in the law.
- *Monitoring and management of hunting activities*
 - MNRT did not collect and analyze data related to animal quotas in order to monitor and ensure hunting companies complied with applicable requirements.
 - In almost half of the cases, MNRT did not record the habitat or ecology where animals were hunted.
- *Collection and distribution of revenue*
 - MNRT did not use scientific methods to estimate its revenues; rather, the agency estimated its revenues based on previous performance.
 - MNRT had lost a total of about TZS 2.7 billion (USD 1.7 million) as of December 2012 because 36 companies did not make timely payments of the government's bills for photographic tourism.

The National Audit Office made several recommendations to MNRT, including to:

- Conduct a risk analysis that includes the realistic setting of targets and allocation of resources;
- Adopt appropriate strategies to eradicate poaching during rainy seasons;
- Collaborate with judicial stakeholders to ensure that penalties are high enough to deter poaching;
- Develop a tool for collecting data related to animal quotas and animal habitats;
- Assess the revenue earned from wildlife activities to form a benchmark for future revenue estimates; and,
- Establish a system for the timely collection of revenue from photographic tourism.

For the full report, see http://nao.go.tz/?wpfb_dl=12.

For further information, please contact Ms. Elizabeth Augustino at eaugustino@nao.go.tz.

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UKRAINE: EUROSAC Working Group on the Audit of Funds Allocated to Disasters and Catastrophes is established

In June 2014, the Accounting Chamber of Ukraine provided an update to the EUROSAC Congress on work completed by the EUROSAC Task Force on the Audit of Funds Allocated to Disasters and Catastrophes. At the Ninth EUROSAC Congress in The Hague, the Congress changed the group from a task force to a working group. The Accounting Chamber of Ukraine will chair the working group through 2017 in cooperation with the INTOSAC and EUROSAC Working Groups on Environmental Auditing. The Congress directed the working group to present its new work plan to the EUROSAC Governing Board in 2015.

Consistent with its mission—to coordinate and consolidate the efforts of the European SAIs to help national governments develop effective and efficient disaster and catastrophe prevention and mitigate their impacts—the working group will conduct joint international audits on this topic, implement the International Standards of Supreme Audit Institutions, and conduct relevant training and advisory activities for its members.

The working group currently has 16 confirmed SAI members. The Accounting Chamber of Ukraine invites colleagues from other SAIs to participate and collaborate with the working group on this important work that will help ensure the safety of millions of people.

For further information, please contact the EUROSAC Working Group Secretariat, the Accounting Chamber of Ukraine, at Tel. +380 44 235 03 24, Fax +380 44 234 20 30, Email rp25@ac-rada.gov.ua.



UNITED KINGDOM: NAO is auditing nuclear power and flood risk management and recently reported on environmental protection and renewable energy contracts

The United Kingdom's National Audit Office (NAO) has an audit underway assessing a proposed contract for the construction of a new nuclear power plant. Over the autumn and summer, the NAO reported on flood risk management, the government's approach to environmental protection, and contracts for renewable electricity.

In 2013, the UK government agreed to initial contract terms on Hinkley Point C, the first new nuclear power station to be built in the UK in over 15 years. The

government is working towards signing the contract, together with a loan guarantee. The NAO is working to produce a report for Parliament on the contract's risks. Following widespread flooding in large parts of the UK during 2013, the NAO reviewed the strategic management of future flood risk, focusing on the allocation of funds for flood management projects. The NAO published its report in late Autumn 2014: <http://www.nao.org.uk/report/strategic-flood-risk-management-2/>.

In June 2014, the NAO reported to the parliamentary Environmental Audit Committee on overarching changes since 2010 in the government's approach to environmental protection. The briefing included an assessment of progress in ten areas of environmental protection: atmospheric pollution and climate change; air pollution; biodiversity; forestry; soil; flooding and coastal protection; waste; the freshwater environment; water availability; and the marine environment. The full briefing can be found at: <http://www.nao.org.uk/report/nao-briefing-environmental-protection/>

The NAO also published a report in June 2014 on the Department of Energy and Climate Change (DECC) rationale and selection of projects for early contracts for renewable electricity. The DECC awarded the contracts for difference, which will cost consumers some GBP 16.6 billion, without price competition. The NAO reported that it was not convinced that it was essential to award so many early contracts without price competition to meet the government's 2020 target for renewable energy. The NAO recommended that the DECC work to maximise price competition in this market. NAO's full report on renewable energy can be found at: <http://www.nao.org.uk/report/early-contracts-for-renewable-electricity/>

For further information, please contact Jill Goldsmith at Jill.Goldsmith@nao.gsi.gov.uk.



UNITED STATES: GAO identifies improvements needed to manage underground injection of fluids associated with oil and gas production

In a June 2014 report, the U.S. Government Accountability Office (GAO) completed an audit of the U.S. government's Underground Injection Control (UIC) program for managing class II wells—that is, wells that are used for injecting wastewater associated with oil and gas production. The U.S. Environmental Protection Agency (EPA) estimates that each day in the United States at least 2 billion gallons of fluids are injected into underground geologic formations to enhance oil and gas production or to dispose of fluids brought to the surface during the extraction of oil and gas resources. As of 2012,

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more than 170,000 class II injection wells existed across the United States.

GAO found that EPA has approved 39 states to manage their own class II programs, while EPA regional offices are responsible for managing programs in the remaining states. EPA regional offices and states use various resources to manage class II programs, including about USD 11 million per year in EPA grant funding, state funding, and federal and state personnel. Class II programs from the eight states GAO reviewed have safeguards, such as construction requirements for injection wells, to protect against contamination of underground sources of drinking water. However, the safeguards do not address emerging underground injection risks, such as seismic activity and overly high pressure in geologic formations leading to surface outbreaks of fluids. In addition EPA has not updated guidance for determining which oversight activities are essential since the 1980s.

GAO concluded that, as domestic oil and gas production increase, demand for underground injection wells will continue to increase, and EPA does not have the ability to effectively oversee and enforce the state programs. GAO recommended, among other things, that EPA review emerging risks related to class II program safeguards to ensure that the safeguards are up-to-date and take steps to improve the agency's oversight of state programs and enforcement of state regulations.

Audit reports are available at GAO's website
www.gao.gov.

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