State Audit Office of the Kingdom of Thailand and the Contribution in Environment and Ecosystem

Authors

Dr. Sutthi Suntharanurak

Pitikhun Nilthanom

Nunnapat Rueangsri

Phattraravee Parvaputsakul

Chomprang Wongrusmeeduan

Wannisa Nokmud

Pimpisut Pansook

State Audit Office of the Kingdom of Thailand

Abstract

State Audit Office of the Kingdom of Thailand and the Contribution in Environment and Ecosystem

This paper discusses the role of the Supreme Audit Institution known as SAIs, which contributes to the environmental issues and preserving the ecosystem through the Environmental Performance Audit (EPA). Presently, EPA is one of the categories of Performance Audit that dealt with a specific subject matter like environment and ecosystem. Sustainable Development is the foundation concept of EPA. The State Audit Office of the Kingdom of Thailand (SAO) as SAI Thailand has conducted EPA since 1993; however, the paper explains the EPA development in Thailand for four phases from 2006-2020. During fifteen years, the EPA in Thailand could improve environmental quality through careful selecting audit topics; audit planning, execution, reporting, and communication.

The paper represents the role of SAO in the international audit communities like INTOSAI and ASOSAI Working Group on Environmental Audit. Meanwhile, it discusses the contribution of the environment and ecosystem, which protects the environment, preserves the ecosystem, and promotes good governance in environmental management. However, SAO further develops EPA to SDG audit, which focused on audit criteria not only environmental approach but also including equity and ethic.

Keywords: Supreme Audit Institution (SAIs), Environmental Performance Audit (EPA), SDG audit, environment, governance

State Audit Office of the Kingdom of Thailand and the Contribution in Environment and Ecosystem

Environmental issues become more significant nowadays. As a public audit organization, the State Audit Office of the Kingdom of Thailand (SAO) has tried to expand the audit scopes to environmental performance audit (EPA)¹ which monitor not only the public spending, but also concerns about the environmental impacts and ecosystem for sustainable development. Moreover, SAO has also engaged with global communities of Supreme Audit Institution (SAIs) such as INTOSAI and ASOSAI Working Group on Environmental Audit (WGEA) to exchange knowledge and experiences in order to develop the environmental audit in Thailand.

The content of this paper is divided into three parts including 1) the introduction to Environmental Performance Audit (EPA), 2) the development of EPA in Thailand and the contribution and 3) future forward of EPA in Thailand.

1. Environmental performance audit

1.1 Background and definition of EPA

Greater awareness and understanding of environmental issues over the past 20 years have led governments (at the national, sub-national, and local levels) to rethink their roles and responsibilities as environmental stewards. Over this period, there has also been increasing concern that organizations should be held accountable for their actions that affect the environment. With regard to national public agencies, it has been the traditional role of supreme audit institutions (SAIs) to hold these state-level organizations to account for their financial transactions. Increasingly though, SAIs around the world are also holding federal bodies to account for their environmental performance through the use of environmental auditing tools and techniques.

The term "environmental auditing" is a convenient label generally used to describe a variety of activities, including management audits, product certification, governmental control measures, and many other activities, which bear little or no relation to an external audit. SAIs also often carry out activities that, by definition, do not qualify as audits, yet contribute to improving government practices. In this context, the term "environmental auditing" is used solely in reference to an independent external audit of environmental issues.

Environmental performance audit (EPA) is an organic integration of government audit, environmental audit and performance audit. Environmental Performance audit learns the theory and technical methods of performance audit and applies it into the practice of environmental issues. EPA develops its own unique set of theory and practice.

Public performance audit has the characteristics of being mandatory and authority, because the audit institution relies on the force of state and nation. Environmental performance audit is an integrated analysis system to identify they fulfill fiduciary responsibilities of environmental performance and evaluate the **economy, efficiency, effectiveness,** and then make recommendations on audit decision, to ensure that the

¹ Environmental Performance Audit (EPA) has objective on measuring ecosystem and the effects of certain activities on the environment against set criteria or standards.

2

environmental performance of a fiduciary responsibility has been carried out effectively. All these activities are carried out by the national audit office, internal audit or audit organization based on social auditing standards of environmental performance status of the system.

Combined with the definition of environmental performance auditing above, the environmental performance audit is a controlled activity to ensure that the government can effectively fulfill its fiduciary responsibility to environmental performance, the independent audit organizations or persons monitor the economic activities of departments and government as well as its management activities of the economy based on forensic results, and give them the audit-related constructive recommendations.

1.2 INTOSAI WGEA²

The International Organization of Supreme Audit Institutions (INTOSAI) is the professional organization of supreme audit institutions (SAI) in countries that belong to the United Nations or its specialized agencies. There are seven regional organizations of supreme audit institutions: Latin American and Caribbean (OLACEFS), Caribbean (CAROSAI), Europe (EUROSAI), Africa (AFROSAI), Arabic countries (ARABOSAI), Asia (ASOSAI) and the South Pacific (PASAI) but not all SAIs are members of a regional organization. INTOSAI promotes the exchange of ideas and experiences between SAIs around the world through its triennial congress called the International Congress of Supreme Audit Institutions (INCOSAI).

During the 14th INCOSAI meeting in October 1992, the INTOSAI membership indicated a strong interest in the roles and activities of Supreme Audit Institutions in issues of environmental auditing. Therefore, the Congress approved the formation of a **Working Group on Environmental Auditing (WGEA).** The WGEA started out with 12 countries and has since grown to a membership of 77, making it the largest INTOSAI working group.

The Working Group aims to improve the use of audit mandate and audit instruments in the field of environmental protection policies, by both members of the Working Group and non-member Supreme Audit Institutions (SAIs). Moreover, WGEA has goals to Increase the expertise in environmental auditing globally and to enhance environmental governance with high-quality contribution and visibility. The Working Group's special attention are Joint auditing by SAIs of cross border environmental issues and policies, and the audit of international environmental accords.

The main substantive themes for the WGEA are 'fresh water' in 2001, 'waste' during 2002-2004, 'biodiversity' during 2005-2007 and 'climate change' during 2008-2010 respectively. Other interesting themes are Sustainable Development, Natural Resources, energy and sustainable transport. The examples of EPA reports are Adaptation to Climate Change and Ocean Acidication in the Marine Environment (2016), Auditing Forests (2010), SAIs Experiences and the Methodological Tools in Auditing Water Issues (2013), Towards Auditing Waste Management (2004), etc.³

² Please see more in https://www.environmental-auditing.org/about/

³ Please see more in https://www.environmental-auditing.org/media/113749/wgeatree.pdf

1.3 ASOSAI WGEA⁴

Apart from INTOSAI WGEA, the State Audit Office of the Kingdom of Thailand (SAO Thailand) is also a member of the Asian Organization of Supreme Audit Institutions (ASOSAI) Regional Working Group on Environmental Auditing (RWGEA) which was formally established at the 8th Assembly of ASOSAI in Chiang Mai, Thailand in October 2000. ASOSAI has grown from the original 11 SAIs, to a membership of some 45 SAIs.

The working group has visions to promote good governance of natural resources and environment protection by enabling SAIs to help their governments improve environmental performance and to protect health and safety of their citizens. Moreover, the goals of ASOSAI WGEA are to share ideas and experiences of information and updating viewpoints on environmental audit, the environmental impacts, challenges and practices among ASOSAI member countries for better solutions to international environmental issues.

As a member of both INTOSAI WGEA and one of the founding members of ASOSAI WGEA, SAO Thailand also gives the importance to the environmental issues for more than ten years. Presently, SAO implemented the concept of sustainable development and environmental auditing to play a key role in protecting the environment and ecosystem in Thailand. Furthermore, SAO always shares environmental audit experiences in the international communities and the WGEA.

Moreover, SAO has participated in several activities of ASOSAI WGEA for the past 20 years. SAO used to be the host of the 7th Seminar on Environmental Auditing, and the 6th Working Meeting of ASOSAI WGEA was held in Khao Yai, Nakhon Ratchasima, Thailand. We also volunteered to be a leading SAI of Cooperative Audit on Water Environmental Protection. The leading SAI will prepare formats, forms, and templates of a cooperative audit⁵. Additionally, SAO makes the compendium report cooperative audit, which collected the audit results of all participating SAIs and other vital issues and also provided lesson learn for the future cooperative audit for environmental issues (see more box1).

Box1: Lesson learn from Cooperative Audit on Water Environmental Protection

After exploring the model for cooperative audit from PASAI and EUROSAI, it found that such model focused on environmental auditing which is based on environmental issues such as the sustainable management of water resources, cross country borders and boundaries.

For the benefits of the Cooperative Performance Audits or CPA, it supported the performance audit capacity in respect of identifying the effectiveness, efficiency and economy of public administration. Moreover, CPA could raise not only the SAIs' capacity but also the quality of conducting the audit and processing the audit reports.

Eventually, adopted model for ASOSAI WGEA's cooperative audit could be divided into 4 steps: (1) topic Identification, (2) planning meetings, (3) audit fieldwork, and (4) reporting meeting.

Source: State Audit Office of the Kingdom of Thailand. (2019)

⁵ Cooperative audit is an audit is carried out by two or more SAIs participating from one region or across the regions.

⁴ Please see more in http://www.asosaiwgea.org/

2. Environmental Performance Audit (EPA) in Thailand

2.1 The development of EPA in Thailand⁶

Since 2005, the State Audit Office (SAO) of the Kingdom of Thailand has paid attention to environmental audits and started contributing the impact of public audit in environmental issues to achieve sustainable development. This research depicts the SAO's **four-phase approach** in carrying out environmental performance audits and cultivating national and global sustainability. We started from the phase 1) strategic research on environmental audit in Thailand, phase 2) strengthening Environmental Performance Audits, phase 3) establishment of the Environmental Audit Office and phase 4) implementation of the environmental concept into the strategic plan for the performance audit.



Figure 1: Development stages of environmental performance audit in Thailand

1. Phase One: Existing Research

According to figure 1, the EPA in Thailand has been developed from the **3E principles—Economy, Efficiency and Effectiveness.** However, the SAO, charged with monitoring government compliance with environmental laws, rules, regulations and council of minister resolutions, has actively demanded to improve this approach.

In 2005, SAO was assisted by the Canadian Audit and Accountability Foundation (CCAF) providing fellowships and management internships to develop a robust environmental audit concept and became a mentor for SAO. Throughout the program, the senior auditors had to complete a nine-month placement at a Canadian legislative audit office, while internships allowed SAI managers to learn managerial practices and develop strategic projects.

During the fellowship, Dr. Sirin Phankasem, Thailand's Deputy Auditor General, was selected to participate in the CCAF fellowship program and developed a strategic paper on "Moving to Sustainable Development: Focus on Environmental Auditing." (Phankasem, 2006) The paper provided planed strategies to integrate environmental issues more fully into SAO audit work, encouraged staff cooperation at

⁶ Please see more in http://intosaijournal.org/improving-environmental-performance-audits-cultivating-sustainability/

all levels and continuous policy support to achieve long-term environmental and sustainable development.

The main strategies to integrate the environmental issues to audit work at the SAO Thailand are 1) to engage senior management in environmental auditing, 2) to integrate environmental issues into the ongoing audit plans for specific entities, 3) to establish a team dedicated to environmental auditing, 4) to discuss audit results and lesson learned exercise to identify the areas that need improvement and 5) To develop a long-term strategy to integrate environmental and sustainable development issues into audit planning.

In 2006, the first implemented strategy of SAO in environmental performance audit on **noise pollution caused by the Suvarnabhumi Airport** which seriously affected nearby communities. According to the audit, the International Civil Aviation Organization (ICAO) overseeing airport operations claimed that solving the airport's noise dilemma required specific problem identification and cost-effective alternative noise reduction measures. The proposed measures included: (1) procuring quieter aircraft; (2) land-use planning and management, (3) noise abatement, and (4) revising operational procedures and restrictions. The ICAO developed policies associated with each measure and established a system to collect fees from those causing the noise-related problems to pay for remedies for community members affected by the noise.

The SAO began by evaluating efforts to resolve noise-related issues. Audit objectives included assessing the measures to mitigate problems experienced by those living near the airport affected by elevated noise levels; identifying problems and barriers in dealing with noise impacts; and providing recommendations to solve the problems.

Three audit findings were uncovered. First, the compensated payments for people affected by airport noise were significantly delayed. Second, the budget for problem resolution for nearby communities suffering from increased noise levels increased sharply. Last, the measures to resolve airport noise pollution were not implemented.

2. Phase Two: Strengthen Environmental Performance Audits

In 2010, the SAO received grant from the World Bank to develop environmental performance audits and requested academic and technical support from the National Audit Office (NAO) of Estonia. Subsequently, the SAO hosted an international workshop on environmental audits, where NAO Estonia audit staff shared experiences in recognizing and understanding sustainable development concepts and executing environmental performance audits.

Later, SAO was provided granted by Die Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and subject matter assistance from the International Organization of Supreme Audit Institutions (INTOSAI) and the Asian Organization of Supreme Audit Institutions (ASOSAI). The SAO coordinated a planning event for implementing a regional cooperative environmental audit on water issues, which would focus on Mekong River Basin management.

Though the audit objectives of Mekong River which would be well-managed and used sustainably and equitably was finally achieved, there were some challenges because of severe problems arising from both the unsustainable use of water and the effects of climate change. Governments of countries along the river basin formed joint practices for transboundary water management. From this stage, we concluded that SAO could strengthen the environmental performance audits by *using learn by doing*. The SAO's accumulated audit experiences were shared among SAIs, and the feedback was used to further improve and strengthen environmental performance audits.

3. Phase Three: Establish the Environmental Audit Office (EAO)

In 2017, the Environmental Audit Office (EAO) was established to focus on performance audits and environmental impacts. The EAO has mandate to review public contracts, concessions and projects, studies and provide recommendations on government programs having the potential to cause environmental damages. Moreover, it applies compliance audits to review audited entities' conformity to EAO recommended actions and international environmental obligations.

Environmental performance audits aim to pave the way for **auditing Sustainable Development Goals (SDGs)** which is crucial and at the forefront of the SAO's mission. The 2030 Agenda of UN SDGs seems to be involved in several environmental dimensions. According to the United Nations Environment Program (UNEP), more than half of the SDGs possess an environmental focus or address natural resource sustainability. With more than 86 targets concerned with environmental sustainability, and each of the 17 SDGs having at least one of these targets, the SAO continues to research auditing SDG implementation in an effort to develop future SDG-related environmental performance audits.

4. Phase Four (current stage): include the environmental concept into the Strategic Plan for the Performance Audit (SSPA)

According to the State audit policy 2018-2022, The State Audit Commission (SAC) promotes SAO to prepare for the social change in the digital era in connection with guidelines on the country's development under the National Strategy and the development of Thailand 4.0. For this reason, the five performance audit offices of SAO proposed the Strategic Plan for Performance Audit (SPPA) for a long-term plan. The objectives of preparing the strategic plan for performance audit as follows;

- (1) To develop the audit planning under the overview approach, which followed the ISSAI implementation on a Performance audit.
- (2) To set up the tool which scoped on the direction of the new state audit act 2018, state audit policy 2018-2022, and SAO strategic plan 2019-2022, which covered the long-term plan 3-5 years.
- (3) To reflect the direction of performance audit in Thailand for each year that coincided to 20 years National Strategy and national polices.
- (4) To select suitable audit topics that led to significant audit findings and constructive recommendations for improving the system.
- (5) To reduce the overlapping among performance audit offices in the headquarter and performance audit teams in the regional audit offices.

The concept of an environmental performance audit included in the strategic plan. The implementation of the environmental concept gives values and benefits for environmental perceptions, that is, (a) supporting environmental protection, (b) preserving ecological system, and (c) promoting governance in environmental management.

2.2 The analysis of EPA in Thailand

In this part, we will discuss about how EPA in Thailand create the values and benefits to the environment. The dataset and environmental audit reports of SAO Thailand are also officially published in INTOSAI WGEA website⁷.

Overall, there are three main types of audit including financial audit, compliance audits and performance audit. Although environmental audits can be conducted as financial or compliance audits, they are most commonly conducted as performance audits. They mainly focus on 3E principles-Economy, Efficiency and Effectiveness-in the perspective of environmental impacts.

According to the figure 2, environmental audit cases in Thailand during 2004-2017 are clearly performance audit, showing 63% or 70 out of total 111 reports. For example, EPA report of "Auditing noise pollution caused by the Suvarnabhumi airport's operations" which the audit team attempted to apply a conceptual framework about environmental performance audits and "The Performance audit on wastewater treatment projects under the Provincial Environmental Quality Management Action Plan" whether the projects complied with the purposes or achieved its goals.

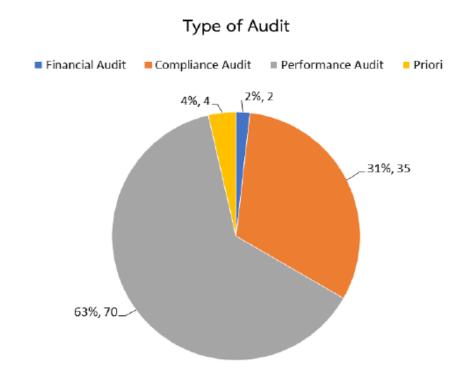


Figure 2: Type of Environmental audit in Thailand (2004-2017)

Relative to type of audit, the audit objectives are further categorized into seven objectives including Fair presentation of financial statements and expenditures, Compliance with international environmental agreements, Compliance with domestic environmental legislation, Compliance with domestic environmental policies, Performance of government environmental policies and programs, Environmental impacts of non-environmental government programs and Evaluate environment impacts of proposed environmental policies and programs.

-

⁷ Please see more in INTOSAI WGEA database https://wgea.org/audit/

In accordance with the EPA, the major audit objective of environmental audit mainly focused on audit objective of Performance of government environmental policies and programs showed in figure 3, depicting 43% or 66 out of total 153 reports, followed by Fair presentation of financial statements and expenditures (22%, 34) and Compliance with domestic environmental policies (18%, 27) respectively.

Main Audit Objective

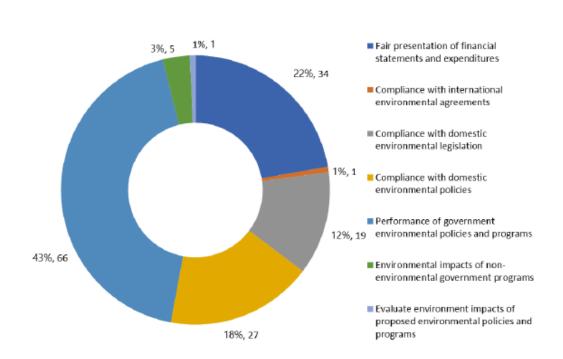


Figure 3: The main audit objectives of EPA in Thailand (2004-2017)

According to the figure 4, among the environmental audit issues including governance, waste air, ecosystems, human activities and selectors, natural resources, water and others related to disaster management; governance is the most interesting issue showing 40% or 63 out of the total 162 reports. Moreover, SAO Thailand paid attention to the areas of waste (16%, 25), Ecosystem and human activities (14%, 22 each) and selectors which are highly recognized in the audit reports.

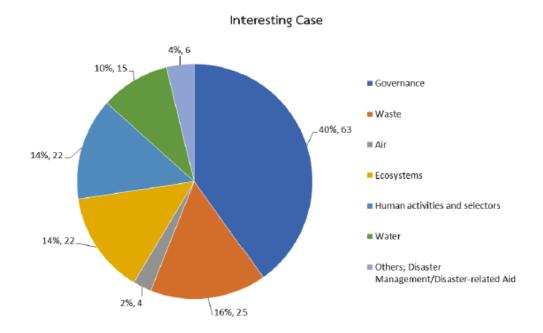


Figure 4: The interesting audit issues of EPA in Thailand (2004-2017)

2.3 Discussion

From the analysis above, we can conclude that environmental audit in Thailand are mostly performance audit and focused on audit objective of Performance of government environmental policies and programs. The main environmental audit issue is governance, followed by waste, ecosystems and human activities which are also highly recognized in the audit reports.

From the past audit works, there are three areas of EPA in Thailand including (a) natural resources and ecological system such as auditing forest, water resources, and wetland, (b) environmental impacts from pollution and infrastructures such as noise, air, wastewater and invasive plants, and also (c) auditing environmental and disaster management such as flood prevention. These cases could create values and benefits for environmental perception. The distinguished EPA reports could be categorized for three contributions as follows (table 1).

Contributions	Example of audit report	Audit results
1. Preserve the natural resources and ecological system	Performance audit of wetland conservation	Recommended to establish detailed regulations and clear directions on environmental impacts
2. Protect environmental effects	Bangkok Super Skywalk Projects: Preventive Environmental Audit	Recommended to review the cost- effectiveness of the project and environmental effects
3. Promote environmental management	Performance Audit on Wastewater Treatment	Recommended the government to provide financial, legal, and institutional arrangements to support environment

Table 1: Contribution and examples of EPA in Thailand

(1) EPA could preserve the natural resources and ecological system.

The example is "performance audit of wetland conservation" (OAG, 2016). The audit found that regulations and directions for putting the Cabinet resolutions into action remained unclear, especially for government agencies. Most relevant government agencies used wetlands without action plans approved by authorized committees. In some cases, no environmental impact assessment had been done before launching projects that could affect wetland characteristics. Also, the audit found several infrastructure projects had been built in wetlands where such uses were prohibited. Even though the Thai Government signed the Ramsar Convention in 1998 and the Government later approved two Cabinet Resolutions on wetlands, the convention and cabinet resolutions were not adopted.

The SAO has recommended that the Office of Environmental Policy and Planning—the national focal point of the Ramsar Convention—establish detailed regulations and clear directions or guidance regarding the resolutions for relevant agencies. Those actions would help assure effective conservation and sustainable uses of wetlands.

(2) EPA could protect environmental effects.

One of the obvious examples of performance of government on environmental policies is the audit report on "Bangkok Super Skywalk Projects: Preventive Environmental Audit" (Suntharanurak, 2013) Under the concept of sustainable development, SAO Thailand concerns about environmental degradation from mega public works construction. Therefore, the preventive environmental audit focuses on sufficient information for decision making before launching a project leading SAO to do the feasibility study report, the Environmental Impact Assessment (EIA) report, and public hearing for stakeholders. The audit objective was to review the cost-effectiveness of the project, which expected to cost 10 billion Baht (334 USD million); to consider its future environmental impact.

The audit findings composed of 1) insufficient and imperfect information for decision making on the project investment and 2) inadequate consultation to obtain public opinion on the project. After the recommendation, Bangkok Metropolitan Administration (BMA) decided to cancel the second phase of the Super Skywalk project.

(3) EPA could promote environmental management.

For example, during 2018-2019, SAO conducted the Performance Audit on Wastewater Treatment. The findings show the remaining sticky issues in wastewater treatment in Thailand. Most local administration bodies fail to adequately and effectively provide wastewater treatment services since their capacity is limited, and the Government also fails to provide sufficient supports for the local organizations. As a result, recommendations focus on the prior role of the Government to stipulate adequate financial, legal, and institutional arrangements to ensure that the sticky issues in wastewater treatment would be solved.

We concluded that the values and benefits of environmental performance audits as follows. Firstly, **environmental performance audits could improve project management**. For example, audit recommendations suggested to reduce risks and propose better mitigation measures. Some suggestions adopted to better governance and more precise responsibilities. Moreover, **environmental performance audits could recover environmental quality.** For example, some audit reports recommended how to use natural resources under the concept of sustainable development.

3. The contribution and future forward of EPA Thailand

The contribution of SAO Thailand on environmental performance audit can be divided into three areas including 1) preserve the natural resources and ecological system, 2) protect environmental effects and 3) promote environmental management. As discussed above, the benefits of EPA are not only to improve the project management, but also to recover environmental quality. The environmental impacts caused by the public projects also need to be concerned. Therefore, EPA aims to provide constructive recommendations for the audited entities to minimize the risks that cause harm to the environment.

To share knowledge and experiences of EPA among Supreme Audit Institutions (SAIs), INTOSAI has also established Working Group on Environmental Audit (WGEA) and the WGEA Steering committee in order to strengthen the standards of environmental audit in public sectors.

3.1 INTOSAI WGEA Steering committee

The INTOSAI WGEA Steering Committee is a management and decision-making committee of the working group on environmental audit (WGEA). It takes a role in operational support and strategic direction and evaluates whether the knowledge sharing of WGEA is consistent with INTOSAI's strategic goals and objectives. The main tasks are to considers and recommends work plan, approves overall project management system developed by Chair, reviews, advises on and approves project-specific work plans, progress reports and project drafts and provides strategic advice to Chair on initiatives related to long-term vision, relationship building.⁸

As SAO Thailand is a member of INTOSAI WGEA and the steering committee, we have contributed the knowledge and experiences of environmental audit to other members and also pay an important role in strategic management to promote the directions and importance of environmental impacts from public auditing. Moreover, SAO plan to initiate the activities to raise awareness of the auditors on environmental audit related to SDGs.

3.2 SDGs audit related to EA

At present, the 2030 Agenda for Sustainable Development Goals (SDGs) initiated by the United Nations. In Thailand, SDGs have integrated into the National Strategy 2018-2037 and the 12th National Economic and Social Development Plan (2017 –2021), resulting from that all government agencies have to be in line with SDGs. With the roles of the Supreme Audit Institution (SAI), we can contribute to these goals through the quality of public audit work. Adopting by INTOSAI, SAI should devote to ensure that the governments conform to financial discipline and accurate reporting, policy, and procedural compliance and through performance auditing. The effective policies and programs deliver to ensure the achievement of our countries' development of sustainability.

As mentioned before, the 2030 Agenda seems to be involved in several environmental dimensions. According to the United Nations Environment Program (UNEP), more than half of the SDGs possess an environmental focus or address natural resource sustainability. With

⁸ Please see more in https://www.environmental-auditing.org/media/1092/roles-and-responsibilities.pdf and https://www.environmental-auditing.org/about

more than 86 targets concerned with environmental sustainability, and each of the 17 SDGs having at least one of these targets, the SAO continues to research auditing SDG implementation in an effort to develop future SDG-related environmental performance audits.

In Thailand, SDG audit development started from **Research to Policy and Practices** in a performance audit.



Figure 5: Auditing SDGs: From research to Policy and Practice

Firstly, SAO researched during 2016-2017, began with the research question of *how to implement the auditing SDGs in Thailand*. The main research findings divided into micro and macro views. From a micro perspective, the SDG audit might implement various audit methodologies as economic evaluation and impact assessment. **Moreover, the audit criteria might be extended from 3E to 6E** (figure 6), meaning we should expand the audit scope from economy, efficiency, and effectiveness to cover **environment, equity, and ethics** as well. In a macro view, the State Audit Commission should set the State Audit Policy to strengthen the SDGs audit for SAI Thailand, which later successfully implemented during 2018-2022.



Figure 6: The development of audit criteria from 3Es to 6Es

13

3.3 Future plan of EPA Thailand

In order to response to the commitment of INTOSAI and the State Audit Policy on environmental performance audit and SDG audit, SAO Thailand has initiated the activities by engaging with academic institution to adapt and develop the capacity of auditors to be catch up with the trend of sustainable development. Moreover, we plan to gain in-depth knowledge in academic fields and raise awareness for government agencies and citizens in the future.

We engaged with stakeholders in an academic called "SDG Move," ⁹ which is the SDG Think Tank operated under the faculty of Economics, Thammasat University. We have a plan to provide four main activities, including the **SDG101 workshop, E-blending course, action research, and seminar** (figure 7) to share the research finding in the SDG audit. All activities aim to strengthen the knowledge of SDG audit for auditors, to gain insight and practices of SDGs from the research and to disseminate the result of audit work to external stakeholders. The activity plans are flexible and can be done several times to ensure that knowledge is transformed into practices.



Figure 7: Activities for development SDG audit in Thailand

SDG 101 Workshop aims to share essential knowledge of SDGs to the auditors. It is the most crucial foundation of the overall assessment since it provides auditors a capacity development to deal with auditing SDGs. In the first phase, the team of SDG move provides knowledge and enhance understanding of the importance of SDG in both macro and micro views to auditors in the workshop. The content includes the interdependence of each SDG's goal as a basis of knowledge for the SDGs Auditing examination.

E-blending Course comes next to provide intensive materials of SDG auditing. The leading target group is performance auditors who have joined SDG101 workshop in the first phase. This activity expects the auditors to apply SDGs knowledge in the process of performance auditing and produce SDGs audit reports as a result. In parallel, conducting **action Research** is a development tool from Research to Policy and Practice.

After all activities, we will hold **the seminar** to share the result of action research. SAI plans to disseminate the output from the workshop by publishing in the academic journal, ASOSAI journal, or delivering in a compendium. The dissemination aims to distribute knowledge and best practices of auditing SDGs to the public and allows the Government to monitor and report on the progress of auditing SDGs.

-

⁹ Please see more in https://www.sdgmove.com/

In conclusion, SAO realized the importance of environmental impacts resulted from the public projects and spending. The criteria of auditing thus expand from only 3E to cover environmental issues and also SDG audit. We tried to strengthen and broaden our impacts by implementing environmental audit in the policies and planning to initiate the related activities to support learning of auditors on environmental issues for future sustainable development.

References

- INTOSAI WGEA. (n.d.). Roles and Responsibilities of the INTOSAI WGEA Working Bodies. Retrieved from https://www.environmental-auditing.org/media/1092/roles-and-responsibilities.pdf
- INTOSAI WGEA. (n.d.). *About INTOSAI WGEA*. Retrieved from https://www.environmental-auditing.org/about/
- Office of the Auditor General of Thailand. (2016). *Auditing wetlands conservation*. Greenlines newsletter, p. 11.
- Phankasem, S. (2006). *Moving to Sustainable Development: Focus on Environmental*. Ottawa: Canadian Audit Accountability Foundation (CCAF).
- SDG Move. (n.d.). Retrieved from SDG Move: https://www.sdgmove.com/
- State Audit Office of the Kingdom of Thailand (2020). The Environmental Performance Auditing of SAO Thailand and the Contribution of the Environmental Challenges. P.6-28.
- Sheate, W. (n.d.). SOAS University of London. Retrieved July 20, 2020, from https://www.soas.ac.uk/cedep-demos/000_P508_EAEMS_K3736-Demo/module/pdfs/p508_unit_01.pdf
- State Audit Office of the Kingdom of Thailand. (2019). Summary of Cooperative Audit on Water Environment Protection [PowerPoint slides].
- Suntharanurak, S. (2013). *Bangkok Super Skywalk Projects: Preventive Environmental Audit*. Retrieved from ASEANSAI: http://www.aseansai.org/2013/08/28/bangkok-super-skywalk-projects-preventive-environmental-audit-dr-sutthi-suntharanurak/

Authors

Dr. Sutthi Suntharanurak Director of International Affairs Office

Pitikhun Nilthanom Head of International Academic Division

Nunnapat Rueangsri Auditor, Professional level

Phattraravee Parvaputsakul Auditor, Professional level

Chomprang Wongrusmeeduan Auditor, Practioner level

Wannisa Nokmud Auditor, Practioner level

Pimpisut Pansook Auditor, Practioner level