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Asian Organisation of Supreme Audit Institutions

Auditing Sustainable Urban Development

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The Asian Journal of Government Audit is a popular resource for the SAI community for promotion of sound and effective audit systems. This bi-annual Journal has been in circulation since 1983 and has provided a forum to ASOSAI members for discussion and dissemination of good practices. The Journal accepts articles, special reports, news items and other materials from member SAIs of ASOSAI.

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Fax No.:91-11-23236818
Emails: ir@cag.gov.in,
asosai.journal@gmail.com

From the desk of ASOSAI Chair

General Chanathap Indamra, President of the State Audit Commission
State Audit Office of the Kingdom of Thailand

Dear Colleagues and Friends,

It is my distinct honor to address you in the April 2024 edition of the ASOSAI Journal, dedicated to the theme of 'Auditing Sustainable Urban Development'. In our rapidly urbanizing world, the importance of this topic cannot be overstated. As cities expand and evolve, they become hubs of economic activity, cultural exchange, and social innovation. However, they also face significant challenges related to sustainability, equity, and resilience.

Sustainable urban development is a critical component of the global agenda, particularly in the context of the United Nations' Sustainable Development Goals (SDGs). Goal 11 explicitly aims to make cities and human settlements inclusive, safe, resilient, and sustainable. Achieving this goal requires robust policies, effective implementation, and rigorous oversight. This is where our role as Supreme Audit Institutions becomes essential.

Auditing sustainable urban development involves evaluating how well urban policies and projects align with sustainability principles. This includes assessing the efficiency, effectiveness, and equity of urban initiatives, as well as their environmental and social impacts. By scrutinizing urban development projects, SAIs can ensure that resources are used judiciously, risks are managed appropriately, and the benefits of urbanization are distributed fairly among all citizens.

The SDGs audit framework provides a comprehensive approach to evaluating sustainable urban development. It might extend the eight aspects known as the 8Es: Economy, Efficiency, Effectiveness, Environment, Equity, Ethic, Emergency Preparedness, and Engagement with Stakeholders. Each of these aspects is crucial for holistic urban development.

For instance, auditing the economy and efficiency of urban projects ensures that financial resources are utilized optimally. Effectiveness audits measure the outcomes and impacts of these projects, while environmental audits assess their sustainability. Equity audits examine how these projects address the needs of all urban residents, particularly marginalized groups. Ethics audits ensure transparency and accountability, emergency preparedness audits evaluate resilience, and engagement audits assess the involvement of stakeholders in urban planning and implementation.

The impact of auditing sustainable urban development extends beyond accountability. It promotes transparency, fosters trust in public institutions, and encourages continuous improvement in urban governance. Through our audits, we can highlight best practices, identify areas for improvement, and provide actionable recommendations to policymakers and implementers.

Moreover, our audits can serve as a catalyst for change, driving the adoption of innovative solutions and sustainable practices. They can also raise public awareness about the importance of sustainable urban development and the role of citizens in shaping the future of our cities.

In summary, auditing sustainable urban development is not just a professional responsibility for us as auditors; it is a vital contribution to the global pursuit of sustainable development. By ensuring that our cities are developed sustainably, we can help create a better future for all.

Thank you for your ongoing support and cooperation.

Best regards,

General Chanathap Indamra

Chairman of ASOSAI

From the desk of ASOSAI Secretary General

Mr. HOU Kai
Secretary General Of ASOSAI And Auditor General Of The National Audit Office Of the People's Republic Of China

As an important spatial carrier of socioeconomic development, cities play a vital role in promoting economic development, social progress, environmental improvement and cultural prosperity. Since the mid-20th century, Asian countries have been experiencing the largest and fastest urbanization in the world history, with dramatic urban development and world-renowned achievements. Urban development has become an important engine of modernization driving the overall development of the economy and society, and a wonderful reflection of the economic, cultural, and social development of various countries.

Though facing the increasing complexity and uncertainty in the international community and a slowing-down global economy, Asia maintains great development potential and momentum. However, in some regions "urban diseases" are prominent such as: the incompatibility between the scale planning of urban development and the environmental and resource capacity; high energy consumption, resource consumption and carbon emissions in urban development; low resilience of urban safety; low level of livability and health; heavy traffic; insufficient cultural protection and inheritance; and insufficient inclusiveness and innovation of cities. Such complex and diverse challenges require governments to make strategic preparations for the future urban development from a broader perspective.

Goal 11 of the United Nations 2030 Agenda for Sustainable Development is about making cities and human settlements inclusive, safe, resilient and sustainable. Cities are safeguarding and supporting the sustainable development of human society. Countries around the world have been focusing on and exploring cities' sustainable development, while the supreme audit institutions are also playing important roles in promoting the sustainable urban development of their respective countries. This issue of Asian Journal of Government Audit will review the auditing practices and typical cases of sustainable urban development by auditing institutions in various countries, with the aim of drawing the attention of audit institutions to the audit of sustainable urban development, promoting the exchange of experience, knowledge sharing and capacity enhancement of audit work in this area, and contributing to the global efforts to build a better home that is sufficient to support the sustainable development of all humankind.

We are confident that with our joint efforts, through the continuous audits on sustainable urban development, audit institutions from various Asian countries will make new and greater contributions to improve urban governance system and governance capacity, enhance the functional quality and comprehensive carrying capacity of cities, and realize the comprehensive sustainable development of economy, society and ecological environment.

From the desk of the Editor

Ms. Shefali S Andaleeb
Director General (International Relations)
Office of the Comptroller and Auditor General of India

"Sustainable urban development should be based on societal transition processes and not solely on technical solutions"- Dr Klaus Topfler[1]

According to UN-HABITAT, by 2030, 3 billion people, i.e. about 40 percent of the world's population will need access to adequate housing. This translates into a demand for 96000 new affordable and accessible housing units per day. Urbanization has powered rapid economic growth across the globe as cities generate 80% of the global GDP. However, as cities expand, policy makers and governance structures are racing to keep up with demand for civic amenities and sustainable & eco friendly dwellings. Unplanned urbanization is a reality in large part of the world. The World Bank estimates that nearly one billion urban poor live in slums and informal settlements, mostly in Asia, Africa and Latin America.

Access to housing is a precondition to access to employment, health, education and social services. Goal 11 of UN 2030 Agenda for sustainable development aspires to making cities safe, inclusive and resilient, in pursuit of which national governments are striving to address the challenges of unsustainable and unplanned urbanisation through various policy initiatives.

The Government of People's Republic of China has started renovation of 217.000 old urban residential communities benefitting over 37 billion households. Further, China has accelerated the construction of modernized comprehensive transport. What has been the role of Supreme Audit Institution of China in assisting the government in improving and optimizing policy design? Readers will find an in-depth analysis of how audit has supported the sustainable urban development in China in the article contributed by the National Audit Office of China.

Ms Mai Malen Abdin of SAI Egypt, through an incisive case study, describes the transformation of ancient district of Fustat in Cairo , Egypt. The auditor's perspective in auditing such projects and providing value added recommendations to policy makers will provide our readers useful information to replicate in their respective SAIs.

One of the biggest challenges of uncontrolled and unplanned growth of cities is the management of solid waste in urban areas. SAI India's team at the International Centre for Environment Audit and Sustainable Development (iCED) writes about the experience of auditing urban waste management in India walking us through a diverse set of policy initiatives being taken in India, and the innovative auditing approach that the SAI has taken for audit of this complex subject.

Our colleagues from the Board of Audit and Inspection, Republic of Korea talk about the risks of urban infrastructure projects and audit strategies and tools being used by the BAI in their article titled Establishing and Operating an integrated Audit System for SOC Projects to Mitigate Risks.

Dear Readers, you have correctly guessed by now that the theme of the April 2024 edition of the ASOSAI Journal is ***Auditing Sustainable Urban Development.***

Diverse articles on this theme along with highly informative articles on auditing health sector, electrical sector and measuring climate performance assessment contributed by colleagues from SAI Georgia, SAI Indonesia and SAI Azerbaijan respectively, makes this edition of the Asian Journal of ASOSAI, rich in information and ideas exchange among the public sector auditors.

I am grateful to General Chanathap Indamara, Chairman of ASOSAI and Mr Hou Kai, Secretary-General of ASOSAI for their inspirational messages. I thank all the contributors for their well-researched and information intensive articles that makes the ASOSAI Journal a leading journal for the professional auditors.

For the team at the ASOSAI Journal secretariat, providing information intensive and enriched content in the Journal remains our continuous endeavour!

[1] Dr. Klaus Töpfer an eminent environmentalist, was Executive Director of the United Nations Environmental Programme (UNEP) in Nairobi.

CONTENT

ASOSAI
NEWS

Seminar for Knowledge Sharing

ASOSAI Seminar on "How to Meet the Public Expectation on SAI" (Bali, Indonesia, December 2023)

An ASOSAI Knowledge Sharing Seminar on "How to Meet the Public Expectation on SAI" was held in Bali, Indonesia from December 11 to 15, 2023. 23 participants from 22 SAIs attended the Seminar with facilitation and technical guidance provided by Subject Matter Experts (SMEs) from SAI Indonesia and SAI Thailand. A representative of the Capacity Development Administrator of ASOSAI (SAI Japan) also participated in the Seminar for the management of the Seminar.

The purpose of the Seminar was to share experience and knowledge on "How to Meet the Public Expectation on SAI", as well as identify good practices regarding the theme. During the Seminar, participants were divided into sub-groups to have discussions based on their country reports on the above theme, which were followed by presentation sessions. At the end of the seminar, participants agreed on the identified good practices on the above theme, and the Seminar was successfully concluded on December 15, 2023.

THEME
ARTICLES

Auditing Supports New Progress on Sustainable Urban Development by National Audit Office of China

Cities play a vital role in promoting high-quality development, achieving higher-quality life, and building cultural prosperity. Goal 11 of the United Nations 2030 Agenda for Sustainable Development is about making cities and human settlements inclusive, safe, resilient and sustainable, reflecting the international community's shared vision of governance with cities as both the subject and the object. Attaching great importance to the audit of sustainable urban development, China's audit institutions have always taken it as an important tool for promoting the high-quality development of the economy and society. The continuous auditing of relevant policies and funds has played an important role in promoting the implementation of major policy measures, safeguarding public funds, and ecological civilization building.

1. China's Achievements in Sustainable Urban Development

Adhering to a people-centered urban development philosophy, China has been improving the standards of urban planning, construction, and governance, modifying the development patterns of super-large and mega cities, carrying out urban renewal projects, and upgrading urban infrastructure, which made historic achievements in sustainable urban development.

First, the housing supply system and the housing conditions of residents have improved. China has continuously improved the housing supply system, focusing on public rental housing, government-subsidized rental housing, and housing with joint property rights. A total of over 63 million government-subsidized housing units and housing units in rundown urban areas have been built, and about 150 million people in difficulties have realized their dreams of having a home to settle in. Households entitled to subsistence allowances and low-income families have full access to public rental housing, and the housing conditions of lower-middle-income families have effectively improved. China also comprehensively promoted the renovation of old urban residential communities. The renovation of 217,000 old urban residential communities has started, benefiting over 37 million households and nearly 100 million residents. It has also improved the real estate market policy. By adhering to the principle that housing is for living in, not for speculation, local governments are guided to implement targeted, differentiated policies to stabilize the market and to satisfy the basic housing needs of all people.

Second, urban infrastructure has been improved and the general capacity of cities has been enhanced steadily. China has accelerated the construction of a modernized comprehensive transport system. The total mileage of China's railway has reached 159,000 kilometers, among which the mileage of high-speed railway has reached 45,000 kilometers. The total mileage of roads in service has reached 5.441 million kilometers, among which the mileage of expressways has been 184,000 kilometers. The number of civil aviation airports has reached 259, 38 of which have an annual passenger throughput over 10 million. By prioritizing the development of public transportation in cities, 55 cities have launched urban rail transit networks, 30 more than that in 2015. The mileage of urban rail transit in operation has reached 10,165.7 kilometers, about three times that of 2015. New business models such as online car-hailing services, shared bikes and shared cars are flourishing, and the proportion of green travel has increased significantly. Municipal public utilities have been improved continuously. The percentage of water supply, gas supply and sewage treatment have reached 99.39 percent, 98.05 percent, and 98.11 percent respectively.

Third, efforts have been made to strengthen urban governance and improve urban living environments. China's urban air quality has improved significantly. The ratio of days with excellent air quality in cities at and above prefecture level has reached 85.5 percent, 4.3 percent higher thant that of 2015. The PM2.5 density has been reduced to 30 micrograms per cubic meter, 35 percent lower than that in 2015, making China one of the countries with the fastest improvement in atmospheric environmental quality in the world. China has also promoted the construction of water-conserving cities. A total of 145 cities across the country have been honored as national water-saving cities. The annual recycled water consumption in cities across China is approximately 18 billion cubic meters, with the recycled water utilization rate reaching 29 percent. Besides, China has promoted the construction of national forest city and urban park systems with 219 cities across the country reaching the standards for national forest city, urban park green space per capita increasing to 15.59 square meters, and the green coverage rate of built-up areas of cities rising to 42.96 percent.

2. Experience in Sustainable Urban Development and Examples

Since 2017, when China first proposed the high-quality development strategy, it has put continuous efforts to improve relevant policies and make continuous progress in reform and development practices, achieving remarkable results. The road of high-quality development is the adaption of Sustainable Development Goals in the Chinese context and the needs of the times, providing valuable experience for promoting the global realization of the Agenda for Sustainable Development.

First, China adheres to a systematic and holistic approach to building livable, resilient, and smart cities. In terms of targets and pathways, China is committed to creating harmonious, livable, vibrant and unique modern cities, and improving the level of new urbanization within the Chinese context. In terms of landscape and patterns, China has changed its single-focused and overspread development model, reasonably managed the scale and construction intensity of cities, and promoted coordinated development between different regions and urban and rural areas. In terms of living environments, the development concept that "lucid waters and lush mountains are invaluable assets" has been carried through in all aspects during the whole process of urban construction. The integrated management of mountains, waters, forests, farmlands, grasslands and deserts has been launched to promote the development of cities in which human and nature coexist in harmony. In terms of basic requirements, China has taken special actions to make up for the shortcomings of infrastructure and to renew and renovate, aiming to build a modernized infrastructure system that is intensive, efficient, cost-effective, safe and reliable, to enhance the resilience and safety of cities. In terms of governance models, China has innovated urban management methods and means, and continued to improve the 5G and fiber-optic network coverage to promote the building of smart cities.

Second, China focuses on the pilot and demonstration work of sustainable development driven by innovation. In 2016, China officially started the construction of Innovation Demonstration Zones for Implementation of the 2030 Agenda for Sustainable Development. This project aims to promote deep integration of technological innovation and social development, eliminate major bottlenecks in achieving sustainable development, and provide reference and inspiration for the sustainable development of similar regions at home and abroad. Over the past seven years since the launch of the demonstration zones, China has adhered to the principle of "one city, one development plan", approved the construction of 11 innovation demonstration zones, including Shenzhen of Guangdong Province, Chenzhou of Hunan Province, and Xuzhou of Jiangsu Province, and accumulated a lot of replicable and scalable experience. Take Xuzhou city, Jiangsu Province as an example, based on the practical needs of high-quality development as the hub city in a resource-exhausted region, Xuzhou actively promotes the transformation of industry, city, ecology, and society. The proportion of high-tech and emerging industries has increased by 10.6 and 23.8 percentage points respectively in five years. The energy consumption per unit of GDP has dropped by 34.5 percent, and a total of 309,000 mu (20,600 hectares) of coal mining subsidence has been restored, realizing the transformation from "a city full of coal ashes and dirt" to "a city with lucid waters and lush mountains".

Third, China attaches great importance to the method of trying out new things first, summing up lessons later, and promoting such experience in the end. In China, the development stages and resource endowments of different regions vary greatly. Therefore, pilot implementation of major policies in some regions has become important experience in China's reform, development, and governance. In the process of exploring sustainable urban development, China first explores patterns and accumulates experience in places with requisite conditions and foundations, and carries out policy guidance, application, and mechanism innovations centered on eliminating bottlenecks in sustainable development. Then such experience plays a demonstrative and leading role in similar regions when expanding pilots. Local governments are encouraged to carry out promotion work based on local conditions and development needs, while building a win-win cooperation mechanism for sustainable development and actively sharing China's experience with the world. For example, Beijing has launched a pilot program to address the housing problems. By improving local laws and regulations, introducing financial resources, and broadening supply channels, the city is able to ensure the stable and healthy development of the housing rental market and continue to promote the improvement of the housing support system featuring both renting and housing purchase.

3. Audits Effectively Safeguard Sustainable Urban Development

In recent years, China's audit institutions have carried out special-purpose audits on policies and funds related to sustainable urban development, including the construction of the housing supply system, funds related to energy conservation and emission reduction, and the construction and operation of major water diversion projects.

First, China has carried out an audit on the construction of the housing supply system to meet the housing needs of all people. Centering on the management of housing supply funds such as low-income housing projects, housing provident funds, and special housing maintenance funds, emphasis has been put on the implementation of policies such as the renovation of old urban residential communities, construction of government-subsidized rental housing and homes with shared ownership, and housing reform, so as to improve the housing market system and housing supply system, increase the effective supply of housing, promote urban renewal projects, and contribute to addressing the housing difficulties of people in straitened circumstances and key groups such as new citizens and young people in big cities.

Second, China has carried out audits on funds related to energy saving and emission reduction to promote the construction of an environment-friendly society. With a focus on the three key fields of carbon emissions, namely energy, industry and transportation, special attention has been paid to the implementation and enforcement of the four major policies on the application of renewable energy sources such as photovoltaic, wind power and biomass power generation, the promotion of new energy vehicles, the control of high-energy-consuming and high-emission projects, and the dual control of the intensity and total amount of energy consumption. Difficulties, obstacles and prominent problems in promoting energy transition and building an environment-friendly society have been exposed, and suggestions for strengthening and improving related work have been put forward to help build green and low-carbon cities.

Third, China has carried out special-purpose audits on major water diversion projects to help build a resource-conserving society. In order to promote the implementation of water conservancy work policy of "water-saving priority, spatial equilibrium, systematic governance, and two-handed force" and to implement the new development philosophy in a complete, accurate and comprehensive manner, China has conducted audits on major water diversion projects. With a focus on the restraints of water resource that affect sustainable development, special attention has been paid to the realization of policy objectives of major water diversion projects in the conservation and efficient use of water, as well as the effective allocation of water resource, so as to promote the optimized allocation and conservation of water resource, and contribute to the water sustainability in cities.

Fourth, China has carried out natural resources accountability audits on leading officials to promote the practice of the green development concept. In order to promote local governments to effectively fulfill their responsibilities for natural resource asset management and ecological protection, and to implement the concept of ecological civilization development and related decisions and plans, natural resources accountability audits on leading officials have been conducted. By expanding the scope of audit elements, emphasis has been put on the implementation of major tasks such as the natural resources asset management, territory development plan, carbon peaking, carbon neutrality, and pollution prevention and control, so as to accelerate the establishment and improvement of audit evaluation standards and indicator systems to help promote the construction of a beautiful China.

The implementation of above audit projects has promoted the practice and experience of sustainable urban development from multiple dimensions such as livability, green and low carbon, water conservation and water security. At the same time, it has exposed the deficiencies and problems in development, and promoted the resolution of problems, addressing of deficiencies, sharing of experiences and optimization of practices by improving top-level design, optimizing policy systems and strengthening overall coordination, so as to contribute to China's sustainable development through auditing.

Appendix: Audit Case of Xuzhou City Ecological Restoration and Green Development

1. Basic Information of Xuzhou City

Xuzhou is located in the northwest of Jiangsu Province, China. Bordering Shandong Province to the north, Jianghuai area to the south, the coastal area to the east, and the Central Plains to the west, Xuzhou is known as a transportation hub with thoroughfares leading to five provinces. It is an important city along the New Eurasian Land Bridge Economic Corridor, as well as the central city of the Huaihai Economic Zone. As an old industrial base and a traditional resource-dependent city, Xuzhou has a coal mining history of more than 130 years, with more than 250 coal mines at its peak, and a heavy industry system dominated by coal, steel, cement and chemicals. It made historically important contributions to the economic and social development of Jiangsu Province, East China and the whole country. However, the long-term large-scale coal mining created 423,300 mu (28,220 hectares) of subsided land, accounting for 2.4 percent of Xuzhou's whole area, which caused serious ecological problems. Since 2010, Xuzhou has faced great challenges in promoting industrialization and urbanization. For example, outdated technology led to less competitive resource-dependent enterprises, insufficient innovation caused the slow development of emerging industries, environmental governance and ecological protection were in grave difficulties, and urban living environments were relatively poor, all of which became key bottlenecks restricting Xuzhou's sustainable development.

2. Background of the Audit Project

The 14th Five-Year Plan put forward the goal of promoting green development and developing a new model of modernization with humans developing in harmony with nature. As a typical old industrial base and resource-dependent city, Xuzhou faced the major issue of how to realize the transformation and development of a resource-exhausted city. In 2022, the State Council approved the construction of an Innovation Demonstration Zone on the Implementation of the 2030 Agenda for Sustainable Development in Xuzhou, with the development goal of "innovation leading the high-quality development of resource-based regional central city". Through the in-depth analysis of challenges confronting development, Xuzhou identified the difficulties in the sustainable use of traditional industrial and mining wasteland as the major problem, regarded ecological restoration and green development as an important channel to solve the bottlenecks of urban development, and developed a distinctive path of urban and ecological transformation. It provided a reference for resource-exhausted cities to achieve transformation and development. Xuzhou's audit institution paid attention to ecological restoration and green development in various audits from multiple perspectives at a deeper level, serving the construction of a sustainable development demonstration zone with powerful and effective audit supervision.

3. Focus of Auditing

(1) Implementation of ecological restoration policies. The focus was placed on the implementation of policies, decisions and arrangements such as the restoration of former industrial sites, comprehensive improvement of coal mining subsidence areas, and the governance of quarries, highlighting problems such as failure to carry out ecosystem protection and restoration in accordance with regulations, damage to the ecological environment, and encroachment of industrial land into natural protection areas.

(2) Management of special funds. The focus was put on the allocation efficiency and expenditure effectiveness of various types of financial special funds for ecological restoration and governance, highlighting problems such as the fragmentation of funds allocation, overspending of funds, swindling of compensation funds, and withholding and misappropriation of financial special funds.

(3) Construction of the ecological restoration mechanism. The focus was put on the improvement of property rights system for natural resources and asset management system, as well as the establishment and implementation of systems such as the mechanism for the use of funds for ecological protection and restoration, inter-regional cooperation on pollution prevention and control, and environmental damage compensation system, highlighting problems such as a lack of clarity on duties and responsibilities, a lack of effective coordination at different levels, and a lack of balanced spatial distribution.

(4) Implementation and effectiveness of restoration projects. The focus was put on the rationality of the feasibility study of ecological restoration projects, the compliance of construction management, the effectiveness of investment control, and whether the environmental and social benefits of the ecological restoration project reached the expected goals after its implementation, highlighting problems such as hasty project launch, loose investment control, and poor restoration results.

4. Main Experience and Practice.

(1) Fully understand policies and strengthen pre-audit study based on problems. First, focus on macro research policies. Xuzhou conducted in-depth research on policies related to ecological civilization construction, and ecological protection and restoration, studied and comprehended the eco-civilization thoughts behind policies and goals, and improved the systematic understanding of ecological restoration related work. Second, identify the entry point of the audit. Through multiple channels of research and collection of relevant data and information, Xuzhou mastered the basic situation of problems such as damage to the ecological environment and encroachment on natural protection areas in the region, sorted out the list of tailings ponds and ecological restoration projects in the region, and reasonably determined the scope of the audit. Third, prepare a list of audit questions. Xuzhou summarized the common and typical problems of ecological damage found by audits in recent years to create a list of audit questions, listed the types of problems and corresponding laws and regulations for each subject matter, standardized problem descriptions, and unified qualitative standards and handling and punishment opinions, so as to enhance the efficiency of spotting problems and collecting evidence at the audit site.

(2) Make overall plans and take multiple measures to achieve comprehensive audit coverage. First, in the audits of earmarked accounts in public finance, Xuzhou adhered to the principle of comprehensive layout and scientific project establishment centering on ecological restoration, mine governance and green development. For example, in the audits of earmarked accounts in public finance, attention was paid to the transformation of traditional industries into high-tech and low-energy consumption, and problems such as scattered allocation of relevant sci-tech funds and low performance were exposed. The competent authorities were urged to introduce more than ten systems and allocate more than 12 million yuan stranded funds to ensure the effective connection of innovative resource elements. Second, in the audits of various ecological restoration projects, Xuzhou tracked the ecological environment restoration, improvement of flood control and drainage, and cost-effectiveness of projects. For example, in the real-time audit of Phase III project of the comprehensive treatment of Pan'an Lake coal mining subsidence, Xuzhou paid attention to issues such as bidding compliance, project budget accuracy and project change rationality, and put forward more than 170 pieces of audit recommendations. Third, Xuzhou conducted the auditing of accountability and natural resource assets on economy and ecology of leading officials. With a focus on the performance of leading officials' duties in ecological protection and restoration, the facts of whether effective protection and rational development were achieved and whether scientific development concepts and correct views on evaluating officials' performance were established were reviewed.

(3) Take bold steps to explore new ground and lead the new development of auditing with innovation. First, Xuzhou took the lead to introduce the Evaluation Indicator System for Natural Resources Accountability Audits on Leading Officials of Township Party and Government Bodies in Xuzhou (Trial). Focusing on the implementation of decisions and policies related to resources and the environment, the achievement of goals and tasks and related supervision and evaluation, the exploitation and utilization of natural resources, as well as the performance of functions related to the ecological protection and restoration, ecological environmental protection and pollution prevention, the document has six primary indicators, 18 secondary indicators and 89 tertiary indicators to provide guidance for this type of audit. Second, Xuzhou took the lead in introducing documents such as Implementation Opinions on Natural Resources Accountability Audit on Leading Officials, clarifying that the achievements of leading officials in ecology will be evaluated when they leave office, establishing a relatively mature policy of natural resources accountability audit on leading officials in line with Xuzhou's reality, so as to guide the green development of the city. Third, Xuzhou implemented the ecological audit model of "1+N", covering special-purpose audits of atmosphere, sewage, land, green spaces, mines, etc., to help rectify outstanding ecological problems. It fully utilized the audit method that combined "online analysis of doubts + on-site investigation of doubts" to improve the level of audit results.

5. Main Auditing Results

(1) Green development has become a defining feature of ecology. The audit accelerated the implementation of projects such as the restoration of former industrial sites, comprehensive treatment of coal mining subsidence, and governance of quarries, promoted the continuous increase in urban green coverage and per capita park green space in urban areas, and continued to improve the water environment. The area of protected wetlands in Xuzhou grew by 26,700 mu (1,780 hectares) and urban green space grew by 390 hectares. A garden city featuring mountains and waters is taking shape rapidly.

(2) Comprehensive ecological benefits are increasingly evident. The audit promoted the implementation of the action plan for the construction of a regional science and technology innovation center. Xuzhou carried out 13 municipal-level science and technology projects related to dual carbon goals, guided and improved the implementation of science and technology policies and the management of science and technology projects. Annual key projects were determined with a focus on ecological restoration, green development, science and technology innovation and other aspects, and the scale of core industries such as the green and low-carbon energy and digital economy exceeded 120 billion yuan.

(3) The ecological civilization achievements are co-constructed and shared. The audit promoted the systematic implementation of ecological restoration projects and built 15 pilot demonstration models. Together with the United Nations Human Settlements Program, Xuzhou released technical standards such as the Technical Standard for Ecological Restoration in Coalmining Subsidence Area of Huang-Huai-Hai Plain, providing technical reference for ecological restoration in other similar cities. In 2023, Xuzhou attended the 3rd International Forum on Big Data for Sustainable Development Goals and the International Forum on Sustainable Utilization and Green Development of Water Resources, as a representative of the demonstration zones. Xuzhou passed on the wisdom of driving growth and development through innovation.

Auditing Urban Areas' Renovation in Compliance with SDG 11 : A Case Study on SAI Egypt's audit of Fustat; A Historic Area Downtown Cairo - SAI Egypt

Accountant. Mai Malek Abdin
Senior Auditor, SAI Egypt
M. Sc. in Accounting and Auditing

Abstract

This article examines SAIs' crucial role in ensuring accountability and progress towards achieving SDG 11: "Make cities and human settlements inclusive, safe, resilient and sustainable." It emphasizes the SDGs' interconnected nature, demonstrating how achieving SDG 11 intersects with other goals like poverty reduction, health and well-being, and responsible consumption and production.

Focusing on the Egyptian government's commitment towards achieving SDGs, particularly SDG 11, the article explores the establishment of the Urban Development Fund and its dedication to financing sustainable urban development projects. Finally, it presents a case study of an audit conducted by SAI Egypt on the Fustat area renovation as part of the larger Renovation Project of the Historic Downtown Cairo Area. This large-scale initiative aimed to revitalize the historic area while adhering to sustainable urban development principles. The article also underscores the importance of analyzing audit methodology, key findings and recommendations as well as the importance of SAIs' role in holding projects accountable as a contribution in achieving a more sustainable future for Egyptian cities.

Introduction

SAIs and SDGs - Ensuring Accountability for a Sustainable Future

The 2030 Sustainable Development Agenda is a comprehensive and ambitious framework that allows humanity to prosper within Planet Earth. This Agenda focuses on implementing 17 SDGs which tackle pressing global challenges such as poverty, inequality, climate change and environmental degradation. In this context, SAIs undertake a key role in promoting accountability and advancing towards achieving these critical goals. Being the accountability guards, SAIs are essential for ensuring that the efforts exerted towards achieving SDGs remain on the right track.

1. Focusing on SDG 11: Building Sustainable Cities and Communities

Among the SDGs, SDG 11 holds a particular significance. Cities are considered innovation hubs, economic engines and cultural centers. However, rapid urbanization could lead to exacerbate existing challenges like poverty, pollution, climate change exposure and social inequality.

SDG 11 recognizes the urgent need to make cities more inclusive, safe, resilient, and sustainable. It encompasses a wide range of targets, including:

- Access to safe and affordable housing
- Improved public spaces
- Sustainable transportation systems
- Reduced disaster risk and climate change adaptation
- Cultural heritage preservation

It is worth noting that SDG 11's significance goes beyond its urban focus where as its targets and indicators are closely linked to other SDGs, forming a network of goals that collectively confront the complex nature of sustainable urbanization.

For example, efforts for combating poverty and improving health, which fall under SDGs 1 and 3 are tightly connected to SDG 11's urban environment. Likewise, achieving sustainable urban environments requires addressing issues related to water and sanitation (SDG 6) and clean energy (SDG 7).

These connections are not just random; they show how sustainable development problems are complicated and depending on each other. Urban areas are included in the middle of these problems as they are centers of economic, social, and environmental activities.

Inadequate urban management could lead to exacerbate problems related to waste management, energy security and climate change. These problems could also have an impact on more general goals like SDGs 4, 5 and 16 which tackle gender equality, education and good governance.

Figure 1: Connection between SDG 11 and other SDGs
Source: UN-Habitat 2020 Catalogue of services

2 - The Egyptian Government's Commitment towards achieving SDGs, particularly SDG 11: Urban Development Fund

The Egyptian government recognizes the importance of achieving SDGs through developing Egypt's strategy on its vision 2030, and it has made significant strides towards their implementation. SDG11 is considered a core axis of this strategy which is reflected in the establishment of the Urban Development Fund.

The Urban Development Fund is a specialized government initiative designed to finance projects that prioritize sustainable urban development practices. The fund focuses on key areas critical to achieving SDG 11 targets, namely:

- **Infrastructure Development:** The fund supports projects that create sustainable infrastructure, including energy-efficient buildings that use renewable energy sources, and establishments resilient to climate change.
- **Urban Areas' Regeneration:** Revitalizing existing urban areas is considered a key focus axis with projects aiming to preserve cultural heritage, promoting social inclusion and improving overall residents' life quality.
- **Green Spaces:** The fund allocates resources necessary for the creation and maintenance of green spaces within cities. This contributes to improving air quality and recreation opportunities as well as conserving urban areas biodiversity.
- **Public Transportation:** Developing efficient and sustainable public transportation systems is a priority seeking to reduce reliance on private vehicles and enhance cleaner transportation options.

Through the Urban Development Fund, the Egyptian government demonstrates a solid commitment to building sustainable and resilient cities. However, ensuring the effectiveness of these projects requires robust oversight mechanisms.

3 - SAI Egypt's Role in Auditing Efforts for Achieving SDG 11's Targets A Case Study: Auditing the Renovation of Fustat; A Historic Downtown Cairo Area.

SAI Egypt plays a crucial role in auditing projects funded by the Urban Development Fund to assess their contribution to implement SDG 11's targets.

Fustat, one of the oldest districts in Cairo with rich cultural heritage, was chosen as a key area for renovation within the larger Renovation of Historic Downtown Cairo Area Project. The project aims to transform Fustat into a vibrant and sustainable urban space while preserving its historical significance. SAI Egypt conducted a performance audit of the Fustat renovation project to assess its contribution in achieving SDG 11's targets.

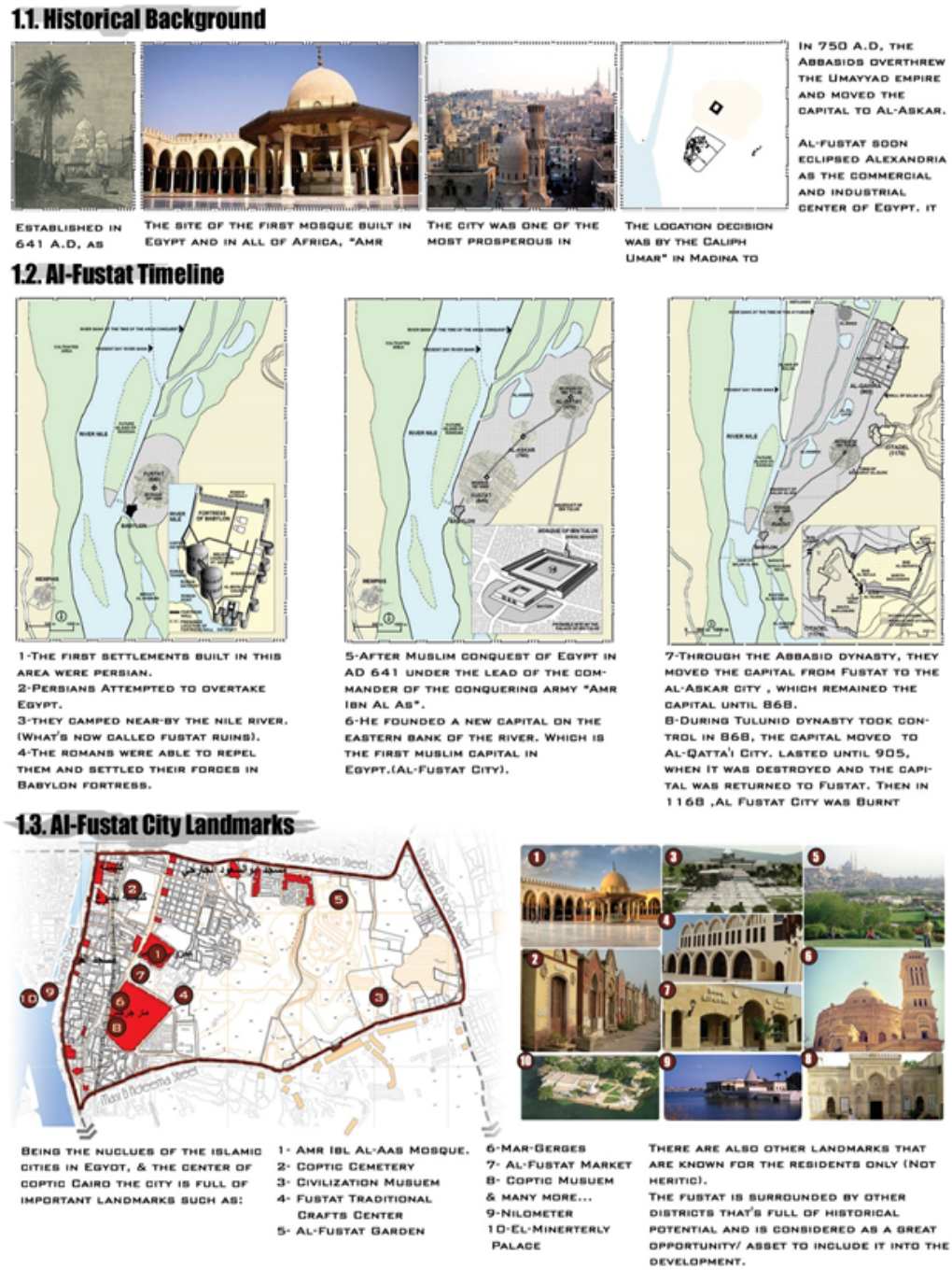

Figure 2

Source:https://www.behance.net/gallery/71285155/Al-Fustat-Urban-Development-Urban-Planning-Project/modules/415643783

Audit Methodology

The audit employed a risk-based approach, focusing on three key domains:

- **Social Impact:** Did the project improve the quality of life for residents and businesses in Fustat? This includes evaluating aspects like access to essential services, being able to afford housing expenses and local community engagement in the planning and implementation processes.
- **Cultural Heritage Preservation:** Did the project effectively succeed in conserving the historical and architectural character of Fustat? The audit assessed the restoration techniques used, protection of archaeological sites and the overall impact on the area's cultural heritage value.
- **Sustainability:** Did the project incorporate elements of sustainable urban development, such as energy usage efficiency, waste management and green infrastructure development? The audit examined the use of energy-saving technologies in buildings, waste collection and recycling initiatives and the creation of public green spaces.

Data collection methods included:

- Auditing project documents (planning proposals, architectural designs, environmental impact assessments, social impact studies).
- Conducting site visits to assess restored buildings, infrastructure improvements and public spaces.
- Interviewing project's officials, architects, urban planners, cultural heritage experts, residents and business owners in Fustat.

Some Key Findings

- The project successfully upgraded the efficiency of the fundamental infrastructure within Fustat, including water supply, sanitation systems and wastes collection. This resulted in improving residents' living conditions and in increasing the area's attractiveness for commercial businesses and tourism, recommending the necessity of considering to achieve the balance between modernity and heritage preservation in all future similar projects.
- The creation of new green spaces contributed to establishing a more vibrant and welcoming public spaces in Fustat. These spaces encouraged community interaction as well as improved residents' overall life quality. On the other hand, the project has led to an increase in property values which could negatively impact residents' affordability of housing on the long run. This could be overcome through providing mechanisms for rent control, income-based housing subsidies as well as enhancing mixed-income development projects.
- Increasing tourism potentials as the project's focus on heritage preservation and restoration of historical buildings has the ability to attract more tourists to Fustat, boost local economy and create new job opportunities.

Figure 3

Before and After Renovation

Source: http://www.cairo.gov.eg/ar/pages/CoursesDatails.aspx?CoID=288

In order to overcome the resistance to change of current and future residents, community participation should be enhanced by developing and implementing robust mechanisms to participate in all stages of urban development projects' planning and implementation. This could involve holding regular public meetings, forming citizens' advisory committees and utilizing online platforms for feedback and information sharing.

The general impact of Fustat Renovation Project has contributed in the effectiveness of SDG 11's implementation by perusing a more sustainable approach as a base for future urban development initiatives.

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UN-Habitat 2020Catalogue of services

Auditing Urban Waste Management- An Overview and Experience from - SAI India

Team at International Centre for Environment Audit and Sustainable Development (iCED), Jaipur

1. Introduction

According to the Census 2011, the decadal growth of the urban population was higher than the rural population, with 31.2 per cent of the population living in urban areas. There has been a dramatic increase in the number of large cities. As many as 53 cities in India had a million-plus population. These numbers may have increased significantly today. While rapid urbanization brings in new opportunities for growth, it also poses several challenges[1] (Ministry of Housing and Urban Affairs 2022-23).

One such pivotal challenge is Municipal Solid Waste Management in urban areas/cities. With urbanization, there occurs a change in the waste profile. Instead of biodegradable (wet) waste, households in urban areas generate increased quantities of plastics, paper, metals and other non-biodegradable (dry) waste. The quantity of waste (on a per capita basis) increases as well, as wealth increases in society. India has crossed the crux of this waste trajectory in many of its urban areas where waste generation has increased exponentially. It is estimated that urban India generates between 1,30,000 to 1,50,000 metric tonnes (MT) of municipal solid waste every day – some 330-550 gramme per urban inhabitant a day. This adds up to roughly 50 million MT per year; at current rates, this will jump to some 125 million MT a year by 2031[2] (NITI Aayog and Centre for Science and Environment, Atin Biswas, Subhasish Parida et al. 2021 2021).

Hence, maintaining a sustainable Municipal Solid Waste disposal mechanism in urban cities plays a very important role in ensuring sustainable urban development.

2. Proper Waste Management is an absolute necessary for a Sustainable Environment

Municipal Solid Waste represents a threat to the environment and human health if not handled or disposed of properly. Surface and groundwater contamination takes place when waste reaches water bodies. Residues from the waste can change the water chemistry, which can affect all levels of an ecosystem. The health of animals and human beings are affected when they drink contaminated water. A specific environmental hazardous substance produced by waste is leachate, which is a liquid that forms, as water trickles through the contaminated areas leaching out the chemicals. Movement of leachate from landfills and waste disposal sites may result in hazardous substances entering surface water, groundwater or soil. Emissions from the incinerators or other waste-burning devices and landfills can cause air contamination. Thus, to ensure better human health and safety, there is a need for an effective system for managing solid waste (Comptroller and Auditor General of India 2019).

3. Solid Waste Management in Urban Areas and Sustainable Development Goals (SDGs)

The 2030 development agenda of the United Nations also emphasizes the role of sustainable cities in making cities and human settlements inclusive, safe, resilient and sustainable. In line with this, SDG 11 (Make cities and human settlements inclusive, safe, resilient and sustainable) aims to encourage countries to take collective action in developing sustainable cities which are resilient and safe for living.

The Global SDG Target 11.6 specifically mentions reducing the adverse per capita environmental impact of cities, including by paying special attention to municipal and other waste management, by 2030. In addition to the global indicator associated with the target- Indicator 11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities, India has two additional parameters- 11.6.4: Percentage of wards with 100 per cent door to door waste collection, and 11.6.5: Percentage of waste processed under the SDG Target 11.6. The Ministry of Housing and Urban Affairs is the data source agency with a periodicity of one year for parameters 11.6.4 and 11.6.5 (Ministry of Statistics and Programme Implementation 2021).

[1] Annual Report 2022-23-Ministry of Housing and Urban Affairs

[2] Waste Wise Cities- NITI Aayog and CSE

[3] Report No 2 of 2019-Performance Audit of Solid Waste Management (Government of Manipur)

4. Solid Waste Management in Urban Areas- India's Perspective

4.1 Institutional Framework

The Ministry of Housing and Urban Affairs is responsible for the formulation of broad policies and programmes and assists State Governments/ Union Territories in providing technical guidelines/financial support with respect to Municipal Solid Waste sectors. The Central Public Health and Environmental Engineering Organisation is the Technical Wing of the Ministry of Housing and Urban Affairs, Government of India, dealing with the technical matters related to Solid Waste Management (SWM) in urban areas of the Country. Solid Waste Management is a State subject, and the State Governments/Union Territories and Urban Local Bodies are responsible for providing the services through planning, design, implementation, operation and maintenance. (Ministry of Housing and Urban Affairs 2022-23).

The Central Pollution Control Board co-ordinates the activities of the State Pollution Control Boards (SPCB) by providing technical assistance and guidance on Municipal Solid Waste such as Management of sanitary waste and disposal of Legacy Waste (Old Municipal Solid Waste) etc. It also resolves disputes among State Pollution Control Boards and collects necessary information from municipal authorities and provides technical assistance. It has a pivotal role in standard setting, review, monitoring[4] (International Centre for Environment Audit and Sustainable Development and The Energy and Research Institute 2022).

As per the 74th Amendment of the Constitution (August 1992), Solid Waste Management (SWM) is one of the mandatory functions of Urban Local Bodies (ULBs). The ULBs shall prepare a Solid Waste Management Plan as per the State Policy and strategy. It is also the responsibility of the municipal authorities to implement laws relating to the collection, segregation, storage, transportation, processing and disposal of solid waste in the municipality (Comptroller and Auditor General of India 2019).

4.2 Legislative Framework

In India, the State Governments are entrusted with the responsibility to make such laws related to the issues of public health, sanitation and solid waste management (Article 243W, 12th Schedule of the Constitution of India). Similarly, the Item 6 of List II in the Schedule VII of the Constitution of India provides for the local governments to take measures for the public health.

The National Environment Policy, 2006 also stresses to strengthen the capacities of local bodies for segregation, recycling, and reuse of municipal solid wastes- recognizing inter-alia the positive impacts it may have on the welfare of safai-karamcharis, and setting up and operating sanitary landfills, in particular through competitive outsourcing of solid waste management services (Ministry of Environment and Forests 2003).

The "Municipal Solid Waste (Management and Handling) Rules" were notified in September 2000. The objective of the rules was to develop scientific techniques for the safe dumping of municipal waste. After 16 years, the Municipal Solid Waste (Management and Handling), Rules were revised and renamed as Solid Waste Management Rules, 2016. The Ministry of Urban Development released the Municipal Solid Waste Management Manual 2016 in alignment with the Solid Waste Management Rules 2016. This manual provides guidance to the ULBs on the planning, design, implementation and monitoring of municipal solid waste management systems.

For the Solid Waste Management Rules 2016, the Ministry of Environment, Forest and Climate Change is responsible for overall monitoring of the implementation of these rules in the country. It constitutes a Central Monitoring Committee under the Chairmanship of Secretary, Ministry of Environment, Forest and Climate Change. This Central Monitoring Committee shall meet at least once a year to monitor and review the implementation of these rules. The Ministry of Housing and Urban Affairs coordinates with State Governments and Union territory (Central Pollution Control Board 2021).

[4] Municipal Solid Waste Management in India- A Compendium Report

4.3 Initiatives by India for Sustainable Waste Management in Urban Areas

4.3.1 Initiatives at National Front

Various government schemes and strategies have been formulated for achieving targets enlisted under SDG11. The Government of India launched the Swachh Bharat Mission-Urban (SBM-U) on 2nd October 2014 and with this, the governance of Municipal Solid Waste Management sector of Urban Local Bodies (ULBs) came to the forefront. The Government of India launched the Swachh Bharat Mission-Urban (SBM-U) on October 2, 2014, with the objective to scientifically process all the Municipal Solid Waste (MSW) generated in the country. To carry forward the progress made, Swachh Bharat Mission (SBM-U) 2.0 has been launched on October 1, 2021 for a period of five years, up to October 1, 2026, with a vision of achieving Garbage Free Status for all cities through 100 per cent source segregation, door to door collection and scientific management of all fractions of waste, including safe disposal in scientific landfills. It is also aimed at remediation of all legacy dumpsites and converting them into green zones.

Various steps have been taken by the Government to guide the States on efficient Municipal Solid Waste Management (MSWM) Processing, inter-alia:

- The State Governments/ Union Territory (UT) Administrations submit their component-wise City Solid Waste Action Plans (CSWAP) based on which, Central Assistance under Solid Waste management (SWM) component is released.
- Various manuals and advisories have been brought out covering all aspects of SWM including planning, designing and operation and maintenance.
- Garbage Free Star Rating Protocol to assess the City's Municipal Solid Waste Management by third party verification.
- Various capacity building & Information, Education and Communication (IEC) initiatives have been rolled out. (Ministry of Housing and Urban Affairs 2023)

- Solid Waste Management (SWM) component of SBM-U 2.0 allows setting up of waste processing facilities such as Material Recovery Facilities (MRFs), Transfer Stations, Composting Plants, Bio-methanation Plants, Refused Derived Fuel (RDF) Processing Facilities, Plastic Waste Processing Facilities, Waste to Electricity Plants, Construction and Demolition (C&D) Waste Plants, Sanitary Landfill, Mechanized Sweeping Equipment and Bio-remediation/ capping of all legacy dumpsites in all ULBs.
- 'Swachhata Startup Challenge' launched in collaboration with Department for Promotion of Industry and Internal Trade (DPIIT) to promote an enabling environment for development startups and entrepreneurs in the waste management sector.
- SBM-U 2.0 Guidelines encourages adoption of locally innovated, cost-effective technology solutions and business models in sanitation and solid waste management by startups, through investment in Research & Design (R&D) and facilitation in Government-e-Market (GeM) portal. CITATION Min2310 \l 1033 (Ministry of Housing and Urban Affairs 2023).

4.3.2 Initiatives for Major Coastal Cities

Fast growing urban cities near the coastline also pose an immediate threat to the marine ecosystems due to dumping of waste which is primarily generated within the urban areas. Marine Plastic Litter is one such important sector which has been dealt by India through the implementation of various schemes such as Swachh Sagar, Surakshit Sagar, Swachhata Action Plan, Coastal Clean Sas, Suchitwa Sagaram, Swachh-Nirmal Tat Abhiyan, Blue Flag Certification, etc. (Ministry of Environment, Forest and Climate Change and Ministry of Environment of Japan 2023).

The Swachh Survekshan, is conducted by the Ministry of Housing and Urban Affairs (MoHUA) since 2016 and is the world's largest urban sanitation and cleanliness survey. It has been instrumental in fostering a spirit of healthy competition among towns and cities to improve their service delivery to citizens and towards creating cleaner cities. The primary goal of Swachh Survekshan is to encourage large scale citizen participation and create awareness amongst all sections of society about the importance of working together towards making towns and cities better places to reside in. Conducted under the ambit of the Swachh Bharat Mission (Urban), the annual survey has managed to mobilise people, resources and authorities in an effort to prove that their city, of all cities in India, is the cleanest and that sustainable practices, both by citizens and ULBs, are being encouraged and promulgated CITATION Gov \l 1033 (Government of India n.d.).

The state of Indore has conquered the top spot alone for seven consecutive years. Through source segregation, participation of a wide array of stakeholders and good governance, the city has become a champion of waste management CITATION NIT21 \l 1033 (NITI Aayog and Centre for Science and Environment, Atin Biswas, Subhasish Parida et al. 2021 2021).

4.3.3 Commitment at International Front

Long-Term Low Emissions Development Strategy (LT-LEDS)

India submitted its Long-Term Low Carbon Development Strategy (LT-LEDS) on November 14, 2022, at COP 27. The salient features of LT-LEDS included climate-resilient urban development driven by smart city initiatives, integrated planning of cities for mainstreaming adaptation and enhancing energy and resource efficiency, effective green building codes and developments in innovative solid and liquid waste management.

4.3.4 Other Notable Initiatives

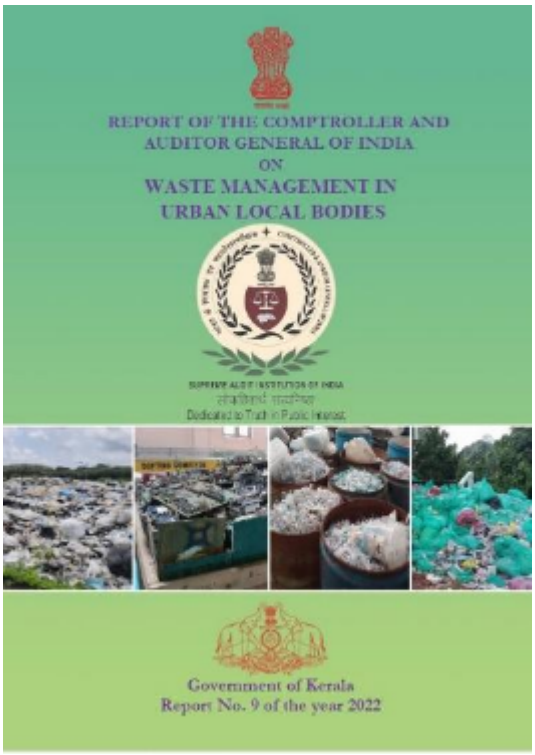
- States/UTs have constituted a Special Task Force for eliminating single-use plastics and effectively implementing Plastic Waste Management Rules, 2016. A National Level Taskforce has been formed by the Ministry of Environment, Forest and Climate Change to make coordinated efforts to eliminate identified single-use plastic items and effective implementation of Plastic Waste.
- The Government published the Battery Waste Management Rules, 2022, on August 24, 2022, to ensure environmentally sound management of waste batteries.
- The Government notified the E-Waste (Management) Rules, 2022, on November 2, 2022, launching a new Extended Producer Responsibility (EPR) regime for e-waste recycling (Ministry of Finance 2023).

5. Initiatives by SAI India in Auditing Solid Waste Management in Urban Areas

The Comptroller and Auditor General(C&AG) of India has played a formidable role in drawing the attention of the Government of India/State Governments to critical issues of urban Solid Waste Management.

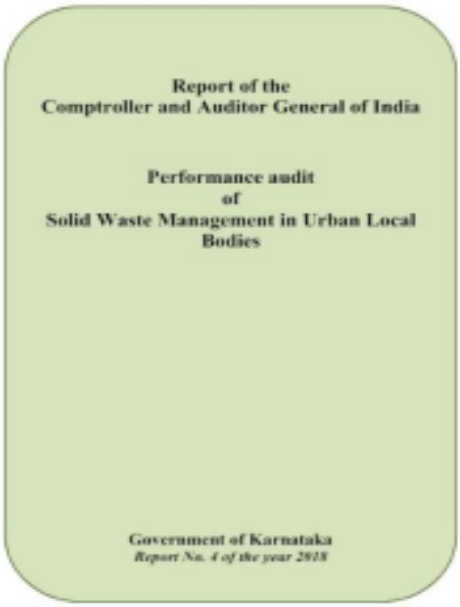
A snap-shot of some recent findings are illustrated in the following paragraphs:

5.1 The Performance Audit on Waste Management in Urban Local Bodies Report No. 9 of 2022 - Report of the Comptroller and Auditor General of India Government of Kerala revealed that there was a delay in the preparation of the State Policy and the formulation of State Strategy on waste management. The ULBs did not prepare short-term or long-term plans. Byelaws were either not prepared or not approved by the Government. The audit noticed rampant use of banned plastic carry bags and low utilization of shredded plastic in road construction works. Material Collection Facilities and Resource Recovery Facilities were either not installed or non-functional. Non-integration of informal waste collectors/waste pickers was noticed. Low priority was accorded to Information, Education and Communication activities. Incomplete segregation of waste at source and secondary levels resulted in a flow of mixed waste to processing sites. Colour-coded bins were not provided to households in all test-checked ULBs. The ULBs used open vehicles or vehicles without partitions for waste transportation, which was against the Rules. Accumulation of wastes in the Centralised processing plants, non-functioning of the Leachate treatment plants, non-collection of e-waste to authorized dismantlers/recyclers and absence of a system for accounting, collecting and disposing of Construction and Demolition waste are other notable issues raised by the audit.



5.2 The Performance Audit of Solid Waste Management Report no. 2 of 2019 - Social, Economic (other than PSUs), Economic (PSUs), Revenue and General Sectors Government of Manipur found that there was a lack of planning for the management of solid waste in the sampled Urban Local Bodies (ULBs). The ULBs did not prepare separate budgets for meeting the expenditure of solid waste management and did not prepare plans which limited the effective execution of waste management activities. There was a gap between the quantum of waste generated and disposed of. Most of the waste was disposed of as mixed waste without processing as per existing norms, thereby creating a threat to the environment and health of the public. There were instances of burning of waste disposed at the disposal sites owned by the municipalities. There were no facilities for the disposal of domestic hazardous waste which resulted in the mixing up of such hazardous waste with other wastes. The landfills maintained in the sampled ULBs had not adhered to the conditions specified in the relevant Solid Waste Management Rules, 2016. The ULBs were not submitting annual reports containing basic information on the progress of solid waste management. The State Pollution Control Board did not conduct monitoring of environmental standards and adherence to conditions for waste processing and disposal sites which resulted in non-assessment of the environmental impact of the Plant.

5.3 During the Performance audit of Solid Waste Management in Urban Local Bodies- Report No. 4 of the year 2018- Government of Karnataka, the audit highlighted that the Information, Education and Communication (IEC) activities did not specifically focus on segregation of special waste and did not emphasise 'not to bury' and 'not to burn' waste. Segregation of waste at different levels was either absent or partial and the ward-wise collection of waste was absent. There was a shortage of primary waste collection vehicles and open vehicles and vehicles without necessary partition were used for transportation of waste. The ULBs were operating disposal facilities without valid authorisation from the State Pollution Control Board and necessary environmental clearance. The absence of proper segregation of waste led to mixing of MSW with plastic waste, bio-medical waste, e-waste and slaughterhouse waste. The ULBs did not collect and channelise e-waste to authorised dismantlers/recyclers and e-waste was found mixed with MSW. The above lapses indicate lack of basic monitoring by ULBs and district /State level authorities to ensure compliance to statutory requirements and posed a serious threat to the environment besides leading to health hazards.


Report of the
Comptroller and Auditor General of India

Performance audit
of
Solid Waste Management in Urban Local Bodies

Government of Karnataka
Report No. 4 of the year 2018

6. The Way Forward

Solid Waste Management in urban areas has emerged as one of the biggest challenges that any country faces today. The situation is aggravated by rapid urbanisation. Inadequate management of waste has significant negative externalities in terms of public health and environmental outcomes. Besides, it has an adverse impact on the aesthetic appearance of the surroundings. The following are some key issues that can be addressed by the governing bodies to ensure sustainable waste management in urban areas.

- Scientific quantification and composition of urban waste to ensure adequate treatment and disposal and to identify and plan for innovative and efficient treatment technologies.
- Adequate promotion of sustainable waste management through Information, Education and Communication (IEC) campaigns by ULBs to create public awareness, minimise waste generation, re-use waste to the extent possible, practise segregation of waste and desist from littering in public spaces.
- Adoption of effective strategies for segregation of waste at various levels, viz. source/ household, centralised sorting facility and waste processing sites, door-to-door collection of domestic hazardous waste and sanitary waste and providing separate colour coded bins at public places to enable effective segregation and collection of waste.
- Implementation of source-level treatment facilities for processing of biodegradable waste and handhold households/institutions for effective utilisation of these facilities.
- Ensuring that mixed waste generated gets segregated at source points itself and setting up Leachate treatment plants to treat the leachate generated, thereby preventing pollution of nearby water bodies and farmlands.
- Establishment of an effective mechanism for monitoring the performance of solid waste management system, complying with extant Rules. Authorities may also operationalise a computerised Management Information System (MIS) and resort to stringent action to curb instances of violation of Waste Management Rules.
- Incentivizing good performance by agencies and institutional mechanisms in urban areas in solid waste management based on citizen feedback/satisfaction surveys.

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Establishing and Operating an Integrated Audit System for SOC Projects to Mitigate Risks - SAI Korea

Mr. Lee Yong Taeck,
Director of division V, Land and Environmental Affairs Audit Division in BAI

Lee yong taeck has joined in BIA since 2005 and mainly audited about land & transport administration as well as SOC Project like audit on Light Rail Transit, Nation Rail, National harbor, Public Private Partnership(PPP) project, safety diagnosis institution and so on.

Mr. Park Jun Hong,
Director of Provincial and Local Government Audit Bureau in BAI

Park jun hong has joined in BIA since 2000 and mainly audited about land & transport administration as well as SOC Project like audit on Nation Rail, National harbor, safety diagnosis institution, construction bidding system and so on.

The Board of Audit and Inspection, the Republic of KOREA

I. Issues on Risks of Social Overhead Capital (SOC) Projects

In South Korea, SOC or Social Overhead Capital refers to some 60 types of social infrastructure, such as roads, railroads, harbors, dams, schools and social welfare facilities, which are crucial for the country. The budget allocated for such SOC projects to be carried out by both the central and local governments in 2024 is estimated to be KRW 59 trillion.

The SOC budget is often considered as discretionary spending, as it requires public agencies to make a rational judgment on whether to embark on building new SOC infrastructure or not. In other words, once started, the agencies in concern are bound to bear a significant financial burden because not only it requires a massive amount of financial investment in early stage of construction, but high operational costs are incurred over a long period of time.

In an effort to manage these risks, the government of the Republic of Korea operates a so-called Project Assurance System for SOCs, in which an independent institution checks risk factors of each stage of the SOC project. The system stands to ensure that only when risk factors of one particular stage are eliminated, can the budget for the next stage be approved.

Meanwhile, like the Government Accountability Office of the United States, the Board of Audit and Inspection (BAI) identifies high-risk areas, and examines future risks from a mid-term perspective. As of 2024, 20 high-risk areas have been identified, one of which is the “Management System for Large-scale Investment Projects, such as SOC”.

The number of SOC investments by the South Korean government is on the rise every year. However, the overall performances of the SOC projects are being undermined because: an increasing number of SOC projects are being exempted from the feasibility study, and many of them turn out to be unfortunately unviable; or are not launched as scheduled due to the delays caused by inadequate management of the project and/or numerous civil complaints.

BAI takes an active initiative in resolving these issues by conducting preventive audits within the framework of public audit system. That is to say that it identifies and removes risk factors of SOC projects for each stage before moving on to the next stage. This paper aims at introducing BAI’s audit strategies and tools for systematic examining of SOC projects with limited audit resources.

II. The SAI of Korea’s Audit Strategies and Tools for SOC Projects

BAI’s three major audit strategies for SOC projects are as follows:

First, BAI conducts preventive audits to control risk factors of each stage of constructing SOC projects. It eradicates such risks when moving on from one stage to another, so that the problematic issues, like poor construction, budget waste, safety-related accidents, and etc. can be prevented at the following stage.

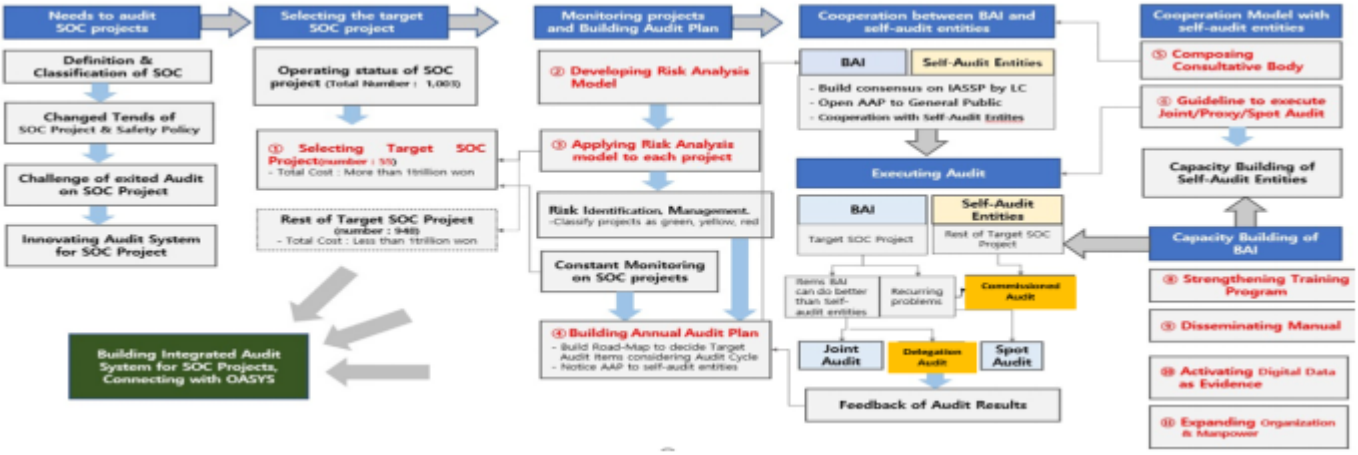
Second, BAI conducts audit primarily on those projects classified as “high-risk” after conducting quantitative and qualitative monitoring.

Third, as for those SOC projects that could not be examined comprehensively due to the constraints of audit resources, BAI utilizes the audit resources of internal audit units (IAUs) within public organizations through an established collaboration system. This is one way of reducing possible blind areas of audit.

Meanwhile, in 2022, BAI has established an Integrated Audit System (IAS) for SOC projects for implementing the above-mentioned three major audit strategies, which is operated in the following matrix:

1. SOC projects with a total cost of over KRW 1 trillion, or more than ten years of duration are designated as the subjects to be under direct management of BAI;
2. BAI conducts an in-depth risk analysis and monitoring to classify individual SOC projects into the categories of high, medium, and low-risk. Once labeled as high-risk, it is highly likely that BAI runs an audit ;
3. Since it is impractical to control multiple risk factors from numerous projects at each stage with the available audit resources, BAI takes proactive measures to prevent audit blind spots by utilizing a collaborative audit model - namely, proxy audit or outsourced audit; and
4. To this end, BAI coordinates with the IAUs for designing audits from the beginning stage of annual audit planning. BAI also joins hands with IAUs in terms of their endeavors for fostering internal auditors' capacity-development.

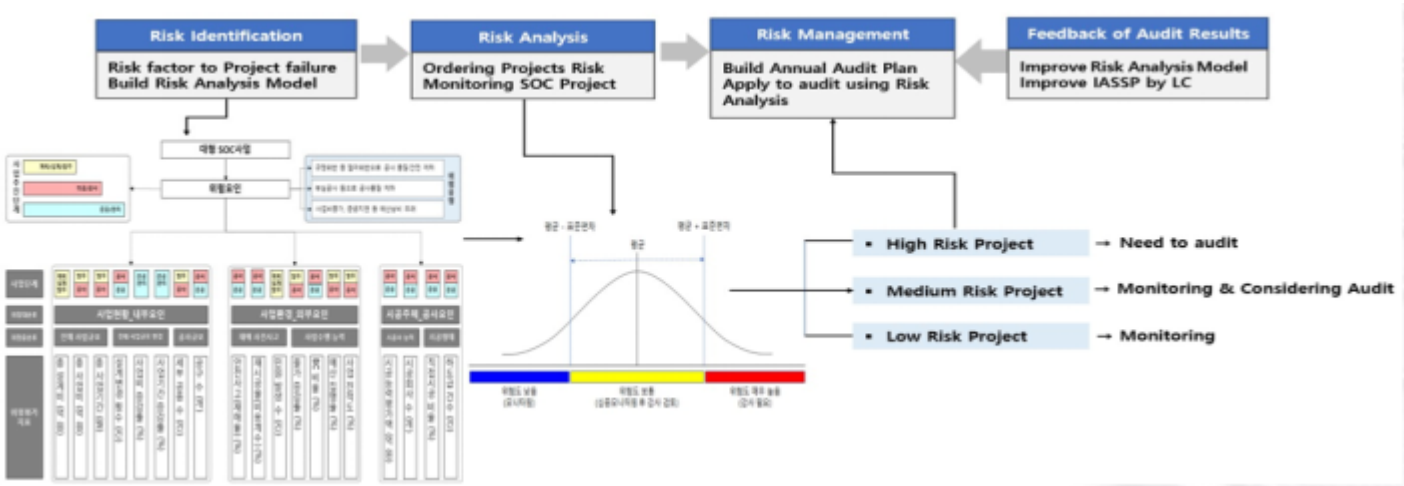
Figure 1. Integrated Audit System of SOC project by life cycle



Also, BAI makes use of the following audit tools to check the risks at each step of SOC projects.

First, the Risk Analysis Model is used to quantify risk scores by inputting risk variables of individual SOC projects. Next, Analytical Hierarchy Processing is used to derive risk scores. Then, projects are categorized into high (red), medium (orange), and low (green) risk groups based on predetermined criteria, which are calculated by standard deviation of the cumulated distribution of risk scores.

Figure 2. The process of developing a Risk Analysis Model



Second, the Construction Audit Manual is used to inspect defective construction and safety management practices to be applied uniformly for multiple construction sites.

Third, Technical Audit Support Teams are constituted to enhance the quality and reliability of SOC project audits. A team of over 20 experts of bridge and building structures, railway tracks, water resources, and etc. are appointed as audit advisors to support audit activities.

Fourth, with regards to the SOC Cooperative Audit Model, BAI has been employing various types of audit methodologies in terms of composition of audit team. In order to respond in a more versatile manner to different situations of each stage of SOC projects, BAI reshuffles its audit teams at each stage to conduct either proxy audit, entrusted (outsourced) audit, or joint audit.

For example, in the designing phase, IAUs would review the appropriateness of construction costs, and request the agency to adjust the costs, if deemed necessary. But the project design department of the agency in concern would insist that the costs be increased rather for other reasons. To overcome difficulties like this, BAI employs a Cooperative Audit Model by using a technical audit support team that will anticipate possible issues and problems. Based on the analysis, BAI requests IAUs to conduct proxy audits.

For the construction phase, it is appropriate to run a joint audit because the work of construction per se can be examined only when it is underway. In other words, BAI and IAUs can separately work on discovering administrative flaws like excessive construction costs, but since checking the site requires a physical presence of auditors, BAI and IAUs compose a joint audit team to prevent overlapping and duplication, and take measures based on their own findings.

III. Conclusion

To sum up, the key lessons of the BAI's audit system for SOC projects by life cycle can be summarized as follows.

First, to select the target project to audit, BAI has developed the Risk Analysis Model, which is to quantify risk scores of individual SOC projects. After conducting the risk analysis and monitoring, BAI runs audits for those classified as high-risk.

Second, to eliminate the risk factors of various SOC projects, which can come up at different stages, run by multiple agencies with limited audit resources, it is important for BAI to make an effort to design collaborative governance within the public audit system. To this end, BAI has established a cooperation model with the IAUs.

Furthermore, to foster active participation of IAUs, it is necessary to: build mutual trust between BAI and IAUs; discover and disseminate success cases of collaboration models; and provide the IAUs with institutional support, such as incentives for best practices.

Third, it is quintessential to make continual efforts to refine tools for designing the SOC audits - namely, the risk analysis model and collaborative audit models - to adapt to the changes in SOC policies and construction technologies.

Last but not least, BAI must not spare any efforts to support IAUs in enhancing their audit capabilities.

OTHER ARTICLES

Building a Better Healthcare Workforce: Audit Analyses Professional Development System - SAI Georgia

About the authors

Ms Ketevan Gigilashvili, Senior Analyst, International and Donor Relations Division, State Audit Office of Georgia

Ms Mariam Zaalishvili, Head of Social Sector Audit Department, State Audit Office of Georgia

Ms Nazi Chaganava, Senior Auditor, Social Sector Audit Department, State Audit Office of Georgia

Contact: iroffice@sao.ge

In response to the shortage and imbalance of healthcare personnel and in accordance with the World Health Organization's (WHO) Global Strategy on Human Resources for Health Workforce 2030" adopted in 2016, it is crucial to develop a healthcare workforce with the appropriate skills to effectively address healthcare challenges and meet current and future population needs.[1]

One of the important priorities of the Government of Georgia is the development of social policy and human capital[2], according to which the National Health Care Strategy of Georgia for 2022-2030 was approved[3]. The goal of the strategy is to enhance the development and effective management of the healthcare system, to improve the health status of the population, to ensure universal access to healthcare services and to develop human resources in the field.

Recognizing the importance of the topic, the State Audit Office of Georgia (SAO) with the support of U.S. Government Accountability Office's Center for Audit Excellence, studied the effectiveness of the mechanisms and measures, which were implemented to ensure adequate qualification and sufficient quantity of medical personnel in the country within the scope of performance audit conducted in 2023.

The Professional Development of Human Capital in the Health Care System – Performance Audit Report[4] encompassed the activities of three Georgian government entities: Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MOH), the Ministry of Education, Science and Youth (MES), and the Agency for Regulation of Medical and Pharmaceutical Activities (Agency). The audit focused on four important areas, through an in-depth analysis of which the SAO identified respective key findings:

1. Needs Assessment for Medical Personnel and Regional Coverage

There is an imbalance in terms of regional coverage of healthcare professionals in the country. The majority (58%) of actively practicing doctors and nurses are employed in the capital of the country; there is a sharp difference between the number of graduates of bachelor programs and number of applicants for residency programs. Besides, the number of bachelor graduates of the nursing program is low and decreases every year, despite a strategic goal of increasing enrollment.

2. Postgraduate Education and Certification

The State Program for Postgraduate Medical Education (PGME) currently lacks a mechanism to identify priority medical specialties for the country's healthcare needs. A significant part of the goals of the program has not been achieved and a majority of specialists are not employed in the respective municipality.

The process of updating materials for qualification and certification examinations granting the right to practice medicine lacks systematic approach. Furthermore, the qualitative aspects of the exam material are not studied during the examination test development process. An estimated 75% to 80% of the examination test is publicly accessible, and the required passing score for the exam is set at 75.5%. As the qualifying exam is only a written test, the necessary practical skills are not assessed. Based on the above, the pass rate for the certification exam is high.

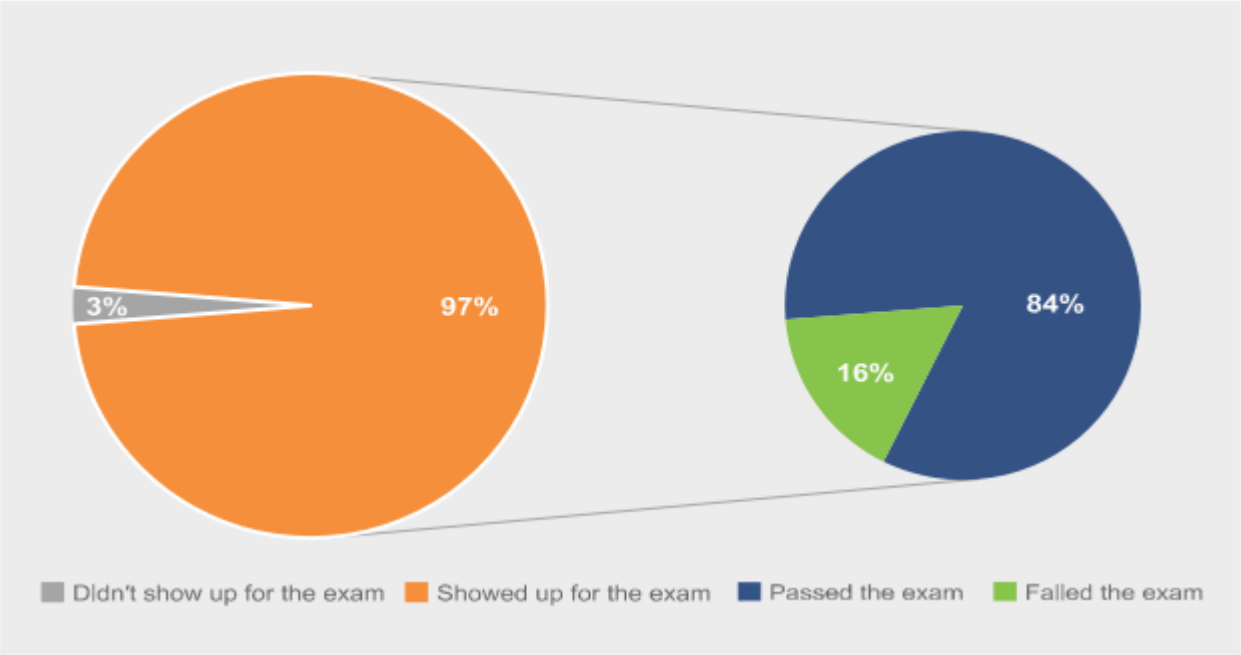
[1] Global Strategy on Human resource in Health: Workforce 2030, WHO 2016.

[2] The Government of Georgia, the main data and directions of the country for the years 2021-2024, Chapter I "For the Construction of a European State", https://www.mof.ge/5321.

[3] Resolution N230 of Government of Georgia of May 2, 2022 "On the Approval of the National Health Protection Strategy of Georgia for 2022-2030".

[4] Performance Audit on the Professional Development of Human Capital in the Health Care System.

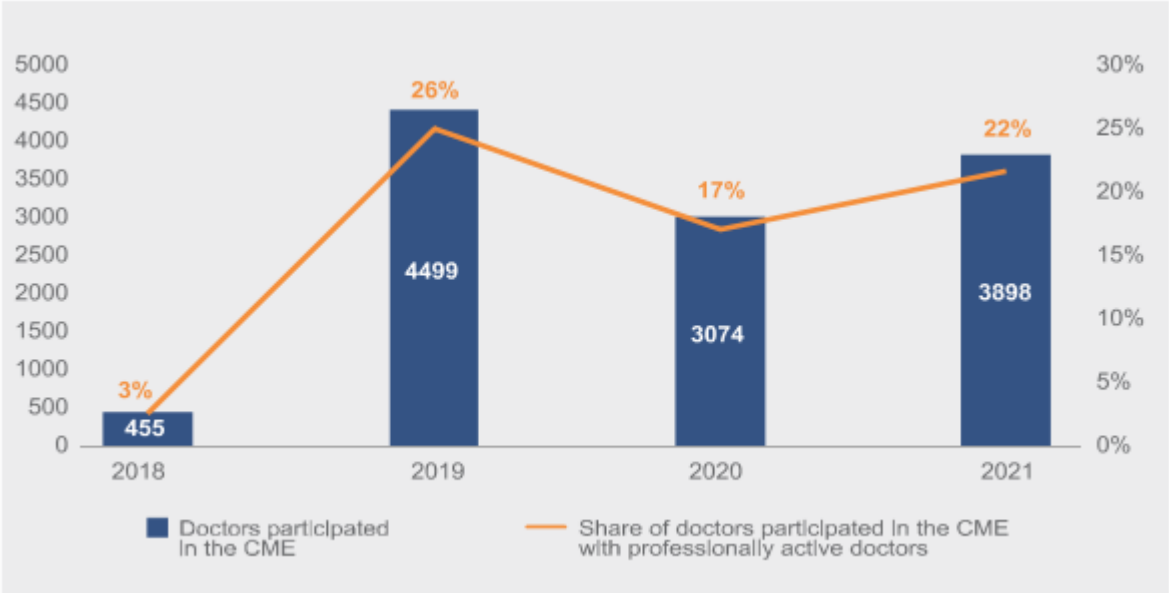
Figure 1: Certificate Exam Pass Rate (2018-2021): Analysis of 4,157 Applicants



3. Continuous Professional Education

The approach to Continuing Medical Education program (CME) is unsystematic. Since the CME is not mandatory for all medical personnel, the participation of doctors and nurses in both mandatory and non-mandatory Continuing Medical Education programs is low, consequently in 2018 - 2021, only 43% of the 17,632 doctors participated in CME. The current accreditation process for CME programs lacks a robust monitoring mechanism to effectively track the implementation of mandatory programs. A total of 757 CME programs were provided between 2018-2021, out of these, 108 (15%) programs were monitored in 2020-2021. From the mandatory 628 programs, only 90 (14%) were monitored.

Figure 2: Data analysis of 2018-2021 of doctors involved in the CME compared to the number of professionally active doctors



4. Medical Workforce Data Collection and Stakeholder Collaboration

Coordination between the Ministries of Education and Health in the field of medical education is not consistent in achieving the goals set by the strategy. There is no complete and reliable information on the total number of active medical personnel, the number of medical personnel participating in the CME program, as well as data on doctors who have undergone or require professional rehabilitation programs.

Following the audit findings, the SAO issued six main recommendations to the auditees with the objective of ensuring the professional development of medical personnel.

- **Recommendation N 1 to MOH:**

Within the framework of the state program of PGME, in order to eliminate the shortage in healthcare workforce, criteria for determining priority areas should be developed and respective measures should be taken to identify and eliminate shortages in specialties. It is also necessary to develop measurable and result-oriented quantitative and qualitative indicators for evaluating the effectiveness of the program, efficient mechanisms for monitoring and controlling of the program implementation should be realized.

- **Recommendation N 2 to Agency:**

In order to efficiently monitor compliance of medical institutions/schools implementing PGME programs with the accreditation requirements, it is necessary to establish a control mechanism - criteria for selecting medical institutions and a monitoring methodology.

- **Recommendation N 3 to MOD & Agency:**

To ensure the essential level of competence among medical professionals in the country, a mechanism for obtaining independent medical certification based on best practices should be established, which will assess both theoretical knowledge and practical skills. Furthermore, an instrument for creating, updating, and quality assurance of certification exam tests should be developed.

- **Recommendation N 4 to MOH & Agency:**

To establish an effective system of CME and ensure continuous professional development of the medical workforce, it is vital to introduce mandatory CME requirements for each specialty, applicable to all professionally active medical professionals. Into this, well-defined mechanisms for monitoring accredited CME programs and the awarding of credit points should be established.

- **Recommendation N 5 to MOH:**

To determine HR policy in the health care system, up-to-date databases should be created with comprehensive information: on the existing healthcare workforce, including the number and qualifications of personnel at all levels of education, along with the number and competencies of potential healthcare personnel.

- **Recommendation N 6 to MOH & MES:**

To ensure highly competent professionals in the health care system, ministries should collaboratively develop an effective coordination mechanism for undergraduate and postgraduate medical education: by determining accountability based on the desired outcomes, developing respective policies and procedures, and establishing the robust mechanisms for monitoring and evaluating of the results.

The SAO's recommendations are developed on the basis of the best international practices, to this end, existing approaches to healthcare and medical education systems in the WHO, the USA, Germany, UK, Turkey, and other countries were studied. Furthermore, experts from the U.S. Government Accountability Office Center for Audit Excellence supported the audit process by contributing their approaches and methodologies, ultimately enhancing the audit's impact.

The audit report was discussed at a meeting of the Parliamentary Standing Group on Audit Reports of the SAO, with the participation of the auditees, that agreed on the findings and recommendations. Based on the SAO recommendations, the auditees prepared a comprehensive action plan, which will foster the development of a modern, efficient, and effective system of medical education and healthcare, aimed at enhancing the qualifications and capabilities of healthcare workforce.

SAO will further follow-up with the implementation of the recommendations in the Audit Recommendation Implementation System (ARIS) innovative platform, which will monitor the follow-up process.

Indonesia Electrical Sector Denouement to Efficacious Climate Governance - SAI Indonesia

Sherlita Nurosidah
About the Author
(Audit Board of the Republic of Indonesia)

Sherlita Nurosidah has been in the Audit Board of Indonesia (BPK) for over five years. Prior to that, she gained her bachelor's degree in accounting at Brawijaya University in 2015 and a master's degree in economic science at the same university in 2023. She has served as an auditor for various local governments at the institution. Upon completing her master's, she is currently a competency development analyst and in charge of a bureaucracy reformation project as one of the strategic unit transformation members. To this date, she has actively written academic journals and conference papers on diverse topics, such as accounting, public auditing, economic issues, flypaper effects, sustainable energy, and legal studies.

Introduction

In the era of unprecedented environmental challenges, global climate governance has emerged as a critical framework for coordinating collective action toward mitigating climate change and fostering sustainability on a planetary scale. With the recognition of climate change as a defining issue of our time, nations worldwide have mobilised to establish comprehensive strategies and initiatives to curb greenhouse gas emissions and adapt to the impacts of a changing climate. Against this circumstance, Indonesia has emerged as a key player in climate governance, setting forth ambitious programs to address its environmental responsibilities while pursuing economic development. The deployment of renewable energy in Indonesia enhances the chance to support just energy transitions to a low-carbon economy (Listiningrum, Idris, Vilandamargin, Nurosidah, & Suhartini, 2022).

Indonesia's commitment to climate action is evident through a suite of programs designed to tackle the multifaceted challenges of climate change. The country's roadmap arrangement towards Net Zero Emissions (NZE) is central to these efforts, signaling a bold ambition to achieve carbon neutrality within a specified timeframe. Additionally, Indonesia has implemented policies such as issuing domestic market obligations to regulate coal and natural gas allocation, reflecting a strategic shift towards cleaner energy sources. Moreover, establishing enhanced Nationally Determined Contributions (NDCs) and a long-term strategy for low carbon and climate resilience by 2050 underscores Indonesia's proactive stance in aligning with global climate objectives.

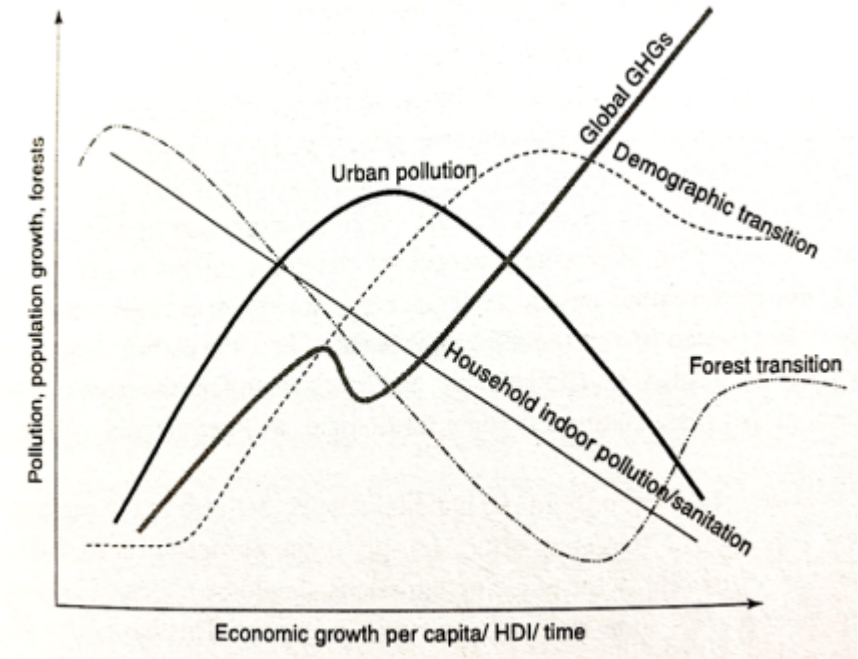
Within Indonesia's comprehensive climate governance framework, the role of the Supreme Audit Institution (SAI) in overseeing the electrical subsector is paramount. This article will specifically address the critical role of SAI Indonesia in conducting audits and evaluations within the renewable energy sector, ensuring transparency, accountability, and efficiency in implementing policies and initiatives. By scrutinising the effectiveness of renewable energy projects and regulatory mechanisms, SAI Indonesia contributes to the country's efforts to transition towards a more sustainable energy infrastructure, thus advancing both environmental and developmental objectives. As Indonesia continues to navigate the complex challenges of climate change, the collaborative efforts of government institutions, civil society organisations, and international partners will be crucial in driving its climate governance agenda forward.

Historical Background of Climate Governance

In early discussions of climate change, it is arguably unreasonable and shall be put aside as its impact will yet be seen in the next 40-50 years (Gupta, 2014). Naturally, actions to favour climate awareness highly depend on countries' policies. The absence of global attention to climate change creates unbalanced competitiveness for corporations under climate treaties. Additionally, it could only lead to higher tensions in the international market as other countries still avoid climate-friendly participation. Local governance urges the need for global externalities to justify actions between cause and effect on climate change. Over the years, evidence has shown significant disruptions that climate change generates, which convince stakeholders worldwide to take precautions.

One of the challenges to climate change is the redundancy of gas emissions and urban pollution. It shows that economic growth leads to higher emissions as a society will only be willing to reduce pollution if related incentives are introduced. A pattern of social development over time can be seen in Figure 1.

Figure 1. Social Development Theory



Source: Gupta (2014, p.19)

A global-scale recognition of climate governance began in 1977 with the establishment of the Right to Development Declaration by the UN General Assembly. There are five paramount phases of governing climate-friendly activities globally. The first phase (until 1990) focused on scientific knowledge enhancement, incremental awareness of critical problems, political mobilisation, a more significant proportion of small islands' participation, ideas in addressing the issue, mitigation, and adaptation. Even though discussions are carried to the highest platform of the UN, it is yet to represent the emerging trend of neo-liberal, neo-conservative approaches, and too idealist. The second phase (1991-1996) brought a more optimistic point of view as new scientific evidence on the danger of climate change was acknowledged. Global commitment to reducing gas emissions by setting targets for developed countries and assisting developing ones was addressed. Unfortunately, the figure showed that developed countries successfully reduced their emission, yet developing ones increased. The third phase (1997-2001) marked the backlash of the leadership paradigm. There was not enough enforcement of the Kyoto Protocol as key countries waited for each other to make a move on ratification. Regardless, global emissions can be reduced by 3% due to circumstantial occurrences, such as the fall of economies in eastern and central Europe, the merger of East and West Germany, and the coal mining closure in the UK. The fourth phase (2001-2007) compensated for the effectiveness of the market mechanism. Despite some governments being reluctant, overall gas emissions fell by 6% due to lower government and judiciary actions. The fifth phase (2008-2012) ended with the initiation of the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) in 2012. To this date, policies regarding climate change have evolved gradually, and new subjects of interest to the environment have been brought to the table.

16 Findings Consisting of 18 Issues in the Electrical Sector Development

In Semester 1 of 2023, SAI Indonesia conducted a performance audit of the Indonesian Ministry of Energy and Mineral Resources (ESDM), the Ministry of Environment and Forestry (KLHK), and others related to the management of coal, natural gas, and renewable energy in the development of the electricity sector for guarantee the availability, affordability, and sustainability of energy. Sample locations are DKI Jakarta, West Java, North Sumatra, Central Java, Bali, South Kalimantan, South Sulawesi, Central Sulawesi, West Nusa Tenggara, and East Nusa Tenggara. The purpose of the audit is to support the 7th SDGs, ensuring access to affordable, reliable, sustainable, and modern energy for all.

To reach its target, Indonesia has set several programs: a roadmap arrangement towards NZE, policy issuance of domestic market obligation to coal and natural gas allocation, establishment of enhanced NDCs, and long-term strategy for low carbon and climate resilience 2050. Nonetheless, SAI Indonesia found several significant issues in primary energy management. The first issue concerns risk mitigation of energy transition towards NZE by 2060, which has yet to be implemented. Governmental regulation to achieve renewable energy spread by 23% will increase cost provision, amounting to 118.15%. Hence, it causes steep government subsidies and compensation. Another problem arises from risk mitigation of funding support and policies on developing solar-based renewable energy. As a result, there is a risk of the uneconomical price of electrical energy and the lower competence of the domestic market in utilizing the energy. In overcoming the issue, SAI Indonesia recommends the ESDM and KLHK arrange further coordination on the development and details of its roadmap by emphasizing a higher degree of sectoral relations, risk identification along with its mitigation plan, and analyzing its impact from choices made.

A slow progression of the electricity supply business plan (RUPTL) potentially influences a scarcity of the national electrical system, which has been another issue that has been found. Calculations of the project advancement in power plant construction and expected readiness operation of generating units indicate that most of the electric power system is in standby condition and deficit. This is demonstrated, among other things, by the low realization of RUPTL. Historical fulfillment data RUPTL target from 2011 to August 2022 shows that the average achievement percentage is only 46.13%. Apart from that, there are obstacles to completing 15 projects with a capacity of 336.8 MegaWatt (MW) whose construction progress has stopped, and 12 projects with a capacity of 177 MW were terminated or not continued. Consequently, there is a potential loss to the majority supply of the national electricity system. SAI Indonesia then recommends that the ESDM and KLHK oversee PT PLN through the Ministry of State-Owned Enterprises in executing the steps recommended to accelerate the RUPTL project's realization from 2021 to 2030.

The energy sector's greenhouse gas (GHG) estimation, specifically the electrical subsector, has yet to draw the actual figure for emissions generated by power plants. The determined target of enhanced NDC does not consider the realization of actions toward GHG emission' reduction in the energy sector. Current GHS emissions calculation uses secondary data from coal sales. Meanwhile, primary data from the APPLE-Gatrik application, which shows a real-time observation, is not employed. The primary data shows fewer emissions produced compared to the reported number. Therefore, reported data on GHG emissions does not resemble the actual value and is more significant than it should be. SAI Indonesia recommends the ESDM and KLHK initiate a data consolidation procedure between the Directorate General of Electricity and Data Center and Information Technology ESDM to synergize APPLE-Gatrik data as a base estimation to inventory GHG, especially the electrical subsector.

Conclusion

Indonesia's proactive approaches to climate governance exemplify a concerted effort toward achieving sustainable development goals while addressing the global challenge of climate change. Indonesia is committed to reducing carbon emissions and building climate resilience through ambitious programs and initiatives. These actions are not only crucial for mitigating the impacts of climate change but also for fostering long-term economic growth and social well-being.

Moreover, the pivotal role played by SAI Indonesia in the electrical sector's denouement audit underscores the importance of accountability and transparency in climate governance efforts. By conducting rigorous evaluations and audits, SAI Indonesia contributes 16 findings of 18 issues to effectively implementing renewable energy policies and initiatives, ensuring the efficient utilisation of resources towards achieving Indonesia's climate targets. Continuing collaboration between government agencies, civil society, and international stakeholders will be essential in furthering Indonesia's climate agenda and realising its sustainable and resilient future vision.

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Involvement of Supreme Audit institutions in climate performance assessment: International and local experience. Realities and challenges – SAI Azerbaijan

Vugar Gulmammadov

Chairman of the Chamber of Accounts of the Republic of Azerbaijan

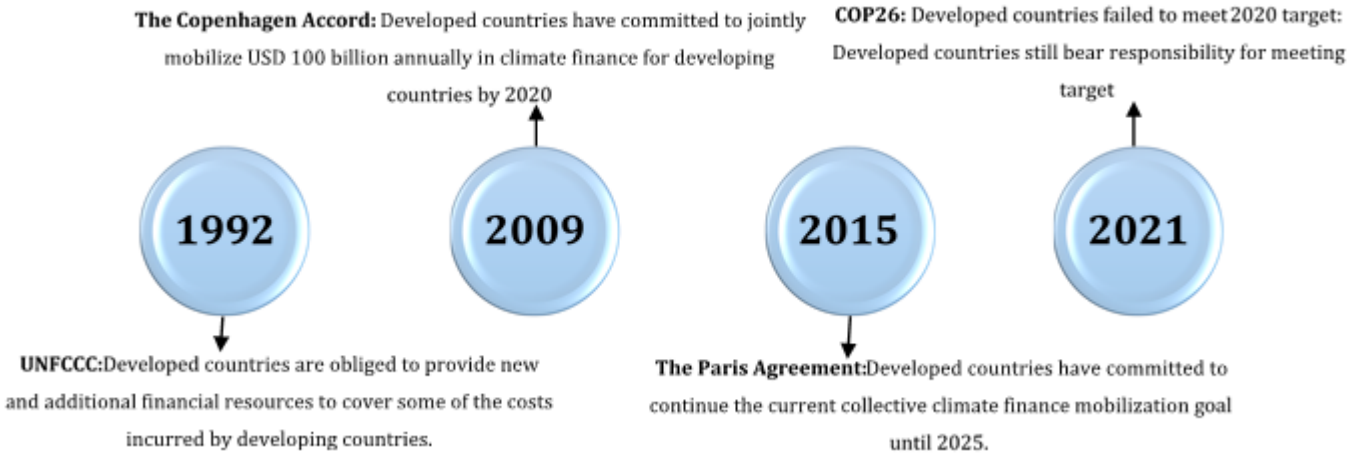
Climate change is one of the biggest global problems of modern time. Greenhouse gas emissions, melting glaciers, forest fires, deforestation and misallocation of water resources have a negative impact on the environment, economic and social conditions. The solution of the mentioned problems should be implemented on the whole planet.

Despite the national and international measures taken by governments to reduce the greenhouse gas emissions in the last two decades, the warming process in the climate system is still observed. According to the 2023 Report of the Intergovernmental Panel on Climate Change (IPCC), the scale of changes in the climate system as a whole in recent years and many aspects of the climate system have reached to an unprecedented extent. So, according to the report, the global surface temperature in 2011-2020 is 1.1°C higher than in 1850-1900. It is predicted that climate changes will continue in the scenarios for the future period.

Although the global climate action is a shared responsibility of many stakeholders in the public and private sectors, the dominance of the former in this area has so far been felt to be significant. Thus, national governments play an important role in climate action by allocating public resources, implementing state policies, and through various governance mechanisms to combat climate change and its consequences. Political commitment by governments, an institutional framework, good strategic management, and broad access to finance and technology can contribute to effective climate action.

Apparently, access to financial resources, especially public finance, is an important tool in the implementation of mitigation and adaptation activities for climate change.

Image. Financial commitments under the Major Climate Change Agreements



As the climate action affects the entire planet, significant financial, including public resources are used for the implementation of this action, and in this process, a national government-based approach to the entire cycle of public finance management is required, the Supreme Audit Institutions (SAI) can contribute to this issue through their audits.

The conducted analyzes show that the experience of conducting environmental audits by SAIs, including their involvement in climate performance assessment, has been expanding in recent years. In the past, the traditional role of SAIs was to oversee the financial operations of public sector organizations. Since the end of the last century, SAIs have realized their responsibilities in a number of areas, including the environment, and started research in a new direction of audit.

The Working Group on Environmental Audit (WGEA) was established within INTOSAI to stimulate and support environmental audit, exchange information and methodological base, as well as meet other cooperation needs.

This process is accompanied by the adoption of field-specific guidelines, as well as their revision in the light of the changing environment. In the last 20 years, INTOSAI adopted Activities with an Environmental Perspective (GUID 5200), Guidelines for Environmental Auditing in the Context of Financial and Compliance Audits (GUID 5201). In addition, the Guidance on Sustainable Development: The Role of Supreme Audit Institutions (GUID 5202) also covers environmental aspects. As can be seen from the guidelines, although environmental issues can be covered by compliance and financial audits, performance audits come to the fore in audit topics related to climate change. Environmental performance audits mainly cover the following:

- ✓ implementation of environmental programs;
- ✓ environmental impact of other programs;
- ✓ environmental management systems and environmental reports;
- ✓ evaluation of proposed environmental policies and programs;
- ✓ solving cross-cutting environmental problems.

Currently, climate action is becoming topical as an environmental audit for many SAIs being aware of the risks posed by climate change to society and the economy. It is no coincidence that the majority of the INTOSAI WGEA survey respondents put adaptation to climate changes as the number one environmental audit topic for future audits.

The assessment of climate action by SAIs aims to achieve the **outcome** - "contributing to the improvement of accountability, effectiveness and inclusiveness of government climate change adaptation measures" through the following three outputs:

1. High-quality audits and recommendations in various areas (disaster risk reduction, water resources management, sea level rise, implementation of climate change adaptation plans/activities, audit of SDGs implementation on climate change adaptation measures);

2. timely submission of audit reports in accordance with legislation;

3. audit impact throughout the audit process.

On the basis of discussions and research conducted within the international SAI community, IDI and INTOSAI WGEA have identified **5 thematic areas** related to climate change adaptation measures and the activities that can be covered by audits in those areas.

1. Disaster risk reduction: Audits can cover a range of adaptation measures (flood barriers, early warning systems, hurricane warnings, tree planting, resettlement, preparedness plans and establishment of organizational structures).

2. Water resources management: Audits can be conducted on a number of adaptation measures (ensuring access to clean water for all, including vulnerable populations, remote areas, innovative ways of using limited water resources in drylands, water conservation, smart use of water resources in agriculture).

3. Sea level rise and coastal erosion: Floods cause deterioration of living conditions, mostly affecting the poor, especially women and people with disabilities. Moreover, sea level rise is a major risk in coastal cities, including the world's largest cities.

4. Implementation of plans or actions related to climate change: Audits in this area can cover topics related to the planning process of climate change activities, the quality of the plan and, where applicable, the implementation.

5. Realization of national adaptation goals related to SDG13: Audits can be conducted on national targets for climate change adaptation measures linked to one or more of the SDG climate change adaptation targets of governments. In this case, a more government-based audit approach is recommended.

Regardless of the thematic area, SAIs should focus on 3 main issues (accountability, effectiveness, inclusiveness) for each audit.

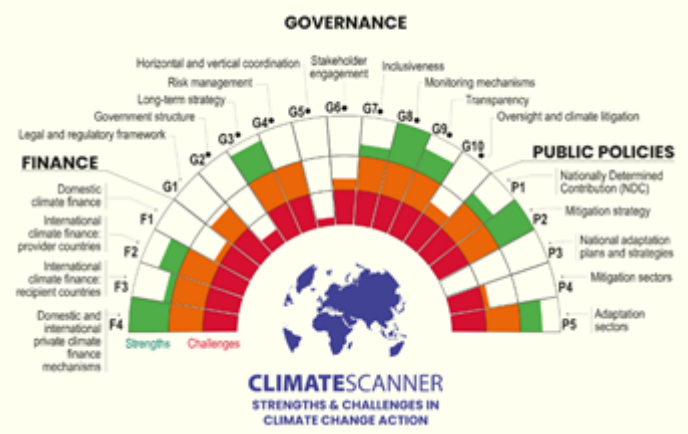
In general, although the SAI mandates differ, they all have a mission to provide independent evaluation of the management and use of public resources. Audit on management and use of resources in most cases is conducted as a component of compliance, financial and performance audits. For this reason, SAIs do not need special authority to assess the effects of funds allocated to climate action. In a number of countries, including Azerbaijan, this has been established at the legislative level and attributed to the direct duties of SAIs. Thus, according to Article 7.0.3.9 of the Law "On the Chamber of Accounts", the Chamber of Accounts can implement external state financial control measures in the field of environmental protection, prevention of disasters and the use of funds allocated for elimination of their consequences.

According to INTOSAI WGEA, in the last 5 years, the number of environmental audits by SAIs is more than 400, and more than 50 of them are directly related to climate performance assessment. Performance audits are significantly predominant here.

Table. Audits conducted by SAIs

Year	Country	Audit
2024	Israel	National Climate Action by the Government of Israel Extended Follow-up Audit
2024	European Court of Auditors	Reducing carbon dioxide emissions from passenger cars
2023	USA	Climate Change: Options to Enhance the Resilience of Agricultural Producers and Reduce Federal Fiscal Exposure
2022	Great Britain	Adapting to climate change: the role and progress of government
2021	Finland	Finland's International Climate Finance - Governance and Effectiveness
2021	Austria	Climate Protection in Austria – Actions and Achieving Targets 2020
2020	Italy	Sudden pollution in the Adriatic Sea
2020	Czech Republic	Support for flood protection measures
2020	The Netherlands	Follow-up on international climate finance
2020	Estonia	Sustainability of measures for rehabilitating land improvement systems
2019	Chile	Implementation of the measures contained adaptation plan to climate change in the health sector
2019	Mexico	Coordination of Hydrocarbon Energy Policy
2019	Sweden	Support for local Climate investments
2018	Philippines	Use of funds intended for the National Greening Program
2018	Hungary	Audit on energy efficiency control of public buildings
2018	Canada	Perspectives on Climate Change Action in Canada
2018	Norway	investigation of Norway's' International Climate and Forest Initiative

Considering the topicality of the issue, SAI Brazil, the Federal Court of Accounts (TCU), the current INTOSAI Chair, made a slightly different proposal, and together with INTOSAI WGEA, experts and international organizations (UNDESA, the World Bank, UNDP, etc.) launched Climate Scanner initiative.



The initiative was officially presented during the XXIV INCOSAI. The Climate Scanner is an innovative tool that provides a rapid assessment of government climate action.

The Climate Scanner tool was designed and tested by various SAIs around the world in 2023. The tool will allow assessments in three axes (governance, finance and public policy).

The purpose of the project is to conduct assessments in the field of climate at the national and international levels, to consolidate the data of the participating SAIs and to deliver relevant information to interested parties in an easy language, to support decision-making with the elaboration of strategic projects.

Climate Scanner assessments by SAIs will be conducted in 2024, and the final results are expected to be announced at the 29th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change - COP29, which will be held in our capital.

A number of fiscal diagnostic tools also encourage the active involvement of SAIs in assessing the climate action. For example, the PEFA Climate (Climate Framework) prepared by the Public Expenditure and Financial Accountability (PEFA) Secretariat also envisages the involvement of SAIs in this activity. PEFA's Climate Framework tool is a set of indicators based on the PEFA framework to gather information on how prepared the public financial management system is to support and promote the implementation of government climate change policies. Note that, **on the one hand**, SAI reports act as a source of information for this evaluation, and on **the other hand**, the effectiveness of SAI's activity in the climate field is measured through some indicators of the tool.

The experience of the Chamber of Accounts of the Republic of Azerbaijan in assessing the national climate activity related to climate changes

In our country, a number of important measures have been taken to achieve the goals in the field of combating climate change, and the State Commission on Climate Change has been established. To organize the activities of the Commission, a Working Group was formed and an Action Plan was prepared. In the past period, the Republic of Azerbaijan prepared its National Information and Biennial Update Reports on climate change and submitted it to the UNFCCC Secretariat.

In accordance with the Paris Agreement, the Republic of Azerbaijan submitted its Nationally Determined Contributions (NDC) document in 2016 and as a contribution to global climate change initiatives, it has set a target of reducing greenhouse gas emissions by 35% by 2030 compared to 1990.

"Azerbaijan 2030: National Priorities for Socio-Economic Development" provides for the transformation of Azerbaijan into a country of clean environment and "green growth". The priorities include climate change and the fight against it, as well as the application of renewable energy in all areas of the economy based on the principles of the green energy space in our country. Climate change mitigation measures are reflected in the "Socio-economic Development Strategy of the Republic of Azerbaijan for 2022-2026", "State Programs on the Socio-Economic Development of Regions" and other documents.

Although substantial work has been done by the Azerbaijani government within the framework of the fight against climate change, the global development trends of the world economy have determined the issues of climate change as an actual problem in the Republic of Azerbaijan. So, according to the Ministry of Ecology and Natural Resources, the total annual greenhouse gas emissions in 2021 increased by 26.3% compared to 2010, and by 7.8% compared to 2020.The results of various assessments show that the agricultural sector, water resources sector, coastal zones and forest sector are more sensitive to climate change in Azerbaijan.

Such conditions define the important tasks for the Chamber of Accounts by highlighting the importance of external state financial control of environmental activities. To assess the effectiveness and efficiency of the government's national climate and environmental activities, a number of audits (mainly performance audits) have been carried out by the Chamber of Accounts recently. Some of the identified topics are directly related to the 5 thematic areas identified by the international SAI community.

On the assessment of efficient use of irrigation water. Due to the recent drought, the trend of depletion of fresh water resources has also been observed in Azerbaijan. According to the results of scientific studies, Azerbaijan is currently ranked 20th in the list of countries that may face water shortage in 2040.

Although more than 75% of fresh water resources in the Republic of Azerbaijan are formed from sources outside the country, the effective use of fresh water resources is one of the topical and priority issues for Azerbaijan. Nevertheless, as the underground irrigation canals prevail it causes a large amount of water loss, and the lack of necessary infrastructure for accurate measurement of the amount of water used does not allow to determine the water loss amount.

In addition, to increase the production of agricultural products, the involvement of uncultivated lands into crop rotation has resulted in the destruction of agricultural crops in areas far from water sources due to drought and lack of irrigation water.

Under SDG 6 (Clean water and sanitation), it was determined that the efficient use of irrigation water was not organized. The 24.3% decrease of indicator 6.4.1 on "Changes in water use efficiency" (showing GDP per m3 of water, defined as the ratio of a country's GDP to drinking water taken from all sources) compared to 2018 showed that the increase in the amount of water taken from sources is not adequate to the level of GDP growth, and thus less efficient use of water.

Assessment of the efficiency of the "Pirshaghi" wastewater treatment plant" project. Due to insufficient funding, the lack of infrastructure for drinking water supply and sewage system in the scope of the facility has made it impossible to deliver sewage to the facility and use it for its intended purpose. The failure of the plant to operate at its full capacity according to the purpose of the economic, ecological and social goals of the Project, and the indicators "6.2.1 Safe sanitation and hygiene", "6.3.1 Proportion of domestic and industrial wastewater", "6.6.1 Water-related ecosystems" showed that the SDG 6 goals were not achieved.

Performance audit of Forestry Development Service. The conducted audit shows that a strong legislative base has been formed to regulate forest-related issues in the country, and the Forest Code has been adopted. The Code defines the legal bases of the regulation of forest relations in the territory of the Republic of Azerbaijan, the use of forests, their protection, reservation, restoration, and the improvement of the ecological and reserve potential. Against the strong legal framework, the previous forestry works that are the basis of forestry activities, have not been completed, efficient use of forest areas has not been ensured, although certain measures have been taken against illegal deforestation, measures in the field of protection and protection of forests from the effects of other anthropogenic factors and pests have been insufficient.

At the same time, national goals for forest activities have not been determined, and since the activities towards achieving the goals specified in SDG 15 (Life on Land) on forest restoration are not sufficient, no significant increase in the number of areas covered by forests has been observed, and there are cases of non-calculation of the indicators defined by SDG15.

The Agalı "smart village" project audited in 2023 are directly related with the 8 of the 17 Sustainable Development Goals ("1. No poverty", "6. Clean water and sanitation", "7. Affordable and clean energy", " 8. Decent work and economic growth", "9. Industry, innovation and infrastructure", "11. Sustainable cities and communities", "12. Responsible consumption and production", "13. Climate action"). Currently, the audit process on the relevant topic by the Chamber of Accounts is ongoing. The audit results are expected to be presented at COP 29 to be held in Baku, Azerbaijan.

In addition, the Chamber of Accounts analyzed the indicators within the medium-term expenditure frameworks under the "Environmental protection" section of the functional classification of state budget expenditures. Within the framework of the analysis, the forecast and performance indicators for the costs of 4 programs (Protection of biological diversity, Efficient use of natural resources, Provision of hydrometeorological data and Environmental protection), as well as the indicators were analyzed, directions for further improvement of the activity were indicated.

The conducted control measures have determined that there are **a number of challenges** in the government's activities related to the national climate and environment.

- ✓ The restoration of the areas liberated from occupation, the forests in those areas and the ecosystem as a whole requires a lot of resources and time. In 2021-2022, more than 3 billion dollars have been allocated to the restoration of liberated territories from the state budget. This creates new challenges for the government to organize and implement the efficient use of those funds, and for the Chamber of Accounts, to assure the efficient use of the funds.
- ✓ As renewable energy, the production of electricity in hydropower plants requires the availability of large sources of running water. Large water sources are mainly transboundary waters and thus 75% of fresh water resources are formed outside of Azerbaijan. The recent drought and the use of water by the origin countries cause a decrease in the water resources of the transboundary rivers until they reach the territory of Azerbaijan. This creates difficulties in the construction of new hydropower plants and the more efficient use of existing plants. In addition, the pollution of transboundary rivers beyond the relevant norms before reaching the territory of Azerbaijan, requires additional time and resources to adapt those waters to be used for domestic and economic purposes.
- ✓ Azerbaijan is among the most mine-contaminated countries in the world, and it is estimated that there are more than 1.5 million unexploded mines and munitions in Azerbaijan. In the period from 08.11.2020 to 27.02.2024, 345 people became victims of 205 mine explosions. The threat of landmines has made it impossible to use the lands in the liberated territories for both residential and agricultural purposes, as well as for ecosystem restoration.

The above-mentioned issues were mostly related to the factors characterizing the impact on the country. In addition, there are other factors that affect the activity of almost every SAI in this field. These may include:

Above all, it is very important to have a strategic management framework and consider the climate issue by public financial management (PFM) system in the field of climate action. It is particularly important that the government's environmental and climate strategic priorities and objectives are clearly defined to assist financial planning. Although concepts such as climate finance, green budget, etc. are currently becoming popular in the field of public finance management, there are still few examples that can be noted as good practice in this field.

Our research shows that it is very important to have budget indicators, along with specific policy goals, in the strategic documents adopted in the country (for example, the National Adaptation Plan) in the field of climate action. Also, references to these documents should be increased during the preparation of the National Climate Action Plan and other strategic budget documents. This will also enable to determine the sufficiency of the budget commitments to implement the adopted strategic documents on the national climate action. At the same time, the inclusion of more institutions in the program budget initiative can create acceptable conditions for monitoring the costs of climate actions.

Another approach is the application of budget tagging. Climate change budget tagging should be viewed more within the framework of budget classification. The first reference point is the GFSM (including COFOG). It should be adapted to the methodology of the State Financial Statistics Manual. Usually, climate change related issues (COFOG) are funded under the functional classification "environmental protection" expenditure. However, the "environmental protection" section cannot act as a financial source of the climate change process in the full sense.

Another challenge regarding the first issue is related to the impact of environmental issues on financial statements. However, the possibilities of reflecting these effects in cash-based budget reporting are limited.

The second issue is the variety and timeliness of climate action data. As it is known, in some cases financial data on activities are submitted to SAIs shortly after the end of the year. It is difficult to say this about non-financial information. Of course, relatively favorable conditions are formed in the countries where the program budget is applied.

Sometimes governments include their environmental programs into a single environmental plan and report. In the absence of such a plan, SAIs face some difficulties. In such cases, SAIs can review the main environmental problems affecting their country and list programs carried out by the government.

It is crucial for SAIs to agree on critical success factors and KPIs for non-financial climate action data. Timely and high-quality presentation of data also requires the integration of IT systems in the relevant field.

As the 3rd issue, we can mention the formation of personnel potential for climate action assessment. As it is known, audits in this field require specific knowledge besides on financial issues and performance audits. Currently, there are various trainings in this field, and employees of the Chamber of Accounts participated in these trainings and obtained the relevant certificates. There is a great need to proceed in this area. In the future, the formation of a more comprehensive training program on climate action assessment by INTOSAI and its relevant working groups can also serve to capacity building.

NEW HEADS OF SAIS

Dr. TANAKA Yayoi, President, Board of Audit of Japan

Dr. TANAKA Yayoi assumed the Presidency of the Board of Audit of Japan on January 12, 2024, succeeding Mr. OKAMURA Hajime, who retired from the position on December 28, 2023.

Prior to assuming her current position, Dr. TANAKA served as Commissioner of the Board (since 2019) and as Acting President upon Mr. OKAMURA's retirement. Before that, she had worked as professor at Research Department, National Institution for Academic Degrees and Quality Enhancement of Higher Education.

NEWS ABOUT
OTHER SAIS

NAO Bahrain employees learn about Artificial Intelligence

The National Audit Office of the Kingdom of Bahrain (NAO) hosted training sessions on artificial intelligence (AI) for 86 of its employees at the beginning of the year.

The training comes within the NAO's framework for informing its employees about the latest developments and best practices in the audit field and raising their productivity.

Participants learned about using artificial intelligence techniques in audit work, their benefits and role in empowering Supreme Audit Institution (SAI) employees, the required resources, and associated risks. The trainers discussed practical examples of AI application in the US Government Accountability Office (GAO) and hinted at future deployment of AI in the audit field.

The training was conducted by Taka Ariga, Chief Data Scientist and Director of the Innovation Lab at US GAO and Alex Gromadzki, Senior Data Scientist at the US GAO Innovation Lab.

NAO Bahrain joins Kick-off meeting of Special Committee on Establishing INTOSAI WGFA

HE Dr Isa Nasser Alnoaimi, Assistant Auditor General for Administrative Audit and Head of the Forensic Audit Team, and Mr. Mohamed Isa Alaradi, Administrative Audit Director and member of the Forensic Audit team at the National Audit Office (NAO) took part in the kick-off meeting of the Special Committee on the establishment of a Working Group on Follow-up Audit (WGFA) of Supreme Audit Institutions approved by the Steering Committee of INTOSAI's Knowledge Sharing Committee.

The committee was formed to study the feasibility of establishing a working group on the follow-up of audit reports and how to increase the impact of those reports on added value. The aim is to enhance the quality of public funds protection systems and support the development of constructive recommendations to improve the effectiveness of audited entities.

The meeting, chaired by HE Datuk Wan Suraya Wan Mohd Radzi, Auditor General of SAI Malaysia, discussed the objectives of the Special Committee and offered an opportunity for SAIs to exchange their experience on following up on audit report and identify relevant best practices. The Special Committee includes 18 SAIs, and its work will continue until July 2024.

NAO Bahrain attends closed session on "Joint Responsibility in Protecting Public Resources"

HE Sheikh Ahmed bin Mohammed Al Khalifa, Auditor General of the Bahrain National Audit Office (NAO), attended the closed dialogue session on "Joint Responsibility in Protecting Public Resources", organized by the United Arab Emirates (UAE) Accountability Authority on the sidelines of the World Government Summit 2024, which was held in Dubai, UAE, in February this year.

The session was attended by heads and representatives from several Supreme Audit Institutions, anti-corruption institutions, relevant international organizations and other stakeholders and discussed the role of these entities in protecting public resources and strengthening institutional partnerships and community participation in this matter. Attendees explored the future of shared responsibility amid evolving governance challenges and emerging trends and opportunities.

The session aimed to enhance cooperation between all relevant parties in promoting the values of integrity, transparency, and accountability at national, regional, and international levels, and reviewed related challenges. Ways to exchange best practices and successful models, case studies for preventing and combating corruption and the problems facing the concept of shared responsibility and strategies to overcome institutional and operational obstacles were discussed.

NAO Bahrain takes part in Training and Development Committee meeting of GCC Supreme Audit Institutions

The Training and Development Committee of the Supreme Audit Institutions of the Gulf Cooperation Council (GCC) discussed the topics proposed by the National Audit Office (NAO) of Bahrain regarding the implementation of the operational plan based on the strategic training plan and the training approved within the training plan for the years 2024 and 2025 which had been drafted by the NAO Bahrain for employees of GCC SAIs.

The operational plan aims to develop the capabilities and skills of GCC SAI employees as well as the institutional capabilities in training, development, and expertise through exchanging experiences and enhancing cooperation in skills and knowledge development, scientific research, and vocational qualifications.

At the meeting, representatives from the NAO Bahrain, Aysha Ahmed Adam, Human and Financial Resources Director, Administration Superintendents Qotoof Abdulwahab Naqi and Ayda Abdullah Alqaed, and Yusuf Almahmood, International Cooperation Superintendent reviewed with the other participants the report of the GCC General Secretariat on the programs implemented for the training plan 2023, the preparation of an applied study on the topics of the sixth GCC for Research and Studies Competition in the field of Auditing and Accounting, and the signing of a memorandum of understanding with the INTOSAI Development Initiative (IDI) and the King Fahd National Library in Riyadh.

NAO Bahrain at FIPP meeting in Luxembourg

The National Audit Office (NAO) of Bahrain participated in the meeting of the Forum for INTOSAI Professional Pronouncements (FIPP) held in Luxembourg recently.

The meeting, which was attended by Mr. Ahmed Mohamed Buti, Director Regularity Audit at the NAO, discussed the implementation of the Strategic Development Plan (SDP) initiatives for the years 2023-2028 for submission to the Steering Committee of the Professional Standards Committee (PSC) and decided that official invitations would be sent to SAIs to join the teams responsible for implementing these initiatives.

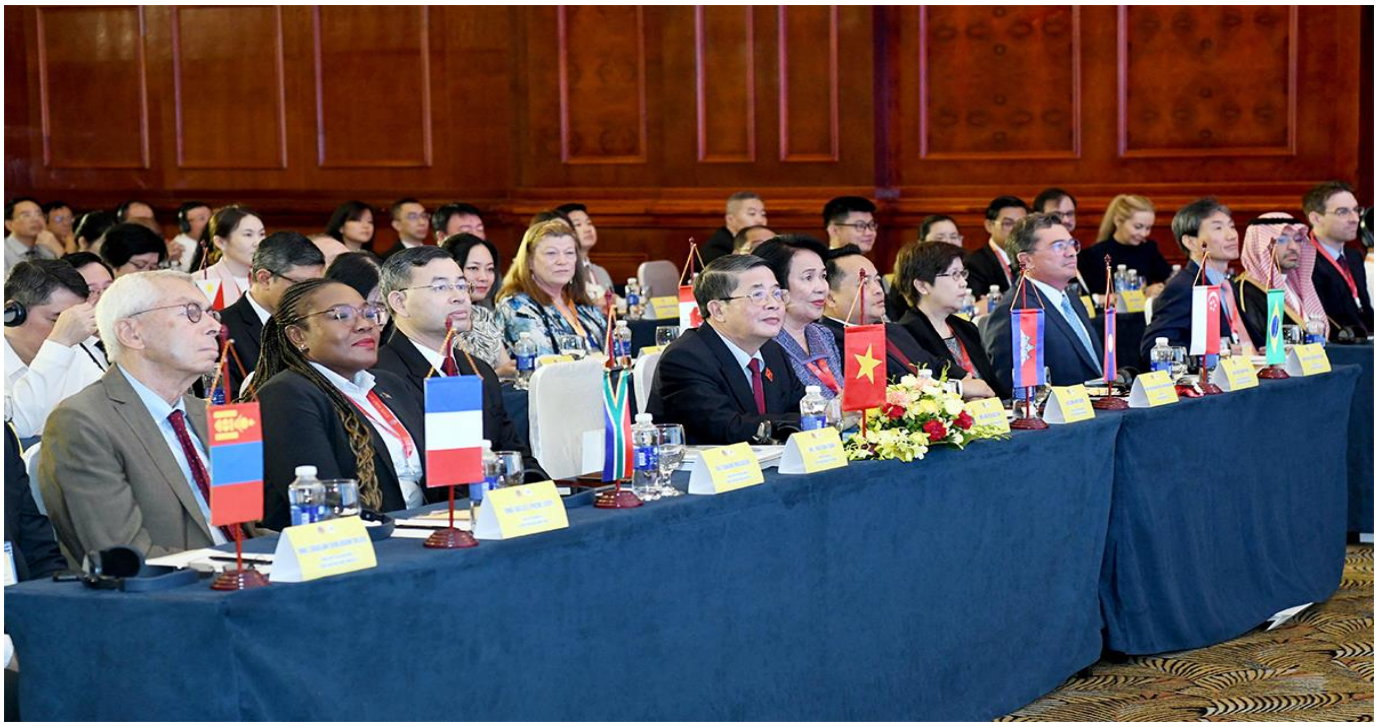
The SDP initiatives include standardizing the terminology used in drafting and translating standards, reclassifying International Organisation of Supreme Audit Institutions (INTOSAI) core principles within the framework of professional standards, facilitating access and use of professional standards by members of SAIs, increasing clarity and consistency in the terminology used in the formulation of standards, and revising guidelines within the framework of professional standards.

The NAO has been a FIPP member since January 2020. FIPP is one of INTOSAI's permanent body with the task to consider and propose how to develop the International Standards for Supreme Audit Institutions (ISSAI) framework to maintain and improve the quality of professional standards and strengthen public sector auditing.

Since 2005, the NAO has also been a member of INTOSAI's PSC Steering Committee as a representative of the Arab Organization for Supreme Audit Institutions (ARABOSAI).

The State Audit Office of Viet Nam (SAV) successfully organized the commemoration ceremony of its 30th anniversary

From July 9-11, 2024, SAV hosted a series of events to celebrate its 30th anniversary (July 11, 1994 - July 11, 2024). A highlight of the celebration was the international conference "Role of Supreme Audit Institution in Anti-Corruption for Transparency, Public Integrity, and Good Governance." This conference, chaired by SAV, attracted leaders from 11 Supreme Audit Institutions (SAIs) including South Africa, Cambodia, Laos, Mongolia, Singapore, France, Brazil, South Korea, Indonesia, Malaysia, Saudi Arabia, as well as representatives from international organizations such as UNODC, CAAF, WB, and ACCA.



Distinguished representatives from different SAIs and organizations attended the Conference

The conference aimed to assess the role of SAIs in combating corruption, especially considering its global prevalence as a societal issue impacting economic growth and sustainable development. Corruption has been identified as a barrier to effective public administration, undermining the efficient use of public finances and assets.

The event featured four keynote speeches from the SAIs of South Africa, Indonesia, UNODC and Viet Nam, alongside panel discussions with speakers from the SAIs of South Africa, France, Brazil, Indonesia, and UNODC. Topics included the roles and mandate of SAIs in anti-corruption efforts, their coordination with other agencies, legal frameworks, human resources, and necessary technical capabilities for conducting anti-corruption audits. Participants also shared experiences in detecting fraud and corruption, exchanging information with investigative authorities, and proposing investigative audit techniques and methodologies to uncover fraud and corruption.

Through these discussions, SAIs aimed to enhance their knowledge and operational experience in contributing to anti-corruption efforts and to plan their future activities.

This diplomatic event marks a significant milestone for SAV, highlighting its 30-year journey of growth and development, and reinforcing its global influence and engagement.

TENTATIVE SCHEDULE OF ASOSAI CAPACITY DEVELOPMENT ACTIVITIES

Tentative schedule of ASOSAI capacity development activities for 2024-2025 (As of the end of April 2024)

Year	Date	Event	Venue
2024	October 21-25	ASOSAI Seminar (Theme: Dealing with Fraud and Corruption in Auditing	Manila, Philippines
	later in 2024 for eight weeks	eLearning Course of ASOSAI Capacity Development Program 2024-2025 on "Dealing with Fraud and Corruption in Auditing"	Online
2025	early in 2025 for one week in two cities	Audit Planning Meetings of ASOSAI Capacity Development Program 2024-2025 on "Dealing with Fraud and Corruption in Auditing"	(TBD)
	later in 2025 for one week	Audit Review Meeting of ASOSAI Capacity Development Program 2024-2025 on "Dealing with Fraud and Corruption in Auditing"	(TBD)

EMAIL/ WEB PAGES OF MEMBER SAIS

Email / Webpage Addresses Of Member SAIs

SAI	Email address	Webpage
Afghanistan	saoaf.int@gmail.com, naderahmadi1358@gmail.com	http://sao.gov.afinfo.saoa
Armenia	intrel@armsai.am	www.coc.am
Australia	external.Relations@anao.gov.au	www.anao.gov.au
Azerbaijan	office@sai.gov.az, international@sai.gov.az, hilal_huseynov@yahoo.com	www.ach.gov.az
Bahrain	info@nao.gov.bh, tr.ir@nao.gov.bh	www.nao.gov.bh
Bangladesh	international@cagbd.org	www.cagbd.org
Bhutan	info@bhutanaudit.gov.bt, tashilhamo@bhutanaudit.gov.bt, hrird@bhutanaudit.gov.bt	www.bhutanaudit.gov.bt
Brunei Darussalam	info@audit.gov.bn, nora.jahali@audit.gov.bn	www.audit.gov.bn
Cambodia	ir.audit@naa.gov.kh	www.naa.gov.kh
China	cnao@audit.gov.cn	www.audit.gov.cn
Cyprus	cao@audit.gov.cy, mmavromichalis@audit.gov.cy, akikas@audit.gov.cy	www.audit.gov.cy
Georgia	iroffice@sao.ge, kgigilashvili@sao.ge	www.sao.ge
Iran	pria@dmk.ir	www.dmk.ir
India	ir@cag.gov.in	www.cag.gov.in
Indonesia	international@bpk.go.id wahyudi.bpk99@yahoo.co.id	www.bpk.go.id
Iraq	bsa@d-raqaba-m.iq, bsairaq@yahoo.com	www.d-raqaba-m.iq

Email / Webpage Addresses Of Member SAIs

SAI	Email address	Webpage
Israel	Israel sco@mevaker.gov.il, int_relations@mevaker.gov.il, sagi_e@mevaker.gov.il, rachel_t@mevaker.gov.il	www.mevaker.gov.il
Japan	liaison@jbaudit.go.jp	www.jbaudit.go.jp/
Jordan	info@ab.gov.jo, fawwaz.odaibat@ab.gov.jo	www.ab.gov.jo
Kazakhstan	int.rel@esep.gov.k, a.tasmaganbetov@esep.gov.kz	www.esep.kz
Korea	koreasai@korea.kr	www.bai.go.kr
Kuwait	IR@sabq8.org,suadz@sabq8.org, IR@SAB.GOV.Kw	www.sabq8.org
Kyrgyzstan	kyrsai@mail.ru,esep@esep.kg, b.toktasunova@esep.kg, tbarchynai@gmail.com	www.esep.kg
LAO-PDR	ird.sao.la@gmail.com	www.audit.gov.bn
Malaysia	international@audit.gov.my, ag@audit.gov.my	www.audit.gov.my
Maldives	info@audit.gov.mv, niyazy@audit.gov.mv, inaeem@audit.gov.mv	www.audit.gov.mv
Mauritius	aud@govmu.org philisetse@gmail.com	www.nao.govmu.org
Mongolia	mnao@audit.gov.mn, info@audit.gov.mn	www.audit.mn
Myanmar	AUDITORGENERAL@mptmail.net kkadec@gmail.com	
Nepal	oagnep@ntc.net.np, hrd_ir@oagnep.gov.np, sharmatm@gmail.com	www.oagnep.gov.np
New Zealand	international@oag.parliament.nz enquiry@oag.govt.nz, Margaret.Graham@oag.govt.nz	http://www.oag.parliament.nz/
Oman	chairman@sai.gov.om, intr@sai.gov.om	www.sai.gov.om

Email / Webpage Addresses Of Member SAIs

SAI	Email address	Webpage
Pakistan	saipak@comsats.net.pk	www.agp.gov.pk
Palestine	facb@saacb.ps pr@saacb.ps	www.saacb.pss
Papua New Guinea	agopng@ago.gov.pg, CAdiunegiya@ago.gov.pg	www.ago.gov.pg
Philippines	mgaguinaldo@coa.gov.ph,cadelacruz2017@gmail.com, danilocabug@gmail.com, jbmcoa@yahoo.com, scontarciego@gmail.com	www.coa.gov.ph
Qatar	info@sab.gov.qa, tech.dep@sab.gov.qa	www.sab.gov.qa
Russia	intrel@ach.gov.ru	www.ach.gov.ru/en/
Saudi Arabia	ird@gab.gov.sa	www.gab.gov.sa
Singapore	ago_email@ago.gov.sg, Sarah_Foo@ago.gov.sg	www.ago.gov.sg
Sri Lanka	ag@auditorgeneral.gov.lk, addlag.cgse@auditorgeneral.gov.lk, chulanthawickramaratne@yahoo.com,	www.auditorgeneral.lk
Tajikistan	interdep@sai.tj, chairman@sai.tj, info@sai.tj	www.sai.tj
Thailand	int_rela@oag.go.th, sutthisun@gmail.com, prajuck_b@oag.go.th	www.oag.go.th
Turkey	int.relations@sayistay.gov.tr, yusufada@sayistay.gov.tr	http://www.sayistay.gov.tr
U.A.E.	president@saiuae.gov.ae, IR@saiuae.gov.ae	www.saiuae.gov.ae
Vietnam	vietnamsai@sav.gov.vn, vietnamsai@gmail.com	www.kiemtoannn.gov.vn www.sav.gov.vn,
Yemen	tech_coop2007@yahoo.com, gogo13026@gmail.com	www.coca.gov.ye

Other Important Email/webpage Addresses

Organization	Email address	Webpage
INTOSAI	intosai@rechnungshof.gv.at	www.intosai.org
ASOSAI	gs@asosai.org	www.asosai.org
EUROSAI	eurosai@tcu.es	www.eurosai.org
OLACEF	relacionesinternacionales@contral (Executive Secretariat, SAI of Chile) PresidenciaOLACEFS@asf.gob.mx (Presidency of OLACEFS, SAI of Mexico)	www.olacefs.comoria.cl
PASAI	enquiry@oag.govt.nz	www.pasai.org
ARABOSAI	secretaire.general@courdescomptes .nat.tn, contact@arabosai.org	www.arabosai.org
INTOSAI Development Initiative (IDI)	idi@idi.no	www.idi.no
INTOSAI Community Portal	ir@cag.gov.in	www.IntosaiCommunity.net

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