

**THE UNIVERSITY OF TAMPERE**

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**AND FINANCIAL MANAGEMENT**

**SOLUTIONS OF ORGANIZING ENVIRONMENTAL AUDITING**

**IN THE STATE AUDIT OFFICE OF VIETNAM**

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## **ABSTRACT**

Nowadays, sustainable development associated with environmental protection has become the hot global concern. In many countries around the world, Supreme Audit Institutions should play an important role in this area, ensuring that natural resources are managed, exploited and used effectively. Environmental auditing has now become a major activity at many SAIs. In Vietnam, environmental auditing is still a new issue in both theory and practice.

Recognizing the importance of environmental protection and sustainable development, the SAV considers environmental auditing one of the priority activities in the years to come.

Therefore, environmental auditing should be conducted more early, more comprehensively and more fully in the manner of auditing objectives, contents, with more appropriate, effective methods and ways of carrying out audits in Vietnam.

It is necessary to study the theory on environmental auditing, analyse and evaluate at the same time the practice of environmental auditing in Vietnam, review generally the situation of environmental auditing conducted in the world, which found shortcomings and limitations of carrying out environmental auditing in the SAV and as a result, draw lessons and propose solutions to implement environmental auditing of the SAV.

The thesis introduces a number of researches by Indian and Vietnamese scientists, INTOSAI experts and a number of standard, guidelines in specific fields of environmental auditing that are published and generally accepted by the SAIs in the regional and international community. It is very important that the thesis studies about the system of legal documents, audit reports related to or published by the SAV in Vietnamese language like the State Audit Law, the State Audit Development Strategy to 2020, annual audit reports. An interview with specialized auditor and a secondary survey of the WGEA are also chosen the data for the research.

Based on an analysis of the general theories of organizational structure, roles and functions of the SAV, and an evaluation and synthesis of the results of environmental auditing activities of some SAIs in the region and in the world, together with a summary and research regarding the current status of the organizational model, the operational mechanism of the SAV in general and environmental auditing in particular, the thesis shows SAV's

development strategy in the future and suggests some solutions and recommendations to efficiently organize environmental auditing in the SAV. The Government, the State Audit Office and the audited entities are subject to have improvement for organizing environmental auditing in the SAV.

# CHAPTER 1. INTRODUCTION

## 1.1. Introduction

Today, sustainable development associated with environmental protection is no longer a matter of a single nation, but it has become a global concern. In Vietnam, environmental protection is an integral part of the country's socio-economic development, especially in the context that Vietnam has set a development target to become a modern industry country by 2020. This country is interested not only in the immediate development benefit but also in environmental protection and sustainable development. Environmental protection must aim at sustainable development in order to meet the needs of the present generation but retain the potential and opportunity for future generations. Over the years, Vietnam has made great efforts in developing and protecting the environment, but the results have not met expectations. At present, there are a number of agencies involved in environmental management and protection such as the Ministry of Natural Resources and Environment, Police of Environmental issues, Environmental Protection Funds. In the immediate future, the awareness of the people is not high, the propaganda and socialization in environmental protection has not paid much attention so the environmental protection of Vietnam is still limited. Our country is still facing many challenges, including environmental degradation and many consequences of climate change. Environmental pollution in large cities, industrial zones, craft villages, river basins across the country and many other environmental issues become hot issues and the concern of the whole society.

The Government's overall objectives and orientations for environmental protection in Vietnam are approved and mentioned in the National Strategy for Environmental Protection until 2020 with a vision to 2030 (Decision No. 1216/QĐ-TTg dated 05/9/2012 of the Prime Minister of Vietnam). The target to 2020 consists to basically reduce sources of environmental pollution; overcome and rehabilitate the polluted environment and degraded areas, improve the living conditions of the people, mitigate degradation as well as depletion of natural resources, to control the rate of declining the biodiversity, strengthen the ability to actively respond to climate change and mitigate the increase of greenhouse gas emissions. The vision to 2030 is to prevent, reverse the trend of increasing environmental pollution, resource depletion and biodiversity loss, improve the quality of living environment, actively



respond to climate change, establish basic conditions for green economy, low waste, low carbon for the prosperity and sustainable development of the country.

In many countries around the world, Supreme Audit Institutions (SAIs) should play an important role in this area, ensuring that natural resources are managed, exploited and used effectively. Environmental auditing has now become a major activity at many SAIs.

In Vietnam, environmental auditing is still a new issue in both theory and practice. The State Audit Office of Vietnam (SAV) aims of becoming a key and effective tool of the State in examining and controlling the economy, effectiveness and efficiency of the management and use of financial resources and assets. The country can not stand outside the general trend. The SAV has joined the International Organisation of Supreme Audit Institutions (INTOSAI) Working Group on Environmental Auditing (WGEA) as a member.

Recognizing the importance of environmental protection and sustainable development, the SAV has considered environmental auditing to be one of its priority activities in the coming time. The SAV only established the working group to learn and research on environmental auditing and sent their members to attend INTOSAI and ASOSAI WGEA workshops and meetings. The content of environmental auditing is included in the Action Plan for the implementation of the State Audit Strategy until 2020 (This Strategy has been approved by the National Assembly Standing Committee of Vietnam). The SAV has developed Vietnam's auditing standards in the direction of assimilating to the International Standards of Supreme Audit Institutions (ISSAIs).

In recent years, the SAV carries out few audits with certain contents related to the environment. Especially, the SAV had the idea of establishing a specialized division under the International Cooperation Department implementing the function to build objectives, develop strategies, process of environmental audits and conduct environmental audits at the SAV. Meanwhile, values and interests, the importance of the SAV are increasingly confirmed and expanded, the recommendations of INTOSAI are increasingly strong; simultaneously, requirement of the government and the public regarding practical issues related to the environment particularly are increasingly high. Therefore, environmental auditing should be conducted more early, more comprehensively and more fully in the manner of auditing objectives, contents, with more appropriate, effective methods and ways of carrying out audits in Vietnam.

In the past few years, the SAV has step by step carried out auditing activities, including many contents on environmental audit. According to the State Audit Law, auditing consists of three types: financial audit, compliance audit and performance audit. Environmental auditing is not a type of audit, but rather an audit, that is, the audit of issues, policies, programs, and funds related to the government's environment. Auditors can therefore perform an environmental audit in all three types of auditing, where applying performance audit and compliance audit is recommended as a top priority.

Financial audit of environmental issues may focus on a number of issues such as auditing and evaluating financial data and providing audit opinions on financial statements; financial responsibilities of the Government. Compliance audit of environmental issues may focus on compliance, consistent with the laws, conventions, and environmental policies of the various levels of government at the national and international levels. Performance audit of environmental issues may include contents ensuring the performance criteria that reflect the operation of the unit, ensuring environmental management is implemented in terms of efficiency, effectiveness and economy.

Then, it is necessary to study the theory on environmental auditing, analyse and evaluate at the same time the practice of environmental auditing in Vietnam, review generally the situation of environmental auditing conducted in the world, which found shortcomings and limitations of carrying out environmental auditing in the SAV and as a result, draw lessons and propose solutions to implement environmental auditing of the SAV.

Objective of the study constitutes systematizing theoretical issues about environmental auditing, analyzing, evaluating the practices of environmental auditing in some countries in the world, predicting the development trend of environmental auditing, simultaneously assessing the practices of organizing the environmental auditing in the SAV, as well as its limitation and difficulties in organizing environmental auditing at the SAV. Based on these issues, drawing lessons learned and proposing resolutions to organizing environmental auditing at the SAV are done.

## **1.2. Research questions**

### ***Main question:***

How to effectively organize environmental auditing in the State Audit Office of Vietnam?

### ***Sub-question:***

- What are the difficulties in practicing environmental auditing?
- What lessons does the SAV learn from the practices?
- How does the SAV improve for organizing environmental auditing?

### **1.3. Research data**

In this thesis, the author introduced a number of researches by Indian and Vietnamese scientists, INTOSAI experts and a number of standard, guidelines in specific fields of environmental auditing that are published and generally accepted by the SAIs in the regional and international community. Most of these products are applied researches, guidance to implementing the environmental auditing contents in the public sector.

Some of the researches products relating to environmental audit are stated such as:

*Sustainable Development: The Role of the Supreme Audit Institution (WGEA)*. “With the approach of economic development associated with environmental protection (sustainable development), this work has shed light on the relationship between CP and sustainable development and the way sustainable development affects the environment. Sustainable development at national and regional levels, sustainable development audits and capacity building of agencies to adapt to sustainable development audits”.

*Environmental Audit and Regularity Auditing* (material of INTOSAI’s WGEA) introduces the concept of environmental auditing that shows impacts of environmental issues towards financial statement of audit entities, and also guide practices to auditors about implementation and report of audit.

*Environmental Accounting: Current Status and Options for SAIs 2010* prepared by the US Agency provides a “framework for organizing information on the status, use, and value of natural resources and environmental assets - including fisheries and forest accounts, among others - as well as expenditures on environmental protection and resource management. The latest categorization of environmental accounts by the international community include four types of accounts - natural resource asset accounts, pollution and material physical flow accounts, monetary and hybrid accounts, and environmentally-adjusted macroeconomic aggregates. Importantly, environmental accounting provides a way to link environmental data with the economic data contained in a country’s System of National Accounts”.

In addition to the works mentioned above, WGEA has published a number of other scientific papers in the form of a guideline for each specific audit subject such as energy, forest, mining, fishery management, etc.

It is very important for the author to study about the system of legal documents, audit reports related to or published by the SAV in Vietnamese language. Based on the State Audit Law, the State Audit Development Strategy to 2020, annual audit reports, the author can access the data resources in order to study fundamentally about the status of organizing environmental auditing in the SAV, as well as the orientation of the Government, leaders of the SAV relating to the environmental auditing development.

The main reference literature deals with conceptual and fundamental theoretical issues related to the environmental auditing. INTOSAI's guidelines and auditing standards provide guidance for financial audits, performance audits, compliance audits, but no specific guidance is available on the environmental auditing.

Annual audit reports of the SAV shows that no environmental audit has been conducted. Not so many audits related to environmental factors have been implemented in the recent years. Therefore, the issue of environmental auditing in Vietnam has not been mentioned in detail, the practice of the SAV on this issue is very modest.

In Vietnam, the organization of environmental auditing has been studied in some aspects, but not in details. Moreover, the solutions of organizing environmental auditing in the SAV have not specifically focused on guidance.

From the perspective of external audit, SAIs normally conduct three types of audits including financial audits, compliance audits and performance audits. The environmental audit is not considered a type of audit, but it is an audit and carried out accordance with the techniques and methods that are not different from the auditing methods and techniques currently applied by SAIs for all traditional types of audit. For SAIs, the focus of the environmental audit is to present environmental assets and obligations, compliance with environmental legislation and conventions (on both national and international levels) and also measures that the audited entities have developed and operated to enhance the economy, efficiency and effectiveness of the environment management.

By learning the theory from national and international research products and publications related to environmental auditing, there are not any systematical and completion product on

environmental auditing and the role, function of environmental auditing at the SAV. Accordingly, the thesis is focused on researching, solving basic theoretical issues, assessing and clarifying the causes of the current situation, based on which the author proposes a resolution system to organize environmental auditing of the SAV. The public researches and publications aforementioned are used for reference and to selectively inherit the researching process of this study.

#### **1.4. Research methods**

To conduct research on the topic, the author applied the qualitative method. The author collected information and data from the materials and legal documents studied by Vietnamese and foreign experts to synthesize related subjects of the thesis. Thus, the author analyzes the status of environmental auditing in the SAV and the situation and trends of environmental auditing in SAIs to see some lessons learned. During the study, SWOT methodology is implemented to analyze the strengths and weaknesses and to evaluate the opportunities and threats for organizing environmental auditing in the SAV.

It has been beneficial for the author to have a chance to be organizing and participating to some training courses facilitated by specialized experts on environmental auditing or performance auditing in the environmental-related sector from SAI Denmark, India, Indonesia. In these occasions, the author can consult the experts and discuss with them to understand more about the environmental auditing and related issues. Otherwise, training materials developed by the professional experts on the field constitute one of valuable documentary sources for researching of the thesis. Accordingly, the author can suggest some solutions for organizing environmental auditing in the SAV.

From 1996, the SAV becomes member of the International Organization of Supreme Audit Institutions (INTOSAI), and joint to the community of Working Group on Environmental Auditing under INTOSAI. This Working Group aims to improve the use of audit mandate and audit instruments in the field of environmental protection policies, by both members of the Working Group and non-member SAIs. Joint auditing by SAIs of cross border environmental issues and policies, and the audit of international environmental accords, has the Working Group's special attention. ([www.environmental-auditing.org/about/](http://www.environmental-auditing.org/about/)). During the research process, the author analyzed and used the survey by the WGEA of INTOSAI conducted during 2009-2011 (*Appendix 1*). This survey consists of 48 questions written in five languages of INTOSAI, including English, Russian, French, Arabic and Chinese. The

survey composes of six main questionnaire groups relating to auditing mandate, environmental audits, impact of environmental audits, environmental auditing capacity, planned environmental audit(s) and WGEA and INTOSAI products. The survey was provided to 118 SAIs by 3 ways, responses were submitted via web page of the working group, by email or by post. Totally, 112 SAIs give response to the survey. At this time, the SAV is one of member of the INTOSAI's WGEA participating in the survey.

However, when using secondary data, there are some limitations of dependence on the collected data and analysed results from another organization. Sometimes, some outdated data may affect the assessment and analysis of the author.

In addition, the author conducted an interview with an expert who is strong in conducting audit of the SAV and in charge of submitting audit report of the SAV to the National Assembly for many years. He directly participated to the team conducting the cooperative audit on water related issues of Mekong River between SAI Cambodia, China, Myanmar, Laos and Thailand. At present, he is Deputy Director of the International Cooperation Department of the SAV, under this department, the SAV intends to establish a specialized unit taking task on environmental auditing. The interview sheet (*Appendix 2*) includes three general questions of sharing knowledge and experience on the studied field with qualitative objective. The main contents of questionnaire involve the importance of environmental auditing, difficulties in performing environmental auditing, status on conducting environmental auditing in the SAV, and experience on organizing environmental auditing in the SAV. His answers, experience and evaluations are very useful for the studying process and results of the thesis.

As a result, the author analyzes and synthesizes of the theoretical data, information as well as the practices on performing environmental auditing in Vietnam and also on the world, with the research method of researching and conducting many documentary sources, survey, interview etc. to achieve the objectives of this study.

## **1.5. Previous research on environmental auditing**

### **1.5.1. Sustainable development and necessity of environmental auditing**

Sustainable Development: the role of Supreme Audit Institutions (WGEA, 2004), with the approach that economic development goes with environmental protection or sustainable development, this research shows the relationship between the Government and sustainable

development in the impact relation with Supreme Audit Institutions (SAIs). Sustainable development and capacity building of SAIs in order to adapt sustainable development audit activities is also mentioned.

Auditing is the activity where independent auditors examine and express their opinions on financial statements (International Federation of Accountants - IFAC). Auditing in its modern concept, is a scientific and systematic examination of books, vouchers and other financial and legal records in order to verify and report upon the facts regarding the financial condition disclosed by the Balance sheet and the net income revealed by the Profit and loss account (Ronald A. Irish). Auditing is a “systematic examination of financial statements, records and related operations to determine adherence to generally accepted accounting principles, management policies or stated requirements” (Kumar & Sharma, 2001)).

According to the Article 5, Independent Auditing Law of Vietnam in 2011, independent auditing is the practice of auditors, audit firms and branches of foreign auditing firms in Vietnam giving their independent opinions on the financial statements and other auditing work under the audit contract.

In 1989, the first environmental audit was conducted in the public sector in the United States after the organization Friends of the Earth International released its publication "Environmental Regulations for Local Governments". In 1994, the United Kingdom promulgated the British Environmental Management System. Accordingly, the United Kingdom, Ireland, Spain and Canada form the basis for drafting international standards for environmental management systems. In 1995, the European Union embarked on drafting a framework for technology management and environmental auditing. These legal documents are intended to acknowledge efforts to improve environmental management, clarifying the need to constantly improve the environment. Environmental audits for businesses and multinational companies are considered the focus of the regulatory framework and require regular implementation. As such, environmental auditing is widely recognized and deployed in many countries around the world.

Along with the concept, division of benefit in environment accounting, Oviir, M. (2010) introduces the effort of international community in developing environment accounting standards, as well as achievements of some countries in using environment accounting report in response to climate change. The value of this material is also increased with the chosen ways in applying environment accounting in two groups of using and not yet using

environment accounting. In addition, Environmental accounting provides a “framework for organizing information on the status, use, and value of natural resources and environmental assets - including fisheries and forest accounts, among others - as well as expenditures on environmental protection and resource management. The latest categorization of environmental accounts by the international community include four types of accounts - natural resource asset accounts, pollution and material physical flow accounts, monetary and hybrid accounts, and environmentally - adjusted macroeconomic aggregates. More importantly, environmental accounting provides a way to link environmental data with the economic data contained in a country’s System of National Accounts”.

In terms of economic development, the consideration of the environment leads to the concept of sustainable development. Sustainability is understood as the health of the global ecosystem and sustainable economic development aims to meet the needs of the present time without compromising the ability of future generations to meet the needs of the future. The ultimate goal of sustainability is the equity of generations. This depends on promoting the economical and efficient use of resources, fairness in trade and the allocation of resources, responsible behavior for nature and other organisms. The environment must be seen as an integral part of economic development rather than a free commodity. Therefore, the environment must be considered a vital issue for the future of humanity and environmental protection is defined as a responsibility for all of us, the citizens of the earth.

Environmental auditing is seen as a way of protecting the environment against environmental instability in the current context. Many countries around the world have been conducting environmental auditing. It aims to effectively utilize natural resources and appropriately allocate production factors. Environmental auditing should play an important role in accelerating the structure of industrial sectors towards the goal of sustainable development for the national economy.

### **1.5.2. Status on environmental auditing and difficulties**

Environmental Audit and Regularity Auditing (material of INTOSAI’s WGEA) introduces the concept of environmental auditing that shows impacts of environmental issues towards financial statement of audit entities, and also guide practices to auditors about implementation and report of audit.

In the last few decades, governments have entered into international and trans-regional agreements and successfully negotiated on global environmental issues including climate



change, biodiversity and desertification, hazardous waste and chemicals, and renewable energy and energy saving. The transboundary nature of environmental issues and government environmental policy implies that cooperation among SAIs is desirable (ISSAI 5140 – How SAIs May Cooperate on the Audit of International Environmental Accord, 2016).

The primary objectives of this guide are to define the different types and natures of cooperative audits, identify the advantages and disadvantages of each type of cooperative audit, identify the approaches by which SAIs can cooperate in conducting audits of international environmental accords, and describe a protocol or agreement for SAIs to use when performing the audits (planning, field work, and reporting).

In view of the companies and the government's responsibilities for environmental matters, they caution that environmental matters can be complex and may therefore require additional consideration by auditors. They also caution that when environmental matters are significant to an entity, and are relevant to financial reporting, there may be a risk of material misstatement (including inadequate disclosure) in the financial report arising from such matters. In these circumstances, the Institute of Chartered Accountants of New Zealand directs auditors to consider environmental matters in the audit of the financial report. However, how or whether New Zealand auditors are responding to the principles of Audit Guidance Statement 1010 is not known. This is the research issue being investigated for this paper. This study would assist in understanding an audit phenomenon not widely known. It would also add a geographical variation to existing literature, making a timely contribution to the international literature on audit practice at both theoretical and professional practice levels. In the research, Christina Chiang (2010) showed that: in New Zealand, Environmental matters are only considered in the planning of a company audit when it is significant and relevant to financial reporting. However, evidence showed that FAs are influenced by mimetic isomorphism by adopting the perspective of company management. On the other hand, public sector auditors are driven by the legislative mandate imposed by the Local Government Act 2002 to search out and verify the validity, accuracy and completeness of information on environmental matters. (Insights on environmental auditing matters New Zealand).

A.K.Shivastava (2015) present environmental auditing with several topics like natural audit, energy audit, waste control; analyzing the situation of environmental auditing following

subjects of strategic audit planning, management of process, assessment of impacts to the environment and situation in India.

“China has many freshwater lakes, which are important for the sustainable development of local areas. The lakes have various functions including storing flood water, supplying drinking water, irrigation, fish farming and recreation. Since the 1980s, population pressures have increased and the agricultural and industrial production around the lakes has intensified. These resulted in a rapid increase of nutrient input, which caused major ecological deterioration in the lakes. In order to control the negative changes of lake water, some policies, plans and programs were implemented by the central and local governments (SEPA website). The performance of different policies, plans and programs is an increasing consideration of the government and the public. Government environmental auditing is an important tool for supervising, certifying and evaluating the performance of environmental policies, plans and programs. However, performance evaluation is impossible without the information from past and present monitoring, as well as science-based water resources decision-making. Various indicators can be used for assessing quality of environment related to river and lake in the US environment. (Multi indicator assessment of water environment in government environmental auditing, 2007).

### **1.5.3. Orientation on environmental auditing**

The authors examine the extent to which the practices of social and environmental accounting, auditing, and reporting (SEAAR) provide opportunities for the identification, communication, and management of social and environmental risks. “In introducing and exploring accounting practices, the theoretical allegiances of accounting are also outlined in order to situate accounting as a social science discipline which experiences similar debates to other areas of scholarship”. It is further argued that the contribution of SEAAR to “risk governance will largely depend upon a radicalisation of accounting rationality in practice”. (Beggington & Thomson 2007).

Environmental Accounting: Current Status and Options for SAIs’, Oviir, M. (2010) provides a “framework for organizing information on the status, use, and value of natural resources and environmental assets - including fisheries and forest accounts, among others - as well as expenditures on environmental protection and resource management. The latest categorization of environmental accounts by the international community include four types of accounts - natural resource asset accounts, pollution and material physical flow accounts,

monetary and hybrid accounts, and environmentally-adjusted macroeconomic aggregates. Importantly, environmental accounting provides a way to link environmental data with the economic data contained in a country's System of National Accounts".

ISSAI 5120 – Environmental Auditing in the Context of Financial and Compliance Audits, 2016 is a guideline based on the generally accepted principles of financial and compliance auditing introduced in ISSAI 200 (Fundamental Principles of Financial Auditing, 2013) and ISSAI 400 (Fundamental Principles of Compliance Auditing, 2013) and on current good practices in environmental auditing. It covers environmental issues in the context of financial and compliance audits and has been written to meet the needs of this entire area.

The guideline introduces the nature of environmental auditing, setting out the character of financial, compliance, performance, and sustainable development auditing, describes in detail the purpose, objectives, and various approaches to financial and compliance auditing. This guideline sets out specific methods and techniques the auditor can use to obtain knowledge of environmental matters and assess inherent risks, how laws and regulations are considered, how audit criteria are defined, and how to perform substantive auditing procedures, at the same time, it also provides information on governmental reporting on environmental and sustainability issues.

On environmental Auditing and the Role of the Accountancy Profession, Philippe de Moor and Ignace DE Beelde (2005) has written review on environmental auditing and the potential role of accountants that distinguishes between compliance audits and audits of the environmental management system. After an extensive introduction to the concept, this review focuses on the similarities and differences between an environmental audit and a financial statement audit. The general approach to both types of audits is similar, except that environmental audits are largely unregulated. "Both audits place an emphasis on the evaluation of control systems, which is an argument in favor of external auditors playing a role in environmental audits". Another argument for including external accountants is their code of ethics. However, these professionals seem to be reluctant to enter the field of environmental auditing. It is argued that "this reluctance is because of a lack of generally accepted principles for conducting environmental audits. If external accountants are engaged in environmental auditing, they should be part of multidisciplinary teams that also include scientists and engineers to avoid a too strong focus on procedures. Rather than treating these audits as totally different, it is proposed that there should be a move towards integrate, or even universal audits".

## **1.6. Research structure**

The thesis is organized as follows: First Chapter introduces context and background of the study. It includes research questions, data, methods and some previous researches. Chapter II will lay out the literary review for the study. Chapter III focuses on the status of organizing environmental auditing of the SAV. Chapter IV describes the analysis and results of the thesis. Chapter V concludes findings or gives recommendations on the phenomenon and also refers to the solutions of organizing environmental auditing. Besides, the thesis composes of some appendix and table subordinating to the study's content.

In the thesis, due to the limitation of time, the author does not make a survey to generally staff who conduct an audit related environment. Otherwise, the criteria system to conduct an environmental auditing does not developed because of the limitation of the thesis framework and the modesty of knowledge by the author.

## CHAPTER 2. LITERATURE REVIEW

### 2.1. Auditing and environmental auditing

#### 2.1.1. Definition and nature of auditing

The word “audit” is derived from Latin word, *audire* which means “to hear”. Originally, it was customary for persons responsible for maintenance of accounts to go to some impartial and experienced persons, ordinarily judges, known as “auditors” who used to hear these accounts and express their opinion about their correctness or otherwise. Thus, the term “auditor” literally means “hearer”. The term is used in this sense ever since the days when public accounts were accepted and approved on the basis of hearing the accounts read. (Kumar & Sharma 2001).

The term "audit" actually came into being and was used in Vietnam in the late 20th century. So far, depending on the approaches, the researcher can define the concept of auditing with the distinguished differences. Within this thesis, the author provides a concept that is investigated and verified by the researcher to be the most appropriate, accurate and complete of the audit that is Alvin A. Aren's (2006) definition. This definition states that: Auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria. Auditing should be done by a competent, independent person.

Following are some approaches on auditing of some well known authors:

The definition of the International Federation of Accountants (IFAC), "Auditing is the activity where independent auditors examine and express their opinions on financial statements."

Ronald A. Irish (in Kumar & Sharma 2001) mentioned “Auditing in its modern concept, is a scientific and systematic examination of books, vouchers and other financial and legal records in order to verify and report upon the facts regarding the financial condition disclosed by the Balance sheet and the net income revealed by the Profit and loss account”.

Robert E. Schosser (in Kumar & Sharma 2001) stated Auditing is a “systematic examination of financial statements, records and related operations to determine adherence to generally accepted accounting principles, management policies or stated requirements.”

Decree No. 70/CP of July 11, 1994 of the Vietnamese Government on the establishment of the specialized agencies mentioned in Article 1 stated: "To assist the Prime Minister in performing the function of inspecting and certifying the correctness and lawfulness. The documents and accounting data, settlement reports of state agencies, non-business units, state economic units and mass organizations and social organizations using state budget funds pair".

According to the Independent Auditing Law of Vietnam, 2011, independent auditing is the practice of auditors, audit firms and branches of foreign auditing firms in Vietnam, giving their independent opinions on the financial statements and reports. Financial and other audit are implemented under the audit contract.

In the above concepts, independent and qualified auditors are supervisors who do not sustain pressure posed by any force and who must have the skills, knowledge and professional capabilities to carry out their duties and be responsible for the conclusions by themselves.

Gathering and evaluating evidence - these are documents, evidence and information about the audited entities that the auditors can and should look for in an honest and proper manner.

Standards are value measures that are legally regulated by the competent authorities that the auditors must comply with when they carry out their activities.

According to the above concept, the nature of the auditing has the following contents:

The subjects of audit are data, documents, cost declarations, financial statements;

The purpose of audit is to provide an assessment of the company's economic and financial performance of the entities in comparison with established standards;

The person of audit is the person who performs the audit work (the auditor, the organization, the audited entity);

The objects of audit are organizations, agencies, enterprises that need to or should be audited according to the law.

### **2.1.2. Classification of auditing**

Auditing is classified according to different criteria, namely:

According to function of auditing: compliance audit, financial audit and performance audit.

According to subject of auditing: internal audit and external audit.

According to time of auditing: pre-audit and post-audit.

## **2.2. Environmental auditing**

### **2.2.1. Concept of environmental auditing**

The term "environmental auditing" is used in the context of independent auditing. Environmental auditing therefore addresses the verification of the independence and objectivity of whether or not the practices comply with the norms and standards. Environmental auditing is the examination of some aspects of environmental management, and the implementation of some forms of verification. SAI agrees that, in principle, environmental auditing is not much different from an audit approach undertaken by SAIs and that it may include all types of audits including financial, compliance and performance audits (How To Increase the Quality and Impact of Environmental Audits, WGEA, 2016).

Environmental auditing was introduced in the US industrial sector in the 20th century in the form of a compliance check. Air and water protection laws are becoming more demanding and commercial organizations are responsible for environmental damage caused by the dischargeeities. This trend is spreading to other countries where US multinationals have branched offices. By law, subsidiaries must apply the same principles to parent companies. Over time, the concept of this type of accounting has been voluntarily applied by many companies and organizations as environmental auditing is considered a key tool for improving environmental management efficiency and reputation of company. However, in the initial stages, reporting on environmental auditing is grounded by a number of organizations such as the Association of Chartered Certified Accountants (ACCA) and the International Standards Group on Accounting and Reporting of the United Nations (ISAR). In Europe, where environmental laws are not so strict as in the United States, environmental audits are used to gauge the "green" levels of companies.

The International Chamber of Commerce has defined the term "environmental auditing" as a management task consisting of processes ranging from systematization, document documentation, implementation and targeting, The school clearly shows the state of the environment - the management, operation and equipment are in place for the purpose of Preventing and minimizing waste, Assess compliance with current regulations, Monitoring the environmental performance of companies, Provide information about the environment to the public".

The concept of commercial environmental auditing is broadly developed and today is becoming a tool for promoting effective environmental management. Environmental audits in the private sector relate to the inputs and outputs of the enterprise and indicate the environmental impact of the materials used and the resulting products. The impact of the products and waste generated by the manufacturing and management of the business process.

In 1989, the first environmental audit was conducted in the public sector in the United States after the organization Friend of the Earth released its publication "Environmental Regulations for Local Governments." In 1994, England Promulgated the British Environmental Management System. Accordingly, the United Kingdom, Ireland, Spain and Canada form the basis for drafting international standards for environmental management systems; In 1995, the European Union embarked on drafting a framework for technology management and environmental auditing. These legal documents are intended to acknowledge efforts to improve environmental management, clarifying the need to constantly improve the environment. Environmental audits For businesses, multinational companies are considered the focus of the regulatory framework and require regular implementation. As such, environmental auditing is widely recognized and deployed in many countries around the world.

According to the survey on environmental auditing of WGEA (2010), there are 86/111 (accounted for 78%) SAIs of the world has conducted environmental related audits. Over the last 20 years, there have been around 2000 environmental related audits, including 383 financial audits, 622 compliance audits, 640 performance audits, and some other mixed audits.

As to the future, almost 2/3rd of the SAIs plan to increase their volume of environmental audits over the next three years, while others (35% of the SAIs) intend to maintain their current level.

From the perspective of external audit, SAI is an operation of the audit, the environmental audit is not a type of audit. Environmental auditing is considered as an audit and is carried out on techniques and methods that are not different from the auditing methods and techniques currently applied by SAIs. It includes all types of audits that are financial audits, compliance audits, performance audits. For SAIs, the focus of the audit could present environmental assets and obligations, compliance with environmental legislation and



environmental conventions (on both national and international levels), It also measures that the audited entity has developed and operated to enhance the economy, efficiency and effectiveness in the environment.

**2.2.2. Classification of environmental auditing**

With an environmental audit approach that is an audit subject that is not an audit type, it is possible to classify environmental audits as follows:

Based on the audit subject: internal audit and external audit (external audit)

Based on the audit function: compliance audit, financial statement audit and operational audit

Based on the time of the audit: pre-audit, post-audit and audit during the implementation

Based on auditor sector/ industry: Air audit, Water audit, waste, Energy audit, Natural resource audit, Audit ecosystems, Auditing of human activities and sectors.

Control activities related to environment	Contents	Objectives	Positioning
Environmental management audit	Assessment of any organization’s operations compared with audit criteria such as regulations or management practices, which work to benefit the environment	To provide information about the organization’s operational status compared to management’s expectations of environmental performance. Reveal what specific measures are required to address this shortcoming.	Internal to the organization
Product certification	A verified and registered process that communicates transparent and comparable information about the	To have a certification document	Independent

	life-cycle environmental impact of products re		
Environmental impact assessment	Process of assessing the likely environmental impacts of a proposal and identifying options to minimize environmental damage of project and policies.	To inform decision makers of the likely impacts of a proposal before a decision is made. To provide an opportunity to identify key issues and stakeholders early in the life of a proposal so that potentially adverse impacts can be addressed before final approval decisions are made.	Independent

*Table 1: Different Descriptions of Environmental Audit (Source: How to Increase the Quality and Impact of Environmental Audits, WGEA, 2016)*

### **2.2.3. Importance of environmental auditing**

Sustainable development was used by the United Nations Environment Programme, in particular in the report “Our Common Future”, published by the World Commission on Environment and Development (WCED 1987). The now quoted definition of sustainable development given in the Brundtland Report is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). Sustainable development constitutes three elements: environment, economy and society. In other words, sustainable development is economic development in harmony with environmental protection and social justice.

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Many economic and social studies have shown that economic development going with social justice is one of the fundamental goals of many governments around the world. The agenda of United Nations on Development in 1994 stated that development is the basic human right, peace is the basis of development, economy is the driving force of progress and the environment is the foundation of sustainability. Equity is the foundation of a society and democracy is core value of good governance - which are the basic goals of good governance. Good state management is a key component of sustainable development, which is the heart of state management.

The role and function of SAIs are to enhance the accountability of the government through auditing to assess whether government activities achieve these goals; Evaluating whether the policies of the government are appropriate to address specific economic, political and social issues; And advise the government in formulating policies that meet the requirements of the country's development phase. In other words, the operation of SAIs contributes to improve the quality and effectiveness of state management.

In the most basic sense, the environment is biological, chemical and physical systems for human surviving. The environment includes the atmosphere, oceans, rivers, lands and organisms. The environment provides raw materials and energy for production and living of human. The natural resources include renewable resources and non-renewable resources. Wastes from industrial and human activities are re-absorbed by the environment so the environment is polluted, resources are exhausted, population's growth is gradually increased. This has limited the scope and quality of economic growth.

The consideration of the environment in terms of economic development leads to the concept of sustainable development. Sustainability is understood as the health of the global ecosystem, and sustainable economic development aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. The ultimate goal of sustainability is the equity of generations. This depends on promoting the economical and efficient use of resources, the fairness in trade and the allocation of resources, responsible behavior for nature and other organisms. The environment must be seen as an integral part of economic development rather than a free commodity. Therefore, the environment must be considered an important issue for the future of humanity and environmental protection is defined as a responsibility for all of us, the citizens of the earth.

With the above approach, environmental auditing is a way of protecting the environment against environmental instability in the current context. Many countries around the world have been implementing environmental auditing with the aims to effectively utilize natural resources and appropriately allocate production factors. Environmental auditing should play an important role in focusing the goal of sustainable development for the national economy. The need for environmental auditing is considered in the following aspects:

#### ***2.2.3.1. Environmental auditing is an important element of auditing activity***

In order to develop the strong, stable and sustainable national economy, there must be a favorable environment. Today, the environment going with sustainable development are considered as a basic policy of each country and it is also the responsibility of a business for the whole society. As the highest inspection authority for public resources, SAI is responsible for inspecting, evaluating and confirming how businesses or projects/ program have impacted the environment, and what measures they apply to prevent, reduce or overcome negative impacts that their activities have caused. In addition, SAI is responsible for ensuring the smooth and efficient operation of the environmental management system through auditing activities of government agencies in terms of performance appraisal. The environment of those ministries is an integral part of the macro management system and the highest inspection authority, SAI has an irreplaceable role.

#### ***2.2.3.2. Environmental auditing plays an important role in confirming the country's actual gross domestic product and the actual cost of the business***

On a macro level, the reality is that many countries that pursue GDP growth have faced unpredictable consequences. If the cost of environmental protection and environmental damage were removed from a country's gross domestic product in the same period, the GDP of some countries would be too small. According to the development trend, short-term economic growth at all costs without any increase in environmental pollution and negative impacts on people's health will be eliminated. From a micro point of view, businesses are only interested in man-made costs that ignore the costs of resources and environmental costs when determining the cost of the product that makes the calculation of profits. The business is inaccurate, and that advantage will not last forever. Therefore, the conduct of environmental audits will force businesses to calculate the cost of environmental resources, which must re-calculate the cost of products as well as the value of gross domestic product.

#### ***2.2.3.3. Necessary to the sustainable development of economy***

The doctrine of sustainable development was born in the 1980s on the basis of the debates on the environment and development of the world. This theory suggests that: (1) human economic activity must be in harmony with the development of nature; otherwise growth will deplete natural resources and pollute the environment. Old and outdated equipment and technology; (2) while developing and consuming process, people need to take practical action so that future generations have the opportunities they have, not allowed to leave for future generations an environment. Ruined Sustainable development, therefore, is a model of development based on regulating traditional economic development as an inevitable choice of history.

Over time, more and more countries, more and more people see the importance of environmental protection and environmental audits. SAIs are increasingly aware of their responsibilities and their efforts on environmental protection through the implementation of environmental audits. In some countries, SAI has established specialized environmental audit and environmental auditors are trying to fulfill their role. In economic development through large-scale environmental audits and results are more practical.

### **2.3. The State Audit Office of Vietnam**

The State Audit Office of Vietnam (SAV) is a specialized agency in the field of state financial inspection in accordance with the laws of the nation, has the function of providing evaluation, validation, conclusions and recommendations on the management and use of public finance and assets.

The operation that is carried out by the SAV is called governmental auditing. Through auditing of the activities of the executive branch (the Government), the SAV operates functions to discharge the responsibility of the Government to the National Assembly and to the people.

### **2.3.1. Organizational structure of the SAV**

SAV is organized and managed in a unified manner, including advisory departments, specialized audit departments, regional state audit offices and service delivery units (*Table 3*). Department of Administration, regional audit offices and service delivery units have their own accounts and seals. The specialised audit departments shall conduct audits according to their speciality of agencies and organizations at the central level. The regional State audit offices shall perform audits of agencies and organizations in the geographical area assigned to them, and other tasks as deputed by the Auditor General.

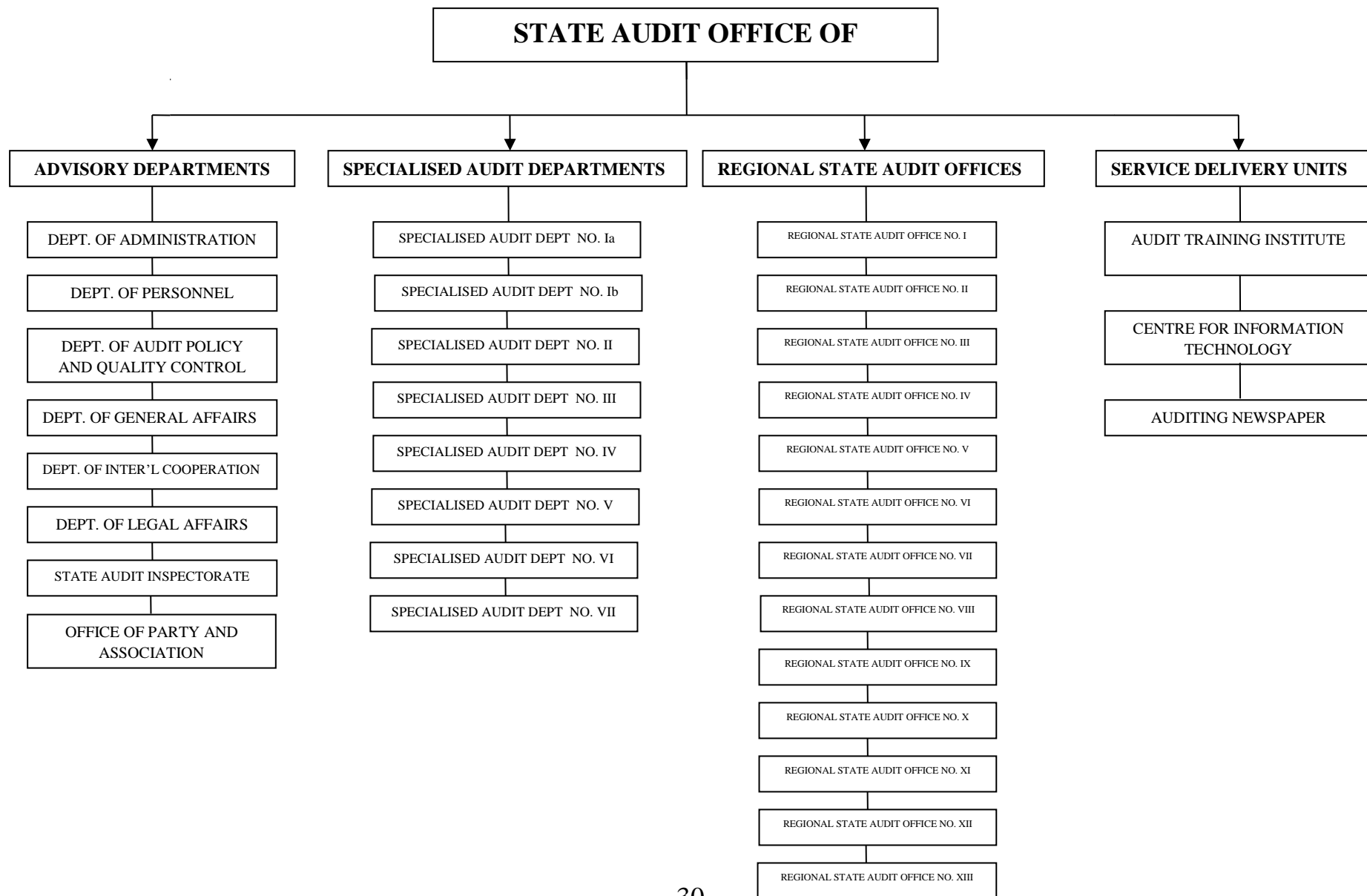


Table 2: Organization chart of the SAV

### **2.3.2. Legal status, function of the SAV**

In order to enhance the State control over the management and use of state budget and public funds, on July 11, 1994, the SAV was established on the basis of Decree No. 70/CP to assist the Prime Minister in performing the function of inspecting and certifying the correctness and legality of accounting documents and data and settlement reports of state agencies, non-business units and state economic units And mass organizations and social organizations use funds allocated by the state budget.

Implementation of the state administrative reform program, after a period of operation, due to the need to speed up the audit to suit the new situation, the Vietnamese Government issued Decree No. 93/2003/ND-CP dated on 13 August 2003, specifying that the Government is a governmental agency with the function of auditing, certifying the correctness and legality of the reports of the State budget at all levels and reporting on the final state budget balance; Reports on finalization and financial statements of agencies, units and organizations using the state budget; Auditing compliance with law and economics in the management and use of state budget and state assets in accordance with the annual audit plan approved by the Prime Minister and unexpected tasks by the Prime Minister or requirements by competent authorities.

Leaders of the SAV are Auditor General and Deputy Auditor General who shall be appointed and dismissed by the Prime Minister; The Auditor General shall take responsibility before the Prime Minister for the entire work of the SAV; The Deputy Auditor General of the SAV shall be responsible to the Auditor General for their assigned tasks. The operating budget of the State Audit Office shall be allocated annually by the state budget according to the same cycle as other administrative Government agencies.

The practice of the SAV in the period 1994-2005 has shown that the independence and objectivity of the State Audit's activities is limited by the inspected person and the inspectors are placed under the direction and control of the Government. Hence, in order to improve the effectiveness and effectiveness of government auditing in accordance with the principles of independence, impartiality and honesty of the SAV, as well as to comply with the principle of independence under ISSAI 1 - The Lima Declaration (INTOSAI, 1997). On June 14, 2005, the State Audit Law was passed by the National Assembly of Vietnam and came into effect on January 1, 2006. The law affirms that the SAV is a specialized body in the field of state financial inspection established by the National Assembly, operates independently and



only complies with the law. Thus, in terms of organization, the SAV is neither a government nor a parliament. This is an important basis for the independence of the SAV in accordance with international practice.

SAV has the function of auditing financial statements, auditing and auditing activities of agencies and organizations managing and using state budget, money and assets.

The mechanism for appointing the head of SAV has an important influence on the functioning of the network. According to the new regulations, the SAV is the head of the SAV, which is responsible for the entire organization and operation of the SAV; The independence of the Auditor General shall be ensured and approved through the process of appointment and dismissal as stipulated in Item 2, Article 17 of the Law on the State Audit.

The law is one of the very few laws in the legal system compose a chapter that regulates operation assurance, which is to ensure the human and material resources of agency operations, more specifically financial security - the basis for the independence, objectivity in the operation of the agency.

Expanding to meet the requirements of reality, November 2015, the SAV has been regulated in the Constitution.

The National Assembly has passed the promulgation of the Law on Amendment which officially came into force on 1<sup>st</sup> January 2016.

### **2.3.3. Legal framework for activities**

The legal basis for the operation of the network is the effective date of the law. The State Audit Law stipulates that the SAV is the specialized body for state financial inspection, which is established by the National Assembly, operates independently and only complies with the law.

The revised State Budget Law of Vietnam 2015 also contains provisions on the tasks, functions and powers of the SAV, especially in the evaluation of budget estimates and the report of the Government's budget final accounts submitted to the National Assembly.

The State Bank Law of Vietnam, in Article 47 (2010) stipulates that annual financial statements of the State Bank must be audited and certified by the State Bank.

## **2.3.4. The role of the SAV**

### ***2.3.4.1. Contributing to improve the economy, effectiveness of the management and utilization of state financial resources***

This role is firstly expressed through regular audits (financial and compliance audits) to evaluate and validate the legitimacy of economic information, first of all in the financial reports of the various levels of government, agencies and audited units. At the same time, it helps the economic and financial information of the State and economic units to meet the requirements of honesty, objectivity and publicity.

Performance audits are conducted to assess the economy, effectiveness and efficiency of the management and use of financial resources. Through which governments see strengths, good practices, also activities that need to be tackled. It could promote government and economic organizations that use the state budget to improve the quality of management and utilization of economic resources in a comprehensive, economic, effective and efficient manner. The requirement to manage and use economically, effectively and efficiently the economic resources of the State and economic organizations is always considered as the leading objectives of macro and micro-economy. In the modern economy, the Government has been expanding its activities to the social and economic sectors in order to perform the function of regulating the economy, therefore it is necessary that these activities should be checked and supervised to ensure that these activities are subject to comply with the regulations within the financial framework. Meanwhile, its goal constitutes to ensure the proper and effective use of public funds, enhance the transparency in the financial management, and provide objective assessment reports to the public – the tax players to the Government.

### ***2.3.4.2. Contributing to raising the compliance with and perfection of the legal system on economic and financial management of the Government***

Through the audit results, reports of the confirmation, evaluation and comment on financial information, the process of managing and using public funds has contributed to maintaining the effectiveness of the legal system of the State. Through controlling the compliance with the law, the SAI will evaluate and recommend audited entities to correct errors in economic and financial management. Therefore, audit activity contribute to the maintenance of legal compliance at all levels of management, enhances the quality and effectiveness of management by the law of state agencies.

Through the functions of examining, certifying and advising on economic and financial management at the macro and micro levels, the audit activity affect economic organizations and Government in the proper and effective management and use of state-managed economic resources.

The Government performs the management of economy and budget by legal system. In order for the legal norms to come into life, the system needs to be synchronized and always completed in line with the socio-economic development. Through its functions, the SAIs one side help the audited entities to strengthen the observance of the law, on the other side, to propose the state management agencies to amend the regulations which are not suitable with the practice. Under the situation that the economy both in terms of macro and micro needs the Government support in creating a healthy competitive environment, the information gained practically through audit activities are useful for research and perfection of the legal system on economy and finance.

#### ***2.3.4.3. Contributing to the transparency of economic and financial relations***

This role is associated with the publicity of audit results obtained from the examination, evaluation and confirmation of the truthfulness and legitimacy of economic information, firstly the information in the financial report established by state agencies and economic units have been audited. SAI contributes to confirm the economic and financial information of the government, the economic units that meet the requirements of honesty, objectivity and publicity.

#### ***2.3.4.4. Contributing to improving the effectiveness of the management and use of state finances***

Through the audit process, the SAV reports and consults the National Assembly about issue or amend the law to suit the practical operation of the economy. The role of the SAV is also to advise governmental agencies on the issuance or amendment of regulations in accordance with the Law. Therefore, the function of consultancy on economic and financial law to implement the law and mechanisms and policies on economic and financial management for agencies, organizations, individuals and management. The use of state budget and business production is an indispensable need to improve the economic efficiency of the use of resources and to put economic activities within the framework of the legal corridor Government.

## **2.4. Difficulties and limitations in organizing environmental auditing of SAIs**

### **2.4.1. Guidance, standards and criteria sets are missing and disproportionate**

In order to create consistency in the implementation of the audit related environment, to achieve high quality audit results, and to make the audit recommendations feasible and useful for audited entities, SAIs need to synchronize guidelines, standards and criteria for environmental auditing.

Characteristics of environment related factors are very diverse, difficult to quantify, have wide impact. There is a difference in terms of evaluation criteria between regions and territories. So the establishment of guidelines, standards, evaluation criteria becomes not simple. The political, social-economic and environmental characteristics of each country are different, so the priority of choosing the audit field or content for environmental auditing is not the same. When SAI chooses a new auditing content, such as climate change audits or natural resources audits, it has not many opportunities to consult or exchange information and experience with other SAIs. Moreover, due to differences between levels of development among countries, the application and adjustment of guidelines, standards, criteria in the field of environment auditing in one SAI are not so feasible to apply for other SAIs in reality of conducting.

In supporting of SAIs to conducting environmental audits, the INTOSAI WGEA has developed and issued a number of documents guiding the implementation of environmental audits in principle, including *Auditing Water Issues: An Examination of SAIs' Experiences and the Methodological Tools They Have Successfully Used* (2013); *Auditing Sustainable Fisheries Management: Guidance for Supreme Audit Institutions* (2010); *Auditing Government Efforts to Adapt to Climate Change and Ocean Acidification in the Marine Environment* (2016); *The World Summit on Sustainable Development: An Audit Guide for Supreme Audit Institutions* (2007); *Towards Auditing Waste Management* (2004); *How SAIs May Co-operate on the Audit of International Environmental Accords* (1998).

Among these studies, there is no standard nor evaluation criteria system related to environmental auditing. The WGEA sets out the principle orientations based on that SAIs develop their own standards and criteria system to conduct environmental auditing. This process requires SAIs to possessing good knowledge and experience, as well as enough long time of construction. There are not many SAIs can develop the studies system or have intention to do it.

The above-mentioned facts are considered as the reason why the guidelines, criteria for environmental auditing are inadequate and incompatible with practice in many agencies. There were 49 out of 94 respondents (52%) to this questionnaire survey conducted by INTOSAI WGEA in 2009-2012 indicated that this fact made them unable to carry out environmental audits (Table3).











Insufficient data on the state of the environment	66%	
Insufficient monitoring and reporting systems	65%	
Lack of human resources	65%	
Lack of skills or expertise within the SAI	59%	
Insufficient formulation of government environmental policy	52%	
Lack of established environmental norms and standards	37%	
Lack of environmental programmes	30%	
Lack of technical resources	29%	
Other	12%	
Inadequate SAI mandate	11%	

Table 3: Which of the following measures did your SAI take to attempt to overcome the barriers? (% of SAI, total number of SAI: 112)

The table 3 shows also the three most frequently encountered barriers that the SAIs have experienced when performing environmental audits have been insufficient data on the state of the environment (66%), insufficient monitoring and reporting systems (65%) and lack of human resources (65%). Noteworthy also is the fact that for 11% of SAIs an inadequate mandate is a perceived barrier.

#### **2.4.2. Experience and resources are lacking and weak**

Government auditing activities are initiated from the requirements of auditing requirements (audit compliance and financial auditing) for management and economic activities in the public sector. With such a starting point in the process of formation and development to fulfill their mission, the agencies that focus on strengthening the capacity in the fields of finance, accounting, banking, law ... When the need to evaluate the value of money or so-called performance audit appears, the capacity of the agencies also have a shift in the direction of promoting the skills of analysis, evaluation and synthesis in all areas of operation of the ministries, agencies and units audited. This requires a variety of specialized areas and training disciplines within the staff of the agency. However, the proportion of people having professional qualifications in economic and social sectors still dominates the contingent of officials and auditors of other agencies; The number of auditors with expertise in new technical or technological fields is far below the needs of operational practice.

Environment and sustainable development are quite new concepts for humanity in general and for the community in particular. Experiences in environmental protection as well as criteria/ specifications for each specific element of the environment have not been formulated as the basis for the auditors to proceed. An appearance requires the agency to have a new approach to addressing new requirements. With the traditional requirements of auditing the rules for environmental issues, there are many new challenges for SAIs. That is how to audit issues such as energy, climate, natural resources, wind, climate change, etc. It can be seen that auditors with expertise in economic issues, finance, law, sociology can not solve the above requirements.

The SAIs have encountered many difficulties and embarrassment in deploying environmental auditing. There are some new and unprecedented issues to be learned in the SAIs. They should formulate strategies, determine organizational models, methods to coordinating and integrating environmental auditing with traditional auditing. At the same time, SAIs develop audit programs, identify evaluation criteria, select auditing methods and

techniques and ways to cooperating with other functional ministries in the field of environmental auditing.

61/106 SAIs respondent (58%) state that the lack of necessary English language and skill to treat environmental issues is one of the main challenges that why they are not interested in studying and implementing environmental audits. In the other hand, possibility of auditor to use English and informatic technology is another difficulty to overcome. The WGEA encourages SAIs to cooperate with other SAIs in performing the environmental auditing. This is one of the most efficace and quickly ways to share experience in conducting environmental auditing. To actively intergrate into the international auditing community, the auditors need to utilize fluent English and possede good analysis skills (ex. using technical or mathematic software). Apart from some of developed countries or countries using English as the formal language, almost of the SAIs, including the SAV, face this challenge.

## **2.5. Lesson learned for the SAV in environmental auditing**

The Government of most of countries on the world spends a lot of money and energy to addressing environmental issues. Meanwhile SAI becomes effective tool to help Government getting the necessary information about the management of the state operation in general and environmental issues in particular by the Government. That is the reason why environmental auditing becomes a major activity of many SAI in the region and on the world. The environmental audits conducted by SAI supported a lot the government in protecting the environment and growing of economic for sustainable development.

Environmental auditing has been implemented in some countries on the world during nearly 20 years and gained remarkable results. However, due to objective and subjective factors, SAV has not really paid much attention to the development of the resources needed to perform this task of environmental auditing. Through consulting and learning experiences from other countries, the SAV can draw on some important issues:

Firstly, it is possible to conduct audits of environmental-related issues without necessarily having a legal provision regulating the operation of this activity. By the nature, environmental auditing is not an audit type. With such an approach, the SAV can perform auditing of an environmental-related issue according to the criteria of the type of audit of financial audit, compliance audit or performance audit.

Through the practice of environmental auditing, international and regional SAIs conduct auditing on the compliance with current environmental regulations as well as regional and international conventions and agreements on environment. In addition, they achieve great success through the auditing of environmental issues in accordance with some criteria of performance audit. With this clever application, the SAV probably plays an active role in the process of conducting environmental auditing without any obstacle regarding to the legal basis.

Secondly, for implementing environmental auditing, the SAV should establish a central unit or specialized branch or specialized department responsible for carrying out these auditing activities. Otherwise, the SAV can also use its own auditors to conduct the audits regarding to environmental issues. The environmental auditing has its own characteristics, so the process of planning for auditing in the SAV needs to include different stages. In order to handle these problems, the SAV should set up a specialized unit responsible for selecting the auditing contents, planning the auditing, selecting the auditing objectives and techniques. It is necessary to highly unify the use of auditing resources in the general as well as promote a maximum of the modest resources of the SAV.

Thirdly, the SAV could build the auditing capacity for auditors conducting environmental audit through actively participating to the INTOSAI WGEA's activities. SAIs learn and exchange information and experience from other member SAIs of WGEA. The Working Group on Environmental Auditing (WGEA) is under the INTOSAI, aims to improve the use of audit mandate and audit instruments in the field of environmental protection policies, by both member SAIs of the Working Group and non-member SAIs. WGEA drafted and issued many guidelines about environmental auditing, organized several seminars and training to strengthen the capacity for 118 SAIs on the world. In addition, WGEA created a number of projects to address the environmental problems that have not been identified in the workplace before. All SAIs on the world are recommended to participate in together to produce the most suitable results for the development of environmental auditing.

According to the guidelines of the WGEA, SAIs cooperate together to carry out audits in the form of joint audits, concurrent audits/ or parallel audits and coordinated audits (WGEA, 2010, Cooperation Between SAIs: Tips and Examples for Cooperative Audits). These forms of audit provide the SAV with opportunities to capture and apply auditing knowledge and



techniques related to environmental issues. Thereby, the SAV develop or revise the suitable set of criteria of techniques to be applied in the environment auditing in Vietnam.

Finally, the SAV needs to modernize its operations by ensuring good conditions of infrastructure and information technology applications. At the same time, it must consolidate the entire organizational structure to meet the auditing requirements and develop the contingent of officials and auditors following the principle of diversifying the training majors, recruiting the auditors with expertise in environmental-related fields such as biology, forestry, oceanography, geology, etc. The SAV should also improve the skills of analysis, synthesis, informatics, foreign languages of auditors and establish and maintain a team of scientific collaborators on environmental auditing inside the country and abroad.

## **CHAPTER 3. FINDINGS ON ENVIRONMENTAL AUDITING IN THE STATE AUDIT OF VIETNAM**

### **3.1. The value of the audit report**

The environmental audit report now constitutes one of the audit reports established by the SAV. The report confirms the correctness and assesses the compliance to the regulations. In accordance to the Article 7, State Audit Law, the audit report is an important basis for the National Assembly, the Government, law enforcement agencies and other State agencies to use in the course of performing their functions. Auditors must carry out the recommendations of the SAV of the violations mentioned in the audit report.

With the Constitution of the Socialist Republic of Vietnam, its legal status has been improved in line with international practice in the area of government auditing, where its independence includes: independence professional, independent in terms of personnel and financial independence, has been ensured. These are the prerequisites for good performance as a government accountability agency. The head of the SAV is the Auditor General elected by the National Assembly, the President of National Assembly issues the appointment decision. Congress is the body that oversees its operations.

### **3.2. Some results of organizing environmental auditing**

The SAV approached environmental auditing at the 9th meeting of INTOSAI/ ASOSAI's Working Group on Environmental Auditing in Russia in 2005. However, in 2010, it will bring environmental factors into its audit activities. The reason is that since the SAV is a new established institution in 1994, there are important issues to implement and follow such as legal status, organizational structure, especially the specialization and further improvement of traditional audit activities such as compliance audits, financial audits, and performance audits of state money and assets. Environmental audits did not conduct yet separately nor independently. However, over the past years, the SAV has also made some achievements in environmental auditing.

Recognizing the importance of environmental auditing for the country's sustainable development on the economic and social level in general and the need to integrate with the professional development trend of the SAI community. In the world and region in particular, in 2010, it officially became a member of the Asian WGEA. Soon after, he set up a working

group on some of his goals with the objective of advising the SAV leaders on the direction and implementation of auditing of environmental issues. With this beginning, it has effectively utilized the support from the community of experienced SAIs in the world. In addition to gaining experience in the field of SAIs from China, India and Indonesia, we also send our staff and auditors to attend seminars and training courses in India, Canada, China aims at step by step approaching and conducting audits of environmental issues.

Along with the organizational and personnel preparation for one, there were also a number of other specific activities aimed at raising awareness and equipping staff with knowledge and skills in environmental auditing, auditor. Specifically, the delegation has organized study tours to Korea, Indonesia, Holland, etc. In addition, they also conducted seminars, seminars on which one with the expertise of foreign experts help our auditors to understand the true and complete nature of the benefits.

The SAV also embarked on the development of a process and some audit criteria for mineral resources and land. Annually, the SAV appoints civil servants to participate in training in the strengths of countries such as India. The SAV conducted joint audit of the Mekong basin with regional SAIs.

State Budget Law and some related laws govern the operation of activities, there are no specific regulations. However, Article 5 of the State Audit Law 2006 stipulates that all activities related to the management and use of state budget, money and property are subject to the audit.

This is the basis for the conduct of environmental audits. So far, some environmental-related audits have been carried out, which may include the following audits:

Audit of the management and use of environmental non-business expenditures for the period of 2006-2008.

The audit of the use of funds for state inspection of the quality of fish and seafood products and products processed from these types, which are implemented under the Agreement signed between the Parties and the SAI of Russia in 2010. This is the first concurrent audit on the environment conducted between Russia and Vietnam and is the second simultaneous audit of two SAIs.

Audit of money and state budget and assets in 2010-2015.

Collection of annual audit plans/ reports of the Department of Environmental Impact Assessment - Ministry of Natural Resources and Environment.

Audit of the Mekong River Basin for the period 2009-2011. This is a parallel audit carried out between Vietnam and the SAIs of China, Thailand, Laos, Myanmar and Cambodia in 2012.

The audit of the licensing and the state management of the exploitation of natural resources and minerals in the period 2009-2012.

Audit of land use and management, implementation of housing projects, urban and industrial zones in 2009-2012 of Hau Giang, combined audit of two projects Kenh Xang canal Xa No and Long My - Thi Thanh dike system.

Audited land use and management audit for the period of 2005-2012 of Vinh Long.

The audit of the national target program on rural water supply and sanitation 2012.

Program audit mitigation and adaptation to climate change for the period 2012-2015.

Environmental audit of the management and treatment of waste water in Khanh Phu Industrial Park, Ninh Binh Province (MTWW) in 2016.

Recent years, SAV conducted audits on several environmental programs/ projects such as the Climate Change Adaption and Mitigation (CCAM) Program, the Planting 5-million-hectare-forest Project, the Treatment of waste water, solid waste and environment protection in Hoi An city Project, the Low Carbon, Energy and Environment (LCEE) Project and two audits of the Management and Treatment of industrial waste water at the Khai Quang Industrial Zone in Vinh Phuc province and the Khanh Phu Industrial Zone in Ninh Binh province. From these audit engagements, SAV has gained many valuable experience and provided the National Assemble detailed reports on the effectiveness of those programs as well as many recommendations for improving the system.

Due to the growing awareness of the importance of one, in addition to the above mentioned results, it has also carried out some other work to put together an important and regular audit content in the operation of the network. This is expressed in a concrete and clear manner in the audit plan of the years. The topic of audit of the management, exploitation and trading of mineral resources, land, housing development, urban and real estate projects is defined as the work of specialized agencies.

From the above mentioned environmental-related audits practices, some suggestions can be drawn. Leaders have recognized the importance of auditing the environment, with the sustainable development of the economy and society. Since then, there have been specific directions and directions for putting environmental audit. It is one of the focusing points of our activities in the coming period. Through a resolution to release the responsibility of the Government to the National Assembly, the people of Vietnam in particular and the international community in general for environmental protection and sustainable development, contributing to the Government's capacity building. Governance and effective use public resources (in terms of funds, natural resources) for economic growth and development.

The SAV has sufficient legal basis and conditions necessary for the implementation of this agreement. This is ensured by the legal status of the state. The State Audit Law of 2016 allows the SAV to be independent in building, organizing the apparatus and carrying out all activities of the State; At the same time, it gives the Auditor General the right to freely choose subjects, contents and application of auditing methods and techniques; The funds and personnel necessary for the implementation of the environmental audit are ensured. With respect to that legal basis, specialized and regional associations have selected audiences, objectives and content for environmental issues. At the same time, these audits shall be conducted by their auditors on the basis of current legal bases and existing standards, procedures, methods and techniques. In other words, it has the necessary and sufficient conditions for carrying out environmental audits in Vietnam.

He was also aware of the importance and benefits of international cooperation in auditing in general and in particular. This is reflected in the fact that Vietnam has rapidly become a member of the regional and world working groups; Attend conferences, seminars and training courses. These activities have contributed to raise the awareness of state cadres and auditors about how to help those who have the opportunity to learn and exchange experiences as well as solve problems and obstacles. It has also succeeded in implementing joint audits, in particular fisheries audits and the audit of the Mekong. Joint/ parallel audits with foreign partners will help to make the audit plan closer to the actual and more realistic requirements. This helps to identify the content, objectives and selection of methods and techniques of auditing more appropriate; The exchange of findings and audit conclusions also contributes to the effectiveness of the audit; Demonstrate valuable experience for future

audits and discover the ability to work at a higher level with your SAIs in other related fields; It contributes to enhancing the prestige and prestige of the SAI community in the region and in the world.

The content, form and size of environmental audits performed by the SAV in accordance with the capability and competence of the auditors. On the type of audit, besides the integrated checklists, which also carried out audits. However, environmental audits have so far been conducted in a mixed format, ie all three types of compliance audits, financial audits and operational audits have been implemented in a single audit. Compounding audits and financial audits are somewhat more prominent than auditing factors in such audits. Thus, state auditors can make good use of their strengths, His capacity. In addition, the selection of topics for environmental audits is quite appropriate as topics related to domestic capital and subsidies for environmental activities; environmental management system; water and waste treatment; agriculture; infrastructure ... which are topics suitable to the size and level of SAIs with long history of formation and development, the advanced and low level of application of advanced and applied science and technology. Start approaching with environmental audits as well.

On the bases, the conclusions of the two groups were also carried out on two groups of legal bases: national and international law. National laws include environmental laws, tax laws, state budget law, the State Audit Law, and a number of sub-laws and other relevant regulations. Pursuant to international law, including international conventions and agreements which Vietnam has signed such as the Kyoto Protocol, the Convention on Biological Diversity, etc...

### **3.3. Some shortcomings and limitations in the organization of the SAV**

In addition to the above results, in reality there are still shortcomings that need to be overcome in order to confirm its position and role in environmental protection and sustainable development of Vietnam.

In many other developing countries in the world, including Vietnam, the harmonious settlement between growth and sustainable development is a difficult problem for the National Assembly and the Government. Most of these countries have choices in terms of economic growth to escape poverty, addressing social issues that undercut development sustainably. With this option, the National Assembly, the Government of these countries need to spend a lot of money on investment in industrial development. As a result,

environmental protection is being overlooked and funding for environmental protection activities is modest. The inevitable consequence of the above action is that the SAIs function to monitor and supervise public resources must also focus their audits on the audit of financial statements, the funds used. In other words, Congress, the Government, the people and the body itself are not aware of the importance and role of agencies in environmental protection and sustainable development. This is the first and fundamental cause of a new test at the current level.

The second limitation comes from the fact that the new structure has not been formed and developed in a very short time. Therefore, there are many other issues that need to be prioritized in the current and in the coming years. Organizational and human resources, enhanced auditing rules to meet the requirements of a transitional economy, have not yet been considered as an audit focus.

The third constraint is human-related. Agencies that converge in value with the audited annual volume too large, the number of auditors that can not cover those audiences at annual frequency.

The environmental protection is really a grand global concern that all the people need to understand and take interested in. It is so important for SAIs, including the SAV, to conducting environmental auditing with efficace auditing method and technique. The subjects of environment, environmental auditing and sustainable development are selected to research by many experts. Some of the works have introduced conceptual issues, theories and good practices in environmental auditing and sustainable development. At the same time, techniques and specific methods in auditing are described so that auditors can understand the approaches and carry out audits related to the environment. However, environmental auditing at the SAV has not been conducted much and synchronously. Although many standards in guiding auditing activities are established in Vietnam or in the world, not any guidance nor standards, specific document on environmental auditing for the SAV is developed. Hence, the next chapters of the thesis clarify some solutions for organizing environmental auditing at the SAV.

## CHAPTER 4. ANALYSIS AND RESULTS

### 4.1. Strengths

First of all, the SAV's legal status is increasingly strengthened. In 1994, the SAV is established and organized and operated under the Government Decree number 70/CP. According to the first State Audit Law established in 2005, the SAV became an independent body and perform activities in compliance only with the laws. In 2013, the first time the National Assembly regulated functions, obligations of the SAV and the Auditor General in the Vietnamese Constitution that underline the SAV's role and status in its auditing activities and decision.

Secondly, the SAV is interested in environmental auditing, therefore in the roadmap to improve its organizational structure, it plans to set up a specialized audit department to perform environmental auditing.

Thirdly, environmental protection is becoming a hot issue of the whole society, some financial audits, compliance audits, performance audit related to environmental factors have been conducted by the SAV in the past time. In recent years, in the process of annual audits planning, the SAV has proactively designed a specialized audit plan for implementing two or three audits related to environmental factors.

Finally, with the ambition to improve its use of audit mandate and audit instruments in the field of environmental protection policies, the SAV participate as a member of the WGEA under the INTOSAI. The SAV acquires better understanding of the environment issues. Otherwise, more and more SAIs in the region and in the worlds joints experience exchange activities held by other SAIs on environmental auditing and conduct cooperative audit on environmental issues.

Top management of the SAV needs to understand as well as take advantage of these strengths in the development and implementation of SAV development strategy on environmental auditing.

### 4.2. Weaknesses

Firstly, as environmental auditing is a very new sector, the SAV has not established the audit standards relating to environmental auditing, also has not developed any guidance on how to



conduct an environmental audit. Therefore, there are different audit opinions on the same audit findings, so audit quality could be deteriorated.

Secondly, the SAV mainly focused on financial audits, compliance audits to meet the immediate needs of the National Assembly and the public (confirm compliance with the law and honesty, reasonableness of financial statements, state budget settlement reports). The environmental audit conducted by the SAV is normally combined in financial audits or compliance audits, and rarely conducted with independent environmental audits. In addition, not many environmental audits are conducted in combination with the performance audits, so audits are not yet specialized in environmental issues, only assessing the compliance with the state law and regulations in using state money and assets, and audit results are not qualified as expected.

Thirdly, the SAV does not establish yet a specialized audit unit responsible for implementing environmental auditing, but any audit department of the SAV performs financial audits, compliance audits and operational audits related to environmental factors will be assigned to carry out environmental audit content.

In brief, the SAV should understand all weakness in the process of implementing its duties in general and environmental auditing so that it can find out right way to handle and solve limitations to improving its organization and operations.

### **4.3. Opportunities**

Firstly, according to the world's current trend, all nations are increasingly interested in environmental protection and sustainable development. United Nations defines one of the Millennium Development Goals is to "ensure environmental sustainability". Otherwise, the theme of the environment appears frequently in international forums as well as media. This is an important factor affecting the social awareness and knowledge about environmental protection.

Secondly, the National Assembly and the Government of Vietnam takes interest, supports and facilitates the implementation of audits as well as audits relating to environmental factors. Especially, the responsible governmental agencies regularly implement SAV's recommendations related to adjusting inappropriate legal documents as well as strict handling the violated entities.

Thirdly, the SAV focuses on international cooperation, right after its establishment in 1994, the SAV become an official member of INTOSAI in 1996, ASOSAI in 1997 and ASEANSAI in 2011. The SAV, a young agency, has the opportunity to cooperate with regional and internationalSAIs in the world by inviting talented experts of progressed SAIs to share their knowledge and experience for Vietnamese auditors. The SAV also sends many auditors to participate in seminars, professional training courses, directly participate in audits organized by the SAI to learn the field audit experience. It is the valuable opportunity to learn and select the most modern audit experiences, knowledge and methods that suit to Vietnam's conditions from many advanced SAI in the world in the field of environmental auditing.

Fourthly,in 2016, the SAV issued 39 standards in the direction of ISSAI guidelines compliancein order to guide all audit activities. This is a comprehensive set of basic principles, operational guidelines, and dealing with relationships arising in the audit activity that the public auditors must comply with in conducting auditing activities. At the same time, the standards are the basis for controlling the quality and practiceethics of all state auditors.

Fifthly, environmental auditing is considered an audit subject which may apply some theoretical and practical contents of all three types of audit includingfinancial audit, compliance audit and performance audit.

On the whole, develop in the favorable conditions is a good chance for the office. Besides of the internal effort, it is important that the SAV could understand and grasp of the opportunities in order to coming closely to the success for the effective organization of environmental auditing.

#### **4.4. Threats**

Firstly, the general social awareness on environmental auditing is not high making challenges in conducting environmental audit. The governmental authorities relating to environment and the audited entities possess limited awareness about the role of the SAV in the field of environmental protection. Sometimes, since this is a very specialized field, while the environmental auditing is a very new concept, specialists in specialized entities think that they are specialists and state auditors do not have expertise in the field.

Secondly, Vietnam does not yet establish national database system on environment. Each ministry or agency may set up data for their activities purpose without inter-agency agreement. Therefore, the environmental database between agencies may conflict in terms of data, content that may reduce the quality of auditors' assessments and conclusions.

Thirdly, environment is a global issue, the coordination audit between countries in the region and in the world becomes mandatory requirement, thus auditors must have proficiency in English, master modern auditing techniques applied to coordination audit among many SAI.

Environmental issues directly affect the socio-economic benefits of nations. Conflicts arise especially between countries rich of natural resources, or some countries which have general interests related to water, natural heritage, etc... This makes the environmental auditing process more complex and challenged.

It is hoped that in the near future, the SAV can overcome the challenges of awareness, build the national database as well as improve the quality of the personnel to meet the requirements of international integration and cooperation. Attempts to overcome that challenge contribute to increase the development of environmental auditing.

In conclusion, analysis results in implementing the SWOT model identifies more clearly the current status of organizing environmental auditing in the SAV. The trend of sustainable development in the world requires Vietnam to pay attention to the performing of environmental protection. Therefore, the SAV should understand its strengths and opportunities to promote environmental auditing as well as control all the weaknesses and threats in the current context.

## **CHAPTER 5. CONCLUSIONS AND SOLUTIONS OF ORGANIZING ENVIRONMENTAL AUDITING**

### **5.1. Conclusions**

Environmental auditing is all about methods of improving and ensuring the effectiveness of utilizing national resources, include natural resources and environment. However, the SAV is facing a lot of difficulties when carrying out their job simultaneously and consistency in order to obtain the required audit result, just so the environment can be improved and increase the effectiveness of Government' works.

Environmental auditing is the audit issues, policies, programs and government funds. Environmental auditing should be understood as the contents of the audit and not the audit types. Environmental auditing may be carried out in all three types of audit: financial audits, compliance audits, and performance audit in which environmental auditing is recommended as a top priority.

Financial audits of environmental issues can be focused on a number of issues such as audit and evaluate financial data and provide an audit opinion on the financial statements; the financial responsibility of Government. Environmental compliance audits can focus on compliance, in accordance with the laws, conventions and environmental policies of the authorities at the national and international level. Environmental performance audits may include content to ensure performance standards reflect the activities of the organization, to ensure environmental management is conducted efficiently, effectively and economically, which then to detect, warn and prevent negative impacts on the environment with the goal of project development. Projects, programs and sustainable socio-economic associate with environmental protection

Environmental auditing practices in the public sector in some countries around the world show that this is an indispensable activity of many SAIs. Difficulties and obstacles in the implementation of many SAI, including the SAV, were encountered by misconceptions and inconsistencies. Some SAIs doesn't even have a legal status commensurate with their potential, as well as lack of experience and audit resources. Other SAI doesn't possess completed standards and guidelines, and some countries don't even set up their database.

Therefore, in the future, the SAI should develop and apply “green” audit techniques, such as energy audits, procurement audits of ministries/ agencies, state agencies and businesses. The purpose of the study was to check whether the goods purchased are suitable and comply with environmental standards and in accordance with sustainable development objectives. There are lots of SAI, especially SAI has developed and experienced in environmental auditing, are integrating environmental factors and sustainable development into their audit activities. Environmental issues and sustainable development are increasingly recognized by the SAIs as auditor in a number of areas through training, use of experts, develop or modify audit guidelines, compliance audit for strategic planning. At higher levels of development, some SAI established environmental testing department or any relevant departments that conduct audit and environment sustainable development.

After that, the management and operation of SAI would then become "green". Many financial institutions have attempted to reduce the negative impact on the environment by reducing the amount of waste, limiting energy usage (electricity, water fuel such as gasoline, oil, etc.) in their office. The use of materials that can be recycled, environmental friendly has the potential to become friendly with the environment and recycling efforts to mitigate environmental impact by adopting “green” measurement in their activities.

In addition, a number of SAIs has studied and performed audits of natural resources - an audit that is focused on environmental auditing.

Through environmental auditing, SAIs recognize that there is a large gap between commitment and practice in the field of environment. Therefore, the audit to perform its comprehensive monitoring functions for environmental monitoring mechanism of the government is considered to be a developing trend of SAI. In addition, the goal to raise awareness about the needs and importance of environmental auditing for the state apparatus and the community is also an urgent task of SAIs in the region and all around the world.

According to SAIs’ trends worldwide, SAV is currently strengthening their organizational solutions. In particular, SAV proposed adjustment, enhancement of legal status, improvement of organizational structure, improvement of quality and structure of human resources in a reasonably way, and to modernization activities of the network and increase the use of IT in all areas of activity;

In addition, SAV needs to develop a strategic plan in which a strategic plan is the main focus of the operation, determine the implementation schedule of its conclusions. Simultaneously,

SAV has to develop their technical solutions such as developing a set of criteria, application of new technologies and strengthening international cooperation.

In the coming years, SAV will give priority to promote the type of audit activity in which auditing the environmental factors must also be increased appropriately. With this approach, the content of environmental auditing should be divided into areas such as water, air, waste, noise, forests, mines, the audit objectives are not only assess compliance with the law, verify the financial statements for the environmental spending but also to achieve the goal of sustainable development in order to improve environmental quality, improve environmental policy, manage and operate activities of the government environment.

## **5.2. The strategic orientation in organizing environmental auditing in the SAV**

Acting as a component of macro-management system and is the highest public financial inspection of Vietnam, the SAV needs to establish and consolidate their irreplaceable role in the economic development and environment protection through the implementation of the environmental auditing. In order for environmental auditing to carry out consistently and quickly, to bring out its effectiveness and efficiency in Vietnam, then the SAV must quickly complete their organization structure, operating mechanism and improve their operating capability. Having said that, if they want to complete the mission and the roles mentioned above, from now on until the year 2020, the SAV must determine for itself the following objectives:

### **5.2.1. To make the SAV become one of powerful tools of the State.**

Improve operating capacity, legal effect, quality and efficiency of the SAV is a powerful tool of the State in checking, controlling the use of resources and national assets. State audit must priority their development both in manpower, material resources and mechanisms and policies during their operations. They needs to ensure the validity of the audit report, which is the most important legal basis of the operations, financial situation of the audited organization; the conclusions and recommendations of the SAV must be implied correctly, entirely and promptly by all audited entities and State's agencies. Furthermore, they needs to pass through audit result, and reports to Parliament to approve the settlement report's for annual budget of the Government and Parliament, in order to help making critical decisions to the development of the country; which also provide helps for operations management and administration of the Government in all areas to achieve the goal of sustainable development is environmental protection, social equity and economic growth.

### **5.2.2. SAV's development must be consistent with international practice and the Vietnamese actual conditions**

International economic integration requires nations to build a healthy financial background, public and ensure transparency. To achieve the above requirements, the countries of the region and the world should have an independent body to organize and have testing function, verify the correctness, legality, economically in managing and use of public resources – having said that is the State audit agency. State audit agency development must conform to the national regulations and international practices. Based on experiences from countries in the world shows that the development of state audit agency, along with the other tools of the State's testing tools are necessary and is a prerequisite for a healthy operating environment and transparency. This new operating environment is a prerequisite to attract investment, ensuring rapid growth for the country, in both stability and sustainability.

Audit is a global problem, and it also carries the cultural nuances of the country. The international experience, guidelines and auditing standards from INTOSAI, IFAC is the basis and solid platform to develop and enact auditing standards system of each country, which allows to save time and cost for that designated country, while ensuring the harmonious development to the world and international integration requirements. However, political institutions, legal environment, occupational and economic mechanisms of each country has its own characteristics, requires the development of State Audit to comply with and adapt to the new conditions to grow and serve effectively to the management in each country.

### **5.2.3. To develop the SAV as focusing on environmental auditing**

In order to deploy environmental auditing synchronously, and to promote the effectiveness and efficiency of the State Audit in environmental protection and sustainable development, in the period from now to 2020, the State audit requires to have a clear viewpoint. Essentially, environmental auditing is not a type of audit but only a content of the audit, therefore, environmental auditing can be done using criteria of all three types of audit, which is compliance audit, finance and operations.

Environmental auditing should be treated as a focus point, a main activities content of the state audit with the purposes of by using audit activities to save natural resources, energy and protect the ecological environment of VN, support the government of VN in implementing commitments of the government.

### **5.3. Solutions to organize environmental auditing by the SAV**

#### **5.3.1. Developing a manual for environmental auditing**

The SAV should develop the Environmental Audit Manual to instruct the auditors in the adequate, convenient and effective process of environmental audit. The Environmental Audit Manual should include the following parts of concepts related to environment and legal documents related to environment and environmental management, legal bases related to environmental auditing, environmental auditing process, the system of sample profiles of environmental auditing, the guidelines correspond to the audit types and methods applied to each environmental audit, important note and experience related to environmental auditing.

#### **5.3.2. Developing and training auditor in both quantity and diversity of expertise and professional expertise with reasonable structure.**

Due to the complexity and very diverse in objective and content of environmental auditing, ranging in many fields and industries, therefore, staff and auditors of the SAV must be sufficient in both quantity, diversity in training expertise to meet the time demands and challenges set. To do this, in 2020, number of staff of 3500 people of the SAV will be allocated according to the professional expertise as follows:

40% of staff has expertise in Finance, Accounting, Auditing, Banking field.

35% of staff has expertise in construction, transportation, irrigation, architecture, mining, agriculture, forestry and fishery.

25% of staff has expertise in economic management, State management, law, information technology and other relevant fields.

#### **5.3.3. Increasing quality of staff and auditor training**

Construct and renovate training program, training content in order to linking theory with practice, equip professional knowledge as well as legal knowledge and practical skills in order to meet the requirements to perform financial statements audit, compliance audit and operational audit; provide additional training in some new auditing fields such as: Environmental audit, economic responsibility audit, activity audit, thematic audit; enhanced auditing professional training in the IT environment; foreign language training to staffs in order to meet the needs of international integration.



Innovate methods of training and retraining for staff, develop and encourage distance learning, self-training, training via workshops, experience exchange on audit factors related to the environment

Promote domestic and international cooperation, strengthen the academic exchanges on auditing profession regards to factors related to the environment. In particular, sending staff to study and acquire knowledge about environmental audit in some advanced countries is very important, participate in training courses, seminars about environmental audit holds by INTOSAI, ASOSAI and other international organizations. In addition, State Audit can nominate staff to participate in projects, activities of international and regional in environmental audit field; assign staff to work at a number of agencies which has relevant experience in the field of environmental audit for the period of 1 to 2 years; or enable the use of knowledge and experience of other Audit agencies through online consultant or evaluate the audit results in the form of cross evaluating (peer review).

#### **5.3.4. Developing auditing strategy which focus on environmental auditing**

The SAV needs to develop plans and strategies for environmental audit in Vietnam. The strategic plan needs to pin point the main focus as well as operating target within the strategist period.

The viewpoint of the SAV up to the year 2020 decided to makes environmental audit becomes the crucial and effective tolls of the State in monitoring the use and management of finance, public asset, to support the operation of National Assembly and People's Council of all levels in surveillance, monitoring and determining any important issues of the country as well as of the local region.

Sticking to the point above, the SAV must have its own operation strategies, in which environmental auditing need to achieve also determine targets for environmental auditing for each period of development.

The purpose of Environmental auditing of the State Audit is to protect nature reserve and environment by conducting audit in accordance with the regulation and share audit tools to consult or make impact to Government's policies on environmental protection.

To achieve the target mentioned above, the State Audit must determine the several targets for environmental auditing. Initially, the State Audit will conduct audit works on distributing, managing and using any of the environmental protection funds. The purpose of

such audit is to evaluate the compliance and transparency, legality and existence of expenses for environmental protection. In other way, during the first stage, environmental auditing focus on compliance auditing and financial auditing of environment related issues.

In the next stage, State audit shift its audit focus point from compliance auditing to operation auditing. During this period, State audit will focus on conducting audit on activities which may have deep impact to socio- economy of Vietnam. That is audit on controlling any activities which may pollute the surrounding environment, activities to protect the environment as well as to take action against climate change. These audit will evaluate policies, Government programs to control and monitor environmental pollution, protect Vietnam's environment according to operation audit such as the economically effect and the effectiveness of such policies and programs.

In the last stage: during this time, environmental auditing will focus to particular sectors i.e. Land resource auditing, Natural resource auditing (mining), water environment auditing, air pollution and construction auditing, Government reaction to climate change auditing.

Within this stage, along with expanding the content of auditing, environmental auditing focus on expanding the scope of auditing. In other means, State audit need to take into account the activities of cooperating audit with others State audit in the region as well as all over the world.

### **5.3.5. Diversifying auditing content and target**

State audit currently is conducting three types of audit ranging in many fields i.e. State budget, basic investment and construction, State organization, National defense. The SAV in reality, is currently conducting environmental auditing within Local's budget auditing of Ho Chi Minh city or evaluating the effectiveness of evaluating tools on environmental impact of environment protection of Ministry of Natural resource and Environment in their budget – monetary – State's asset audit.

The integration of content and target of environmental auditing to State Audit's auditing can be done via audit's type, in which, the compliance of law as well as other provisions relates to environment will be evaluated, check and verify the fund which was used for any environmental activities, and assess the economically, efficiently, effectiveness of projects as well as Government policies.

The SAV directed their focus to increasing in the following years the activities of operating audit, in which the number of audit conducted will be increase correspondingly. With this approach, the content of the environmental auditing have to be divided into subject, business sector i.e. water, air, waste, noise, forest, mining...Targets of the audit are not only limited to evaluating the regulation compliance, verifying financial statement for any fund relates to environment, but must be moved towards sustainable development target in order to improve the quality of the environment, improve the environment's policies as well as environment management of Government.

### **5.3.6. Diversifying the form of audit relates to environment issues**

Objectives of environmental auditing are diverse and have nature spread ability over a wide range. Therefore environmental auditing will be conducted with participation from many SAI in both region and international, using one in three types of audit, which are general audit, simultaneously audit and cooperative audit.

To strengthen the environmental auditing activities in Vietnam, apart from integrating contents and audit targets to general audit, the SAV need to be more active in environmental auditing that have other State audit organization, in which the main focus will be cooperative audit. In order to achieve this, auditors must perfect their management skills as well as their works so they can cooperate with international colleagues. These are both challenges as well as requirements to Vietnam's auditors, however, the benefit would be very significant to not only environmental auditing but also to general audit.

### **5.3.7. Revolutionizing the way to organize an audit team.**

Currently, State audit only assign their team with 3 to 4 smaller audit group. This method is seems to be more suitable to a large scale audit with complex issues, and many audit connecting points in a wide range. This method does not seem to fit into an environmental auditing.

With the above arrangement, the time taken for an audit will be reduced, auditing personnel will also be decreased however the quality supervising of the audit will be more favorable. In other means, with the above arrangement, audit expenses will be reduced but the quality of the audit will be enhanced, therefore, the frequent of the audit to be conducted will be increased.

### **5.3.8. Constructing database for environmental auditing**

With solutions mentioned above, there are needs to construct an informatics database, which also is treated as an urgent solution.

Informatics database about audit activities must be built on all fields to become a basis for research to be conducted more easily for audit activities in general and for environmental auditing in particular. This database will include document format for audit activities to audit targets, audit report, standards, laws and regulation, programs, project relates to audit activities. The interface of this database system can be designed in an opened way. This is understood as user can connect and receive information in some designed way, i.e. audit types, active sector or audit subject. This database will be updated regularly. Basically, this is an opened database for user wanting to reach information they want. However, due to the confidentiality, there will be some limitations to users, in which, only authorized personnel can have access.

The benefit of having such database is undeniable for systematic monitoring of audit subjects, saving times as well as manpower, save up cost for making plan, information research, also benefit the directing and operating activities of auditing in general and environmental auditing in particular.

## **5.4. Recommendations to organize environmental auditing in the SAV**

### **5.4.1. Recommendations to the State**

Regulation system must be completed, at first, it must be reviewed, revised any current official documents, in order to scrap any out dated, conflict clauses. Also, the needs to make and issue regulation consistency base on research and international law implementation in a suitable way to Vietnam's current condition.

About environmental issue and sustainable development, there are needs to legalized assessing activities of any compliance on provisions about environmental protection and environmental impact assessment of an audited organization. This must be treated as a very solid but basic content in an audit report of the SAV.

To ensure the independence, integrity and professionalism of an audit organization, there are needs to maintain and satisfy the operating expenses demand. The State must have an investment policy as well as information technology development to ensure the SAV activities, satisfy any requirements for international integration.

Construct national database with accurate, promptly official information to support the SAV in making strategic plan, carrying out audit activities as well as to propose any possible petition in helps of National Assembly's monitoring and supervising activities, Government's management to any environmental related issues. Reporting mechanism must be presented to report any environmental related issues as well as any necessarily sanctions to force an audited organization to correct and to surmount damages to environment.

#### **5.4.2. Recommendations to the SAV**

In order to improve the quality, the efficiency as well as the effectiveness of an audit activities in general speaking and environmental audit in particular speaking, the State Audit Office need to simultaneously conduct the following: construct and complete the organizing system, improve capability as well as quality of the State Audit Office's manpower. Modernize State Audit Office's activities, expanding international cooperation in order to study, experience exchange to regional and international organization in which to improve research ability and apply it to auditing activities as well as environmental audit.

The SAV need to construct and issue Audit standards categorized to each type of environmental auditing (compliance, finance, operation) as well as construct strategic plan to conduct environmental auditing, making guidelines and personal manual for State auditor.

#### **5.4.3. Recommendations to audited entities**

Environment protection is a social responsibility. It is not enough to limit its responsibility to the act of State issuing law and regulation on environmental protection as well as audited entities carry out their checking and supervising function. Protecting the environment requires acts and measurement from audited entities.

Improve the awareness of directory board as well as all employees on the importance of the surrounding environment and the responsibility to protect the environment, by comply with laws and regulation and apply "green" technology in operation, carrying out ones duties to mitigate the bad impact to the environment as well as using wisely country's scare resources.

Other important thing constitutes to improve the awareness of an audited entities and abilities of internal controlling system. When possessing a corrected and completed awareness, Board of director only then can create an environment and required conditions to ensure their organization comply with the law and regulation as well as other provision on

environmental protection. Any violation to the environmental protection must be prevented as well as taking immediate action. Also, it is a must to apply and carry out any necessary and friendly activities to the surrounding environment.

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## **ABRIVIATION**

ASOSAI	Asian Organisation of Supreme Audit Institutions
INTOSAI	International Organisation of Supreme Audit Institutions
ISSAI	International Standards of Supreme Audit Institutions
SAI	Supreme Audit Institution
SAV	The State Audit Office of Vietnam
WGEA	Working Group on Environmental Auditing

## APPENDIX 1: SURVEY ON ENVIRONMENTAL AUDITING

### AUDITING MANDATE

#### Question 1

In the context of this survey, by environmental auditing or auditing environmental protection, we mean **financial, compliance and performance auditing that evaluates and gives opinions on environment-related matters.**

**Does your SAI have a legislative mandate to audit environmental issues in ...?**

		<b>Yes</b>	<b>No</b>
1	Financial audits	( )	( )
2	Compliance audits	( )	( )
3	Performance audits (value-for-money)	( )	( )
4	Priori audits (for example, audits in advance of expenditures)	( )	( )

#### Question 2

**What level of access does your SAI's mandate give to undertake environmental auditing of the following governmental and nongovernmental organisations? Please select one access option per line.**

	<b>Full</b>	<b>Partial</b>	<b>No</b>

		<b>Access</b>	<b>Access</b>	<b>Access</b>
1	The national government	( )	( )	( )
2	Provincial, regional, or state governments	( )	( )	( )
3	Local, municipal, or community governing bodies	( )	( )	( )
4	State-owned enterprises or state-owned companies	( )	( )	( )
5	Semi-governmental organisations	( )	( )	( )
6	Non-governmental public enterprises or organisations	( )	( )	( )
7	Private sector enterprises or organisations	( )	( )	( )

Question 3

**Does your SAI's legislative mandate refer specifically to environmental auditing?**

( ) Yes

( ) No

Question 4

**Has your SAI's environmental auditing mandate changed?**

( ) increased a lot

( ) somewhat increased

( ) remained the same

( ) somewhat decreased

( ) decreased a lot

ENVIRONMENTAL AUDITS

Question 5

**What does your SAI consider to be the five (5) most important environmental issues facing your country? In the Priority rating column, please mark “1” as the most important issue, “2” as the second most important issue, etc., until you have 5 issues marked.**

		Priority rating
<b>Water</b>	drinking water: quality and supply	
	pollution of bodies of water, such as industrial and agricultural	
	wastewater treatment	
	Acidification	
	water quantity management or management of watersheds	
	marine pollution	
	other water issues	
<b>Air</b>	climate change	
	stratospheric ozone layer depletion	
	acid precipitation	
	local air quality, such as smog, particulates, SO <sub>2</sub> , NO <sub>x</sub> and CO <sub>2</sub>	
	indoor air quality	

	toxic air pollutants, such as organic POPs, dioxins and furans	
	other air issues	
<b>Waste</b>	general waste	
	hazardous waste	
	municipal, solid and non-hazardous waste	
	radioactive waste	
	contaminated sites and soil pollution	
	other waste issues	
<b>Natural resources</b>	minerals, such as mining, gas and oil	
	forestry and timber resources	
	fisheries (freshwater and marine)	
	other natural resources issues	
<b>Ecosystems</b>	Biodiversity	
	protected areas and natural parks	
	ecosystem management and ecosystem changes	
	species at risk	
	Wetlands	
	rivers and lakes	
	protection of marine habitat	
	coastal areas	
	other ecosystem issues	

<b>Human activities and sectors</b>	Agriculture	
	land development	
	energy and energy efficiency	
	natural disaster management: preparedness responses	
	transportation, traffic and mobility	
	recreation and tourism	
	cultural heritage	
	urban environment quality (sustainability)	
	biosafety and genetically modified organisms (GMOs)	
	chemicals management	
	Pesticides	
	environment and human health	
	Infrastructure	
	other human activities /sectors	

Question 6

**Using the definition of environmental auditing referred to under question 1, has your SAI conducted any environmental audits?**

Yes

No

IF Question 6=YES

Question 7



**Has conducting environmental audits in your SAI ...?**

- increased a lot
- somewhat increased
- remained
- somewhat decreased
- decreased a lot

Question 8

**Please indicate the number of audits your SAI has conducted related to environmental matters.**

- [     ] number of financial audits conducted related to environmental matters
- [     ] number of compliance audits conducted related to environmental matters
- [     ] number of performance audits conducted related to environmental matters

Question 9

**Does your SAI consider environmental issues in other audits (e.g. financial, compliance)?**

- Yes, always
- Yes, sometimes
- No, never

Question 10

**In the following table there are seven (7) audit objectives of environmental auditing listed. Please select the three (3) most important objectives your SAI has audited, marking “1” as the most important objective, “2” as the second most important objective and “3” as the third most important objective.**

	<b>Priority rating</b>
Fair presentation of financial statements and expenditures	
Compliance with international environmental agreements and treaties	
Compliance with domestic environmental legislation	
Compliance with domestic environmental policies	
Performance of government environmental programs	
Environmental impacts of non-environmental government programs	
Evaluations of environmental impacts of proposed environmental policies and programs	

Question 11

**Has your SAI conducted an environmental audit on international environmental agreements or treaties?**

Yes

No

IF Question 11=YES

Question 12

**Please name the international environmental agreements or treaties your SAI has**

**audited.**

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Question 13

**By sustainable development we mean development that integrates social, environmental and economic objectives. Under this definition, has your SAI started or completed audits of your country's progress in sustainable development specifically?**

Yes

No

#### THE IMPACT OF ENVIRONMENTAL AUDITS

Question 14

**Does your SAI measure the impact of your environmental audits?**

Yes

No

Question 15

**What are the main challenges your SAI has faced in measuring the impact of environmental audits?**

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Question 16

**How does your SAI measure the impact of your environmental audits? Check all that apply.**

- Parliamentarian hearings
- Media coverage
- Follow-up audit
- Monitor the fulfilment of proposals made in audit reports (e.g. letter, interview)
- Government response to audit recommendations
- Any other appropriate measure

Question 17

**Have your conducted audits had any impact in helping government departments to....?**

	<b>Full impact</b>	<b>Partial impact</b>	<b>No impact</b>

1	formulate environmental legislation or environmental policies and programs	( )	( )	( )
2	evaluate their capacity to develop and implement environmental policies or programs	( )	( )	( )
3	generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	( )	( )	( )
4	develop their environmental management systems	( )	( )	( )
5	produce their environmental reports	( )	( )	( )

Question 18

**Please provide us with a short example(s) about positive impact(s) of your SAI's environmental auditing.**

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Question 19

**Would you like to add any additional comments on measuring the impact of your environmental audits?**

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ENVIRONMENTAL AUDITING CAPACITY

Question 20

**Assume that all your SAI's employees constitute 100%. In this case, approximately, how many employees deal with environmental auditing in your SAI?**

[     ] percentages of employees are working full time on environmental audits.

Question 21

**Has the share of employees working on environmental audits changed in your SAI?  
Has the share ...?**

- ( ) increased a lot
- ( ) somewhat increased
- ( ) remained the same
- ( ) somewhat decreased
- ( ) decreased a lot

Question 22

**Does your SAI have a specific department or section working full time on**

**environmental audits?**

Yes

No

Question 23

**Have there been any other changes in the capacity (budget, training, methodology, etc.) of your SAI conducting the environmental audits? Has the capacity...?**

increased a lot

somewhat increased

remained the same

somewhat decreased

decreased a lot

Question 24

**Which of the following barriers has your SAI experienced in developing and executing environmental audits?**

		<b>Yes</b>	<b>No</b>
1	Inadequate SAI mandate	<input type="checkbox"/>	<input type="checkbox"/>
2	Lack of skills or expertise within the SAI	<input type="checkbox"/>	<input type="checkbox"/>
3	Insufficient formulation of government environmental policy, such as goals that are not measurable, absence of a strategy, or insufficient regulatory framework	<input type="checkbox"/>	<input type="checkbox"/>
4	Insufficient established environmental norms and standards	<input type="checkbox"/>	<input type="checkbox"/>

5	Insufficient monitoring and reporting systems	( )	( )
6	Insufficient data on the state of the environment	( )	( )
7	Other, please specify in the next question	( )	( )

IF Question 24=OTHER YES

Question 25

**Please specify which kind of other barriers your SAI has experienced in developing and executing environmental audits.**

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Question 26

**Which of the following measures did your SAI use to attempt to overcome the barriers?**

		<b>Yes</b>	<b>No</b>
1	Modified SAI's mandate	( )	( )



2	Trained SAI's staff	( )	( )
3	Collected environmental data directly from the field	( )	( )
4	Used international organisation environmental standards	( )	( )
5	Cooperated with universities or research institutes	( )	( )
6	Developed performance indicators	( )	( )
	Worked with the Regional Working Group on Environmental Auditing (RWGEA)	( )	( )
7	Other, please specify in the next question	( )	( )

IF Question 26=OTHER YES

Question 27

**Please specify which kind of other measures your SAI used to attempt to overcome the barriers.**

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Question 28

**Would you like to add any comments on environmental auditing capacity?**

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PLANNED ENVIRONMENTAL AUDIT(S)

Question 29

**Does your SAI have any environmental audits planned?**

Yes

No

Question 30

**Please indicate what issues related to the environment your SAI is planning to address in audits scheduled. Check all that apply.**

<b>Water</b>	drinking water: quality and supply	
	pollution of bodies of water, such as industrial and agricultural	
	wastewater treatment	
	Acidification	
	water quantity management or management of watersheds	
	marine pollution	

	other water issues	
<b>Air</b>	climate change	
	stratospheric ozone layer depletion	
	acid precipitation	
	local air quality, such as smog, particulates, SO <sub>2</sub> , NO <sub>x</sub> and CO <sub>2</sub>	
	indoor air quality	
	toxic air pollutants, such as organic POPs, dioxins and furans	
	other air issues	
<b>Waste</b>	general waste	
	hazardous waste	
	municipal, solid and non-hazardous waste	
	radioactive waste	
	contaminated sites and soil pollution	
	other waste issues	
<b>Natural resources</b>	minerals, such as mining, gas and oil	
	forestry and timber resources	
	fisheries (freshwater and marine)	
	other natural resources issues	
<b>Ecosystems</b>	Biodiversity	
	protected areas and natural parks	

	ecosystem management and ecosystem changes	
	species at risk	
	Wetlands	
	rivers and lakes	
	protection of marine habitat	
	coastal areas	
	other ecosystem issues	
<b>Human activities and sectors</b>	Agriculture	
	land development	
	energy and energy efficiency	
	natural disaster management: preparedness responses	
	transportation, traffic and mobility	
	recreation and tourism	
	cultural heritage	
	urban environment quality (sustainability)	
	biosafety and genetically modified organisms (GMOs)	
	chemicals management	
	Pesticides	
	environment and human health	
	Infrastructure	

	other human activities /sectors	
<b>Governance</b>	government greening operations	
	environmental impact assessment	
	strategic environmental assessment (SEA)	
	environmental management system	
	sustainable development	
	World Summit on Sustainable Development (WSSD)	
	domestic funds and subsidies	
	international funds and subsidies, such as Global Environmental Facility (GEF)	
	other governance issues	

Question 31

**How does your SAI plan to change the volume of conducting environmental audits in the next five years?**

- increase a lot
- somewhat increase
- remain the same
- somewhat decrease
- decrease a lot

Question 32

**Does your SAI anticipate any developments regarding environmental auditing in the next five years?**

Yes

No

IF Question 32=YES

Question 33

**In the following table there are fourteen (14) possible developments of environmental auditing listed. In the Priority rating column, please mark “1” as the most important development, “2” as the second most important development, etc., until you have 5 developments marked.**

		<b>Priority rating</b>
1	Creation of an environmental unit within our SAI	
2	Creation of a pool of environmental auditors	
3	Integration of environmental issues in other audits	
4	Training in environmental issues in other audits	
5	Training in environmental auditing	
6	Development of environmental performance indicators	
7	More attention to quality and reliability of information	
8	More measurement of effectiveness of policy	
9	Evaluate the impact of work and ways to improve the	

	impact	
10	Development of new products that are not environmental audits	
11	Exchange of knowledge with other SAIs	
12	External expert advice	
13	Peer review by other SAIs	
14	Peer review by external experts (for instance, universities)	

Question 34

**Would you like to add any additional comments on planning environmental audits for the next five years?**

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INTERNATIONAL ACCORDS AND COOPERATION BETWEEN SAIS

Question 35

**Has your SAI had any experience in cooperation with another SAI in environmental auditing issues?**

( ) Yes

No

IF Question 35=NO

Question 36

**Could you please indicate reasons why your SAI has not been engaged in cooperative audits?**

lack of interest in our SAI

lack of resources

inadequate SAI mandate

lack of skill or expertise within the SAI

lack of partners

IF Question 35=YES

Question 37

**Please specify what types of cooperative activities your SAI has experienced.**

		<b>Yes</b>	<b>No</b>
1	Cooperation with another SAI on an audit related to an international environmental accord (including treaties, international agreements, obligations, or commitments)	<input type="checkbox"/>	<input type="checkbox"/>
2	Cooperation with another SAI on an audit of an environmental subject, but not on an agreement or treaty	<input type="checkbox"/>	<input type="checkbox"/>
3	The exchange of audit information or environmental auditing	<input type="checkbox"/>	<input type="checkbox"/>



	experiences between SAIs		
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IF Question 35=YES

Question 38

**How does your SAI appreciate the cooperative activity? Has this cooperation been for your SAI...?**

- very useful, please specify in the next question
- somewhat useful, please specify in the next question
- somewhat not useful
- not useful at all

IF Question 38=VERY USEFUL, SOMEWHAT USEFUL

Question 39

**Please specify the things that your SAI find useful in cooperative activity.**

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WGEA AND INTOSAI PRODUCTS

Question 40

**In the following table eighteen (18) WGEA products are listed. Have you read and/or**

**used this product in your work?**

	<b>Product</b>	<b>Yes</b>	<b>No</b>
1	WGEA Paper – Auditing Biodiversity: Guidance for Supreme Audit Institutions (2007)		
2	WGEA Paper – The World Summit on Sustainable Development: An Audit Guide for Supreme Audit Institutions (2007)		
3	WGEA Paper – Evolution and Trends in Environmental Auditing (2007)		
4	WGEA Paper - Cooperation between Supreme Audit Institutions: Tips and Examples for Cooperative Audits (2007)		
5	INTOSAI Paper – Sustainable Development: The Role of Supreme Audit Institutions (2004)		
6	INTOSAI Paper – Environmental Audit and Regularity Auditing (2004)		
7	WGEA Paper – Towards Auditing Waste Management (2004)		
8	WGEA Paper – Auditing Water Issues: Experiences of Supreme Audit Institutions (2004)		
9	WGEA Paper – Results of the Fourth Survey on Environmental Auditing (2004)		
10	INTOSAI Paper – Guidance on Conducting Audits of Activities with an Environmental Perspective (2001)		
11	INTOSAI Paper – The Audit of International Environmental Accords (2001)		
1	INTOSAI Paper – How SAIs may Cooperate on the Audit of		

	<b>Product</b>	<b>Yes</b>	<b>No</b>
2	International Accords (1998)		
1 3	INTOSAI Paper – Natural Resource Accounting (1998)		
1 4	Home page of the WGEA website		
1 5	Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"		
1 6	<i>Greenlines</i> newsletter on the WGEA website		
1 7	WGEA meeting material (including compendium) on the WGEA website		
1 8	WGEA work plans on the WGEA website		
1 9	Results of the previous INTOSAI WGEA Surveys on the WGEA website		

Question 41

**What are the three (3) most important INTOSAI WGEA products and services for your SAI? In the Priority rating column, please mark “1” as the most important product or service, “2” as the second most important product or service and “3” as the third most important product or service.**

	<b>Product/Service</b>	<b>Priority rating</b>
1	Guidance materials	

	<b>Product/Service</b>	<b>Priority rating</b>
2	Website: <a href="http://www.environmental-auditing.org">www.environmental-auditing.org</a>	
3	Training courses, seminars	
4	Working Group meetings	
5	<i>Greenlines</i> newsletter	

Question 42

**Would your SAI be interested in additional INTOSAI WGEA guidance on environmental auditing?**

Yes

No

IF Question 42=YES

Question 43

**Could you please specify the topic of the INTOSAI WGEA guidance your SAI is interested in the most?**

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Question 44

**What do you recommend to be the main theme of the WGEA work plan? The INTOSAI WGEA has already covered water, waste, biodiversity and climate change. Please explain your choice.**

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Question 45

**Are there any specific products or services that your Regional Working Group on Environmental Auditing (RWGEA) could provide?**

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Question 46

**Does your SAI have any other comments or suggestions on our work? This information will help us to build the INTOSAI WGEA work plan.**

**You can consult the current work plan on our website under WGEA activities/Work Plan.**

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Question 47

**Would you like to add any additional comments to the Survey for the INTOSAI WGEA?**

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Question 48

**Please provide contact information for the official(s) completing this survey. We will use this information only to clarify responses, if required.**

Country	
Name	

Position	
E-mail	
Phone	
Fax	

**This was our last question. We highly appreciate the time and effort you and your SAI contributed to filling in the survey form. Thank you!**

## **APPENDIX 2: INTERVIEW SHEET**

### Question 1:

With the role of the person incharged of making annual report of the SAV in many years, can you share experience on performing environmental auditing in the SAV?

Please share your view about the importance and perspective of environmental auditing?

### Question 2:

Based on your personal seasoned experience in conducting auditing in general and environmental auditing in particular, can you inform challenges of organizing environmental auditing in the SAV?

### Question 3:

How do you evaluate and draw the lesson to be learned for organizing environmental auditing from the practices of conducting auditing in the SAV?

THANK YOU!