Understanding Environmental Audit in the Public Sector: Malaysian Perspective

Hairul Nizam Yusoff*

*Lestari, Universiti Kebangsaan Malaysia, 43600 UKM, Bangi, Selangor, Malaysia

*Corresponding: hny_8198@yahoo.com

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Abstract

Environmental audit is considered a new approach and still in the evolving process. This situation has significant influence on the efforts to provide a single interpretation to be accepted by the public. Most of the definitions offered by organizations normally influenced by the nature of the organizations’ operations and in general the private practices play a leading role in providing the definitions compared to the public sector. In the context of environmental audit in the public sector, definition about the audit is referred to the framework provided by the INTOSAI as the main reference to the auditors. Due to its various definitions, this study is conducted to look at how this perspective influences understanding of the public sector auditors in particular in the developing countries as the case of Malaysia. This study employed qualitative approach where interviews were conducted with selected auditors to gain their understanding about environmental audit. The result showed consistent understanding by the auditors with the established framework for environmental auditing in the public sector. Even though there were some gaps between respondents’ opinion and the framework, but the framework eventually served as a fundamental for the auditors to understand about environmental audit.

Keywords: Public sector auditing; environmental audit; sustainable development

1.0 INTRODUCTION

Environmental audit is considered as a new field of auditing system as mentioned by Power (1994) that emerged as a result of the so-called an ‘audit explosion’ in the 1980s. As a new field of audits, it provides a challenge to establish a single, generally accepted interpretation. This need arises due to the term of environmental audit itself does not represent a specific purpose but instead may be associated with various forms of activities and programs (Hillary, 1998).

“International Auditing Practice Committee (1995), stated that basically there is no one generally accepted form of interpretation related to environmental audit.” Most of the interpretations we have nowadays are influenced by the nature of the organizations’ activities because the evolving nature of environmental audit has complicated the efforts to provide a clear interpretation of this audit (Cahill, 1992). This, in turn has
a significant effect on the individual understanding about what is meant by environmental audit. Therefore, this study will try to explore how the auditors understand about the environmental audit and the focus of this study is the auditors in the public sector.

This study focused on the auditors in the public sector because there is gap in the development of environmental audit in the public sector compared with the private sector, with most of the existing interpretations today are offered by private organizations such as the British Standards Institution, the International Chamber of Commerce and the International Organisation for Standardisation. Furthermore the interpretation of environmental audit in the public sector is slightly different from the private practice due to the differences in the nature of its activities.

The lack of discussion about environmental audits from the perspective of developing countries has also been one of the motivating factors this study. According to Rika (2009), study of environmental audit in the developing countries has not attracted much attention compared to developed countries. This situation can be understood as environmental awareness in the developed countries is better compared to developing countries where the interest of economic development is often preceded over the need to preserve the environment. Therefore, the need to fill in the gap and to enrich discussion from the perspective of developing countries has been the motivation for this study.

The rest of this paper will be as follows. Next, the existing definitions and concepts with respect to environmental audit from the perspective of the private and public sector audit will be discussed followed by a brief description of the method of the study before the discussion and conclusions.

### 2.0 Definitions and Concept of Environmental Audit

Discussion in the literature mostly associated environmental audit as a means of assessing the environmental performance (Watson and MacKay, 2003). Environmental audit can be understood in a broader context, but need to be differentiated from the environmental impact assessment (EIA). According to He et al. (2009), EIA is an ex ante and ex post evaluation done on the proposed development project with the aim of informing decision-making and could be used as a preventive and precautionary mechanism to protect the environment. Meanwhile environmental audit is an ex post approach undertaken after a development project is implemented to ensure it is progressing according to plan and in the context of the public sector is to evaluate whether the implementation is complied with the existing policy. Furthermore, in the process, the audit may help explain the problems that affect the achievement of the policy set.

The definition of environmental audit is very much influenced by the nature of the operations of the organization (Stanwick and Stanwick, 2001) but environmental audit basically has some common features that it is a systematic, documented, periodic, and objective checking process of a company’s environmental performance against pre-set standards and objectives (Hillary, 1992 in Hillary, 1998). Besides that, environmental audit is also being used as a management tool in environmental management system to disseminate the result to the clients and stakeholders about assessment of compliance with the environmental laws and regulation. Generally, most of the definitions focus on the use of environmental audit as an environmental management tool which aim to help the management in safeguarding the environment and to comply with the relevant laws and regulations. It also deals with the right of the stakeholders to get useful information regarding environmental management system implemented by an organization.

According to Hillary (1998), the most most common accepted definition of environmental audit is as defined by the International Chamber of Commerce (ICC). The ICC defines environmental audit as, ‘A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of helping to safeguard the environment by (i) facilitating management control of environmental practices; (ii) assessing compliance with company policies, which would include meeting regulatory requirements.’ (International Chamber of Commerce, 1989).

The Commission of the European Communities Council (2001) perceives environmental audit as a management tool to assist the organization management in administering environmental matters when defines environmental audit as a management tool framework for setting and reviewing environmental comprising a systematic, documented, periodic and objective evaluation of the performance of the organization, management system and processes designed to protect the environment with the aim of (i) facilitating management control of practices which system related to an organization’s management of its may have an impact on the environment; (ii) assessing compliance with the environmental policy, including environmental objectives and targets of the organization.

Meanwhile, the Environmental Protection Agency (EPA) points out the role of regulated entities under the self regulatory approach to systematically conduct an environmental audit with the aim of meeting environmental requirements. The agency defines environmental audit as a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements (cited in GAO, 1995). Based on the definition, environmental audit can be used in various ways to achieve a number of objectives such as to verify organization’s compliance to environmental laws and regulation, evaluating the effectiveness of environmental system in place to manage environmental responsibilities and assessing the risk of facilities operations (GAO, 1995).

The International Organisation for Standardisation (ISO) has extended the definition of environmental auditing to include dissemination of audit result to the client. According to the ISO, environmental audit is a systematic, documented verification process of objectively obtaining and evaluating audit evidence to determine whether specified environmental activities, events, conditions, management systems, or information about these matters conform with audit criteria, and communicating the results of this process to the client (cited in Lighthbody, 2000).

In accordance with the definition given by ISO, Gray (2000) refers environmental audit as a social audit that focused on the priority to report the audit results to the user and in this context is not limited to the internal, but more important is to the external users about the extent of the organization’s success in ensuring its accountability to the environment.

Meanwhile Welford (1994) refers environmental audit as a series of activities initiated by management to evaluate environmental performance, to check compliance with environmental legislation and to assess whether systems are in place to manage environmental responsibilities.Visvanathan et al. (1998) take a slightly different perspective to define environmental audit as a systematic approach, documented and implemented periodically and objectively done, to evaluate environmental management performance and organizational
needs towards the environment in order to enable the organization to make an objective evaluation on the organization’s compliances to its own policy and relevant environmental laws. Regarding their perspectives, environmental audit is essentially an assessment carried out by organization as an approach for continuous improvement as well as to protect the environment.

The International Organisation of Supreme Audit Institutions (INTOSAI) defines environmental audit in the context that the audit is generally not significantly different from normal auditing as practiced by Supreme Audit Institutions (SAIs) and its can encompass of all types of audit where in the performance audit, the three Es of Economy, Effectiveness, and Efficiency can be included. The adoption of the fourth E that is the 'Environment,' depends on the SAI’s mandate and its government’s environmental policy, which is desirable, but not critical for conducting environmental audit in the public sector. Meanwhile the concept of sustainable development can part of the environmental audit definition, only if it is a part of the government policy and/or program to be audited (Leeuwen, 2004). The INTOSAI basic environmental audit framework is as shown below.

### Table 1 INTOSAI basic environmental audit framework in the public sector

<table>
<thead>
<tr>
<th>Basic environmental audit framework</th>
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<tr>
<td>Audit is no different than normal auditing practicing in the public sector comprising of financial, compliance and performance.</td>
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<tr>
<td>With respect to performance audit, focus on the ‘3Es’ of economy, efficiency, effectiveness can be included.</td>
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<tr>
<td>Audit on the environmental issue is highly depended on the SAI’s mandate and the government’s environmental policy.</td>
</tr>
<tr>
<td>The concept of sustainable development can be part of the definition only if it is part of the government policy and/or program to be audited.</td>
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</tbody>
</table>

Source: Leeuwen (2004)

Based on the framework, environmental audit is, in principle, not different from other audit approaches practiced by the SAIs. It could encompass of audit of financial, compliance or performance on which the environmental audit is basically performed under the jurisdiction of performance audit. Environmental audit in performance audit perspective is aimed to determine whether an organization is achieving its objectives effectively, efficiently and economically (Rose, 2001; Leeuwen, 2004). The audit on the economic factor basically to assess the pattern of spending by an organization. The audit is about to determine that the acquisition of the appropriate quality and quantity of financial, human and physical resources was done at the appropriate times and at the lowest cost that is, spending less. Efficiency assessment focus on the optimization used of resources to ensure maximum useful is gained for any given set of financial, human or physical resource inputs, or is minimized for any given quantity and quality of output provided. Meanwhile, the evaluation of effectiveness is regarding the organizational spending whether it has achieved the objectives or other intended results of programs, operations or activities (Rose, 2001; INTOSAI, 2004).

As prescribed in the INTOSAI framework, assessment on the environment depends on the SAI mandate and whether the government has a policy on the environment. Based on the provision, mandate and government policy would be the main challenges to the most of SAIs in conducting environmental audit especially when dealing with sustainability issues. However, some of environmental auditors advocated that the environmental audit should be practiced in regular, and automatically include “environmental sustainability” in all organizational performance audits based on the principle that all organizations should have internalized some environmental objectives, but under the current practice, environmental issue only addressed when the performance audit is specifically conducted to examine them (Rose, 2001).

Generally, environmental audit in the private sector has been used as an internal control mechanism in environmental management and to ensure organization operation is in compliance with environmental laws and regulations. Meanwhile, in the public sector, environmental audit is considered an environmental check and balance mechanism to ensure public resources had been used economically, effectively and achieved the intended result as well as to consider the impacts of programs, activities or operations to the environment. Environmental audit is also being considered an important tool to achieve sustainable development which seems to be left out in the definitions offered by the private counterparts.

### 3.0 RESEARCH METHOD

This study is a qualitative research using semi-structured interviews as a method to gather information from respondents. The use of semi-structured interview in qualitative research provides an opportunity for researcher to explore in greater depth on how the respondents understand about environmental audit undertaken in the public sector and to give freedom for researcher and respondents to explore new potential while discussing these issues.

This study was conducted among auditors in the public sector and in this case, the Office of the Auditor-General. A total of nine auditors consisting of junior auditors, senior auditors and senior managers of the Office of the Auditor General were selected to be the respondents in this research. Interview sessions with the respondents were conducted between May to September 2012, which took between 30 minutes to two hours and recorded. The record then transcribed in verbatim to produce raw data.

Analysis of the interviews was done using the approach as suggested by Miles and Huberman (1994). A number of key themes were developed to reflect the respondents’ understanding about environmental audit. The results of the analysis then compared with an environmental audit framework in the public sector as proposed by INTOSAI (2001) to look at the respondents’ understanding and potential reasons for the differences.

### 4.0 RESULTS

Discussion on the findings of this study is based on the environmental audit framework advocated by the INTOSAI (2001). This reference is important to provide insight whether respondents’ understanding is consistent with the INTOSAI environmental audit framework. Based on the framework, the findings are as discussed below.

#### 4.1 Background of the Respondents

A total of nine respondents were chosen as respondents for this study consists of three auditors in each group, representing junior auditors, senior auditors and senior management team. The junior auditors selected are directly involved in the process of conducting the environmental audit. Meanwhile, the senior auditors are responsible for supervision on the audit works and
senior managers are directly involved in the decision making process in particular to determine the contents of environmental audit report. The following table shows the background of the respondent and their involvement in the implementation of environmental audit.

Table 2 Respondent's involvement in environmental audit

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Junior auditor</th>
<th>Senior auditor</th>
<th>Senior management</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of respondents</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Audit experiences</td>
<td>3 - 25 years</td>
<td>&gt; 25 years</td>
<td>5 - 25 years</td>
</tr>
<tr>
<td>Experiences in environmental auditing</td>
<td>&lt; less than 5 years</td>
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</table>

Based on the responses, the majority of the respondents agreed that environmental audit should be classified as performance audit. A respondent for instance said, “What is important in the performance audit is that we will assess 3Es, the economy, efficiency and effectiveness…” [Auditor 5]. Similar opinion was expressed by the following respondent, “The primary focus for performance audits is to assess 3Es, the economy, efficiency and effectiveness, which 3Es are the major aspect and the fundamental ‘when we want to make objective conclusion about the achievement of the existing projects...’” [Auditor 9]. The interest to environmental audit in the context of performance audit, basically, is to look at the outcome of the program implemented as stated by one of the respondents, “...But in the performance (audit) we actually want to see the outcome of the program. We are concerned whether there is any outcome to it.” [Auditor 8].

Two important points had been raised to explain why the environmental audits is not conducted from the perspective of financial and compliance audits. Firstly, is due to flexibility in the audit assessment to evaluate the extent that a program has been planned, implemented and monitored properly. A respondent for example stated, "...we consider environmental audit as a performance audit...We want to know the extent of planning, implementation and monitoring of projects or government programs related to the environment have been carried out effectively and efficiently.” [Auditor 6]. Another respondent expressed, “We conduct performance audit to look at how a government program or project has been planned, implemented and monitored effectively and efficiently.” [Auditor 5].

The second explanation is due to the problem of integrating environmental accounting in the financial statements which according to a respondent has not yet been implemented in the public sector. “As for the financial, when you want to link it with the environment, the question here is about how much the environment has actually been translated into RM. I think, we in Malaysia do not have such translation to actually account the value of environment in the financial statement....That is mostly, I think, the environmental auditing is concerned.” [Auditor 8]. Another explanation forward by a respondent, “Let us try to give value in term of money when we preserve the natural resource, ....(but) in that sense we cannot value it” [Auditor 4].

Although evaluation of 3Es is emphasized in the INTOSAI framework, the majority of respondents emphasized that environmental audit assessment is generally to evaluate whether the implementation of an activity has been performed in an efficient manner and meeting the goals set rather than the economic use of resources. In fact, less attention on the economic factor in an environmental audit is associated with its potential negative relationship with the efficiency factor as explained by a respondent, “In 3Es, we did not assess the economy and efficiency for a reason that they have a negative relationship. For example, if you want to improve the economy, efficiency maybe in less priority because we want to lower the cost. So we had to forgo efficiency.” [Auditor 3]. A similar opinion was expressed by the following respondent, “...the scope (of audit is) such as performance audits. We check the effectiveness and efficiency. We just put a little effort on the economy” [Auditor 4].

Even though environmental audit is emphasized as a performance audit, a number of respondents raised the potential to associate it as a compliance audit to assess the extent of agency’s compliance with laws and regulations. In this context, concept of audit as a medium to ensure compliance with laws and regulations is seen to have significant influence on auditors perception about the audit as expressed amongst others,
"Firstly we will look over the laws..." [Auditor 1]

"Auditing as I am concern is about to ensure all the procedures are followed and implemented correctly." [Auditor 2]

"...but compliance and performance we really did that portion. It means that we are evaluating the compliance to laws and regulations..." [Auditor 8]

4.3 Integrating Environmental Aspect in the Audit

The second perspective in the INTOSAI environmental audit framework is that the audit can cover the fourth 'E,' that is the "environment" only if the mandate allows the auditor to perform the audit in the public sector. The mandate is considered a necessary aspect even though not critical to enable the implementation of environmental audit in the public sector. Respondents explained that a clear mandate in the audit jurisdiction to specifically allow the auditor to perform an environmental audit is not a requirement. Provision of a general mandate that is sufficient to allow the conduct of the audit the view of a respondent, "If we refer to the Audit Act, the environment is not mentioned there. But in the process of auditing we will evaluate the policy and the extent of implementation and also the money spent by the government to address environmental issues have reached the intended goal." [Auditor 5]. In this context, respondent considered the existing provisions in the Audit Act is sufficient to enable the conduct of environmental audit even though the act is not clearly stated the responsibilities of auditor to carry out such an audit in the public sector.

According to another respondent, specific mandate to conduct environmental audit is not a priority because the current type of audit is considered enough to enable auditors to perform the audit. "...But for me this audit is made up of various forms such as the audit on development as well as the environmental audit. The reason is we don’t have real environmental auditing per se, because auditing on forest also can be an environmental auditing. Even audit of the river can be categorized as an environmental audit. Meaning that, there is no typical topic of environmental auditing. Actually it is part of the bigger picture of audit...It cannot be specific an environmental auditing actually. However we can select the title, topics related to the environment such as associated with the development, in connection with irrigation...thus we can focus on the environment" [Auditor 7].

The issue of audit mandate to carry out environmental auditing, however, did not attract much attention from the respondents. Instead respondents emphasized more on the need for auditors to consider on the impact of public programs to the environment. A respondent for instance said, "...we look at the effects (of a program) on the environment." [Auditor 1]. According to respondent, audit emphasis on the environmental impact was a significant changed in the implementation of environmental audit compared with the previous approach which emphasized more on the management of public expenditure as further elaborated, "The audit now focus more on the environment compared with the previous audit which focus more on the financial management where the effects on the environment were not disclosed....." [Auditor 1].

While doing assessment on the impact of public programs and activities to the environment, the audit should focus on the reality happened as raised by a respondent, "So we understand that environmental issues are very much involved in the reality of what happened...." [Auditor 5]. Emphasis on assessment of the environmental reality should constitute as one of the main objectives in environmental audit as further mentioned by the respondent, "... based on the objective, the audit was conducted to evaluate the extent of the environment has been monitored and the action taken by the responsible authorities." [Auditor 5]. Another respondent explained, "...in the environmental audit, we evaluate each activity...These activities are related to what is left and its impact on the quality of the environment...." [Auditor 3]. The need to focus on the reality happened also further discussed by another respondent, ". ...actually in our environmental audit, we analyzed before and after and we made a comparison...So there we can see the impact on the environment." [Auditor 4].

Another point raised by respondent was the audit should also consider evaluation of the non-physical effects to the environment. The scope of the audit should be expanded to cover aspects related to the environmental effects of activities that cannot be seen physically. A respondent stated, "In general, the purpose of our audit on the clinical waste was to evaluate whether the clinical waste produced by hospitals have been managed properly.... Meaning that if it is not properly managed, clinical waste in hospital may spread germs in the hospital..." [Auditor 7].

4.4 Integrating Assessments for Sustainable Development

The INTOSAI environmental auditing framework pointed that sustainable development issues can be part of environmental audits only if it is part of the government policy or program to be audited. Referring to the interpretation, a respondent gave this comment, "Yes, we emphasize that. We must first look whether they have a sustainable development program or not...That's the first we check whether they have it or not. If there is no, meaning that they have nothing to follow." [Auditor 1].

Sustainable development issues in environmental audit should not be restricted only if this aspect is part of the government policy or program to be audited. Instead sustainable development should be a regular practice in environmental audit. A respondent for instance said, "...Thus the audit is to assess the sustainability of the environment that it is maintained and secured for generations to come." [Auditor 5]. In fact, environmental audit for sustainable development is also perceived to be a vital mechanism to ensure the natural resources have been properly managed for the survival of society as a respondent commented, "... for the public we want it to last long to the next generation for their survival..." [Auditor 3]. Similar views were expressed by the following respondents,

"If we do not carry out the audit and did not take action, I think our environment would be destroyed. So everything will extinct" [Auditor 5]

"Today we look at it is not much left. Malaysia might be one day have only half of what we have today where we already depleted the forests, rivers. So it means there's needs lots of improvement to sustain our natural resources. " [Auditor 2]

In integrating potential issues of sustainable development in auditing, thorough consideration should be exercised since in the developing country the need for economic development is always preceded the important to protect the environment. Environmental aspects and sustainable development even though interrelated, but are treated differently and these basically have significant influence on the audit as mentioned by these respondents,
"... For the environment, what we really need is to keep that man is not greedy for the development, greedy to do development." [Auditor 3]

"We want to have cleaner environment even if we do the development because as a developing country we cannot have both, there's things we need to forgo. We cannot have the two. But even though we forgo that, we have to make sure what we forgo is done properly." [Auditor 8]

5.0 DISCUSSION AND CONCLUSION

INTOSAI framework only provides a general perspective on environmental audit. However, the perspective presented by INTOSAI is seen to have a significant influence on the respondents’ understanding of the audit. In the context of the nature of the audit, it was observed the respondents had a tendency to consider environmental audit as a performance audit. However, the focus on performance audit is more on the efficiency and effectiveness than economic factors in order to observe the achievement of a program. In addition, an environmental audit is also considered a new approach in the public sector auditing. This understanding is seen affected by serious efforts to highlight the importance of environmental audit in the current period.

In the context of integrating environmental aspects in the audit, the respondents generally focused on the importance of assessing the environmental impact resulting from the implementation of a program. The assessment of the extent of the environmental impact of the program is considered an important issue and should be a priority in environmental audit if compared with INTOSAI framework that puts the need to assess the environmental aspects only if the audit is supported by a mandate or the government has established a policy on the environment.

The need for an audit mandate to support environmental audit initiatives in the public sector should not be an issue. Mandate, even though considered important, is not a primary requirement to support the implementation of environmental audits in the public sector because the audit is part of the auditing arm that can be applied within the existing audit framework, but caution should be emphasized to the parameters specified in the existing law.

Concerning the relationship between environmental audit and sustainable development, most of the respondents understand this issue in a wider perspective. Respondents agreed that environmental audit has a positive relationship with sustainable development and to achieve this objective, the audit should not be limited to only if sustainable development is part of the government policy or program to be audited. Instead, sustainable development should be a priority in environmental audit objective. Therefore, in this context, environmental audit is seen to have great potential to contribute to achieving the goals of sustainable development, particularly in the developing countries.

Based on the discussions and issues raised, there was observed a consistent understanding among the public sector auditors with the INTOSAI environmental audit framework. Environmental audit framework. Even though there were some broader perspectives among the respondents following the introduction of environmental audit in the public sector, but the framework eventually served as the basis for the auditors to understand the audit.

References


