ELSEVIER

Contents lists available at ScienceDirect

Environmental Challenges

journal homepage: www.elsevier.com/locate/envc



The governance structure on the role of internal auditors in environmental auditing practices: Cases of Malaysian local organisations



Muthyaah Mohd Jamil^{a,*}, Nor Hafizah Zainal Abidin^b, Norhayati Mohd Alwi^b

- ^a Faculty of Accountancy, University Technologi MARA, Selangor Campus, Malaysia
- b Department of Accounting, Kulliyyah Economic and Management Sciences, International Islamic University of Malaysia, Kuala Lumpur, Malaysia

ARTICLE INFO

Keywords: Internal auditors Environmental auditing Qualitative study Role theory Malaysian local governments

ABSTRACT

This study investigates how governance structures' internal auditors play their roles in environmental auditing practices. This study used interpretative research focusing on multiple case studies: two Malaysian Local Governments with single-case design and environmental auditing. This study utilised three methods of data collection: document analysis, observations and interviews. This study used thematic analysis using Atlas. Ti software. This study concludes that governance structures such as NGO Watchdog Group, independence of the internal audit department, tenure of Chairman, multiple functions and review meetings influence the roles of the internal audit department. This study explores the environmental auditing practices using expectation development by Role Theory to illustrate the process of environmental auditing practices. The findings outline how to construct environmental auditing practices and improve the effectiveness of the practices in government organisations.

1. Introduction

Malaysian Local Governments (MLGs) must establish their internal audit department (Perbendaharaan Malaysia, 2013). The internal audit department performs an independent function in an organisation. Meanwhile, the National Audit Department is an external auditor for an organisation (Perbendaharaan Malaysia, 2003). Monitoring the implementation of environmental programmes and activities has remained a prominent concern for the organisation mainly because poor monitoring of environmental programmes may lead to severe environmental damage.

Environmental auditing of environmental programmes and compliance is mandatory for ISO 14001-certified organisations (SIRIM, 2017). Hence, the environmental auditing practices in a certified ISO 14001 would differ from that of a non-organisation, which is untapped in past studies. Therefore, this study will explore the differences by comparing environmental auditing practices between certified and non-certified MLGs. Notwithstanding various guidelines and standards on ecological auditing practices, the absence of a directive from the higher authority has disregarded a uniform standard for MLGs and led to many EAP formats (Buang, 2007).

Internal auditors play crucial roles in the implementation of ecological auditing practices amongst MLGs. A comprehensive discussion is taking place about the role of internal auditors, from assurance to providing consultancy. The construction of the role of internal auditors depends on the organisation's governance structure (Buang, 2007).

The MLG has unique features that differ in structure and regulation (Perbendaharaan Malaysia, 2013). The regulations for the MLGs are different because they are based on the regulations from the state government and specific local enactments. Due to different regulations, the governance structure may also differ. The results of this study may shed some light on the unique governance structure that influences the implementation of environmental auditing practices in Malaysia.

The remainder of the paper proceeds as follows. The next section discusses the theoretical lens of environmental auditing practices and the expectation enactment model. The section after that discusses the methodology of the case. The two case studies are produced in Section 4 to illustrate the process. Section 5 identifies the most visible commonalities and differences for each stage of environmental auditing practices. The concluding remark unveils which and why particular environmental auditing practices are more comprehensive and concludes the discussion with recommendations for further research.

2. Literature review

The role of internal auditors has evolved from assessing the risks of financial statement audits to ensuring the credibility of the environmental management system. The interpretation of the roles of internal auditors has emerged, and the discussion on internal auditors has become wider, ranging from supervision, prevention, protection and evaluation

E-mail address: muthyaah@uitm.edu.my (M.M. Jamil).

Therefore, this study would like to explore how governance structure influences the environmental auditing practices in MLGs.

^{*} Corresponding author.

to consultancy (Chambers & Odar, 2015; Lenz & Sarens, 2012; Onumah & Krah, 2012). Generally, internal control aims to ensure that the organisation is managed efficiently and economically.

Most studies highlighted that governance influences the roles of internal auditors (Mihret et al., 2010; Woldeyohannis & Mihret, 2008; Yismaw & Mihret, 2007). Governance's criteria include organisational settings (Asaolu et al., 2016; Axelsen et al., 2017; Christopher, 2014; Onumah & Krah, 2012; Woldeyohannis & Mihret, 2008), management support (Christopher, 2014; Onumah & Krah, 2012; Usang & Salim, 2016), auditee attributes (Onumah & Krah, 2012) and internal audit quality (Christopher, 2014; Onumah & Krah, 2012).

The organisational setting, which highlights the situational background of an organisation, is characterised by three factors: organisational structure, the highest authority and budget allocation. The first factor is the organisational structure, which consists of hierarchy, regulation and audit authority of the organisation, all of which have weightage to the role of internal auditors in performing their duties (Mihret et al., 2010; Morin & Hazgui, 2016). Internal auditors have the freedom to audit various programmes if the top management authorised them to do so (Asaolu et al., 2016; Bananuka et al., 2018; Schyf, 2000). In line with this, this study examines how the top management's authority influences the role of internal auditors in EAP.

The second factor is the highest authority of the MLGs, which is the Audit Committee. Previous studies stated that internal auditors performed an assured role for the audit committees (Bananuka et al., 2018; Onumah & Krah, 2012; Schyf, 2000). A clear reporting framework for an organisation enables internal auditors to perform their responsibilities. Other studies concluded that the auditees perceived that the audit committee did not influence the role of internal auditors (Bananuka et al., 2018; Schyf, 2000). The auditees further debated that the audit committees were not clear about the importance of the roles of internal auditors in the organisation because the concept of the audit committee was relatively new in public organisations (Bananuka et al., 2018). Therefore, no established guideline is present for the audit committee to understand the roles of internal auditors in a public organisation. This study expands this discussion by focusing on how the audit committee perceives the roles of internal auditors in EAP.

The last factor is budget allocation. Several studies stated that the lack of budget contributes to the inefficiency of service delivery by the internal auditors (Asaolu et al., 2016; Onumah & Krah, 2012; Usang & Salim, 2016; Schyf, 2000). Both perspectives agreed that the internal audit department requires a reasonable budget to perform its duties. The reasonable budget depends on how the top management perceives the importance of the internal auditing exercise. As no discussion has been found on how budget allocation influences the EAP, this study looks into how the budget affects the EAP in MLGs. This study also explores how organisational settings, such as organisational structure and budget allocation, influence the EAP.

Management support is one of the components of governance. Previous studies concluded that management support inevitably influences the role of internal auditors in a public organisation through the acceptance of the internal auditors' reports (Asaolu et al., 2016; Baber, 1983; Gupta & Ray, 1992; Onumah & Krah, 2012; Schyf, 2000; Usang & Salim, 2016; Xiangdong, 1997), the top management tenure (Schyf, 2000) and the resources provided by the top management (Asaolu et al., 2016).

Both perspectives agreed that the management perceived the importance of the role of internal auditors by accepting the published reports (Asaolu et al., 2016; Baber, 1983; Gupta & Ray, 1992; Onumah & Krah, 2012; Schyf, 2000; Usang & Salim, 2016; Xiangdong, 1997). These studies argued that the management implementing the suggestions in the published reports shows that the management perceived the essential roles of internal auditors.

A study by Asaolu et al. (2016) further extends the discussion by stating that the management recognises the critical role of internal auditors when the top management provides the internal auditors with resources

to perform the audit process. The organisational resources include the budget allocation for training and the usage of the assets. The top management authorises the internal auditors to utilise their roles fully by allowing them to use the organisational resources.

The internal auditors cannot fully utilise the resources if there are frequent changes in the top management. According to Schyf (2000), frequent changes in top management lead to underutilising the internal auditors' roles in an organisation. Each top management has its own goal in managing an organisation. If there is a frequent change in top management, the roles of the internal auditors also change based on the goals set up by the top management. Therefore, this study examines how the top management supports the roles of internal auditors in EAP.

On the other hand, auditee attributes signify the characteristics of the auditee towards the role of internal auditors. The opinions of internal auditors and auditees seemed to differ concerning auditees' attributes influencing the roles of internal auditors (Onumah & Krah, 2012; Usang & Salim, 2016; Yismaw & Mihret, 2007).

Internal auditors perceived that auditees' attitudes influenced their roles (Onumah & Krah, 2012; Usang & Salim, 2016). To illustrate this point, the practice of reminding about the internal auditors' positions by the auditees, such as the management, is naturally a threat to internal auditors and may limit the internal auditors' roles while performing an internal audit. Consequently, the internal auditors do not have the freedom to give an independent opinion when reporting to the audit committees or the management of public organisations.

However, Yismaw and Mihret (2007) revealed different findings about the auditees' point of view. The auditees claimed that their attributes did not influence the roles of internal auditors in Ethiopian universities, and they accepted the judgement given by the internal auditors. They admitted that they did not maintain a proper filing for the documentation that would qualify the internal auditors to give their judgement. Therefore, how the auditees' attributes trigger the role of internal auditors in EAP is also explored in this study.

Internal audit quality is related to the features of governance that help internal auditors to perform their roles. The inefficient roles of internal auditors were due to the lack of proper training for the internal auditors, especially in exercising internal audit regulations (Onumah & Krah, 2012; Usang & Salim, 2016). The internal auditors proposed broader training coverage about auditing procedures. They believed that this would help them perform extensive audit procedures. After all, education and proficiency are the features of internal audit quality.

Internal auditors and auditees agreed that the education and proficiency of the internal auditors influence the outcome of the audit process (Asaolu et al., 2016; Christopher, 2014; Onumah & Krah, 2012). The internal auditors with professional qualifications were able to perform a value-added audit for public organisations. Due to this argument, how internal audit quality influences the internal auditors' roles in EAP is investigated in this study.

This study utilised the Expectation Development Model from Role Theory to illustrate how governance differs in environmental auditing implemented in the MLGs. This model is derived from a functional role perspective, which is the guiding principle in discussing the differences in practices, especially on how the actors played their roles in these practices. This perspective defines roles as a set of expectations influenced by a social system (Biddle, 1986; Lynch, 2007; Mantere, 2008; Walker, 2017; Wittmayer et al., 2017). The social system is the norms, behaviour and characteristics of the members of society.

This present study provides a detailed explanation of EAP implementation from organisational perspectives. Prior studies have delineated the practices that facilitate organisations to implement EAP because each organisation has its administrative structure (Bae & Seol, 2006; Byington & Campbell, 1997; Campbell & Byington, 1998; Earnhart & Leonard, 2013; Evans et al., 2011; Simon et al., 2014). The review suggests that the EAP in organisations may differ, although derived from the same industry.

This study adopts the Expectation Enactment Model proposed by Fondas (1994), which has four determinants in deriving expectations: role senders, characteristics of the focal person, and attributes of the relationship between the focal person and role senders, to interpret the findings. This model explains the importance of individual roles in an organisation (Wittmayer et al., 2017), emphasising the role-playing mechanism, where the actors individually receive and execute their roles to meet organisational goals. The effect of the organisation depends on the role set-focal person relationship.

This current study focuses more on the characteristic of the sender's role, which is how the instruction of the environmental auditing practices is carried out through the process. The leading player in environmental auditing practices is the auditors. This model is suitable for elaborating how the leading player plays their roles in completing the environmental auditing practices. It is relevant in explaining the features of each role as the agent of compliance (Wittmayer et al., 2017), mainly because the actors use their distinctive parts in the organisation.

Fondas (1994) elaborates that authority and distance refer to delegating authority. This situation refers to how the authority of any process is delegated to the players of the process. The study argued that the primary player for any practice should be able to provide resources and help the team in managerial studies. The study also discusses that the manager should play different roles in managing the business, known as the role set of diversities. The different backgrounds of the team and expectations facilitate the new transformation that took the play, member variability. The last characteristic is expectation strategies, which may require the initiated expectation when it is weak. The expectation is created by the role sender as part of their objectives.

3. Methodology

The interpretative case study research involves in-depth exploration of particular facts, events or processes in the context of one or more interviewees (Hartley, 2004). This present study adopted the interpretative case study as its research design. This study used holistic/single unit analysis with multiple case designs to highlight the variances of the internal auditors' performance of roles in EAP in the two MLGs. This study sent 22 letters to all the MLG in Peninsular Malaysia. Only two MLGs were permitted to collect in-depth data within the organisation.

The data were gathered from interviews, document analysis and information observations. The mixed methods were used to see how the environmental auditing practices flow, who the actors were and how the actors played the roles in environmental auditing practices. The interview methods were used to determine how the flows worked and how the actors played their parts. The document analysis is used to examine how the report is being prepared and how the result of the practices is generated. The last method, observation, is used to get a clear picture of the relationship between the role sender and focal person.

The interview session was conducted in dual language to get detailed information about the process. The researcher used an interactive interviewing stance in which the interviewer and interviewee can ask or answer any question to or from each other (Tracy, 2013). The interview sessions were started by asking the interviewee to answer tour types of questions and describe the EA process (Tracy, 2013).

The researcher identified possible questions based on theories to facilitate the interview in a one-to-one setting; the interview duration was between 30 and 45 minutes. The researcher formulated three different sets of questions. Set A contains the interview question used for internal auditors to explore the implementation of EAP in the organisation. The full interview protocol is shown in Appendix 1. The second set (Set B) of the interview questions was prepared for the auditees to explore how they perceived the EAP (refer to Appendix 2). Set C was arranged for councillors or members of the Audit Committee. This set was designed to measure the extent of their involvement in EAP (refer to Appendix 3).

Table 1 List of Interview Session.

No	Position	Date	Duration	Recorded (Y/N)
ALPH	IA.			
1	Head of Internal	23 October 2014	60 minutes	N
2	Auditor	23 September 2016	30 minutes	Y
3	Auditee 1	27 December 2017	35 minutes	Y
4		22 December 2018	30 minutes	N
5	Auditee 2	27 December 2017	95 minutes	Y
6	Auditee 3	27 December 2017	45 minutes	Y
7	Internal Auditor 1	27 December 2017	45 minutes	Y
8	Auditee 4	23 February 2018	30 minutes	Y
9	Internal Auditor 2	23 February 2018	30 minutes	Y
10	Auditee 5	23 February 2018	30 minutes	Y
11	Auditee 6	23 February 2018	30 minutes	Y
12	Internal Auditor 3	23 February 2018	30 minutes	Y
13	Councillor	22 December 2017	30 minutes	Y
14	Auditee 6	22 December 2017	15 minutes	N
15	Auditee 7	23 February 2018	30 minutes	Y
BETA				
16	Head of Internal Auditor	22 March 2017	90 minutes	Y
17	Internal Auditor 4	22 March 2017	60 minutes	Y
18	Internal Auditor 5	27 March 2017	30 minutes	Y
19	Auditee 8	23 March 2017	30 minutes	Y
20	Auditee 9	27 March 2017	60 minutes	Y
21	Auditee 10	27 March 2017	60 minutes	Y
22	Audit Committee 1	13 December 2017	75 minutes	Y
23	Audit Committee 2	27 January 2018	75 minutes	Y
24	Audit Committee 3	27 January 2018	45 minutes	Y

The purpose was explained, and a consent form was given to the interviewee before the researcher started the interview. The consent form (as in Appendix 4) was given to inform the interviewee's rights and obtain the interviewee's permission to audio-record the interview. The rights include refusing to answer specific questions, requesting an unrecorded interview session and stopping the discussion at any time. The consent forms were collected and documented. The respondents gave a copy of the signed consent forms for future reference.

Before the session, the researcher asked if any other parties were involved in EAPso that arrangements could be made for interview sessions with them. After each interview session ended, the researcher transcribed the interview based on the audio recording. Then, the transcribed data were sent to the interviewees for verification. After verification, the data were sent to a licensed translator for translation purposes — most data comprised a mixed language between Bahasa Malaysia and English. The purpose of the translation was to ensure the translation achieved the right content described.

Three different sets of questions were used to facilitate the session. Set A contains interview questions asked to internal auditors to explore the implementation of EAP in the organisation. Set B was prepared for the auditees' perceptions. Set C was arranged for the councillors or members of the Audit Committee. After each interview session ended, the researcher transcribed the interview based on the audio recording.

Table 1 shows the number of interview sessions with the two MLGs, which differ due to the different approaches to implementing EAP. Hence, ALPHA involved many interviewees due to its process of including employees from other departments, which did not happen in BETA, whereby the implementation of EAP was only being executed by the internal audit department.

The second method for data gathering was document analysis. This study gathered documents from various sources, including speeches, annual reports, newspaper cuttings, Master Development Plan, and Strategic Plan between 2017 and 2019 from both the MLGs. All documents were accessible by the public except the master development plan. The papers were used to see the pattern of instructions in written communi-

Table 2
List of Documents.

Local Governments	Documents	Justification
ALPHA	Annual Report Speeches Newspaper Cutting Master Development Plan Plan Strategic	To understand the regulation and laws that bind the MLGs To obtain information regarding the standards governing the EAPs 3 To understand the formal
ВЕТА	Annual Report Speeches Newspaper Cutting	organisation process, procedures and rules on the EAPs • To understand the impact of the EAPs on the organisation • To find out any specific issue regarding the EAPs being discussed • To determine who is in control of the EAPs for each stage • To determine the role of each party in the process

Table 3
Informal Observation Sites.

Date	Location	
ALPHA		
23 September 2016	Internal Audit Unit Office	
22 December 2017	The main lobby of the ALPHA building	
27 December 2017	Meeting Room A	
27 December 2017	Meeting Room B	
22 February 2018	Meeting Room C	
23 February 2018	Meeting Room D	
22 December 2017	Meeting Room Audit Committee	
BETA		
22 March 2017	IAS Office	
27 March 2017	IAS Office	
27 March 2017	Auditee 1 Office	
27 March 2017	Auditee 2 Office	
13 December 2017	Audit Committee 1 Office	
27 January 2018	Audit Committee 2 Office	
27 January 2018	Audit Committee 3 Office	

cation regarding the EAP implementation. The followings are the documents that the researcher has reviewed. Table 2

The third data gathering process was in the form of informal observations. The researchers visited different offices, namely meeting rooms, internal audit offices and lobby, in both MLGs. The purpose of the casual statement was to observe responses when expectations were communicated to others and how the directions were translated into actions.

The findings from the observation are based on the displayed items on the notice board. For instance, both the MLGs showed the process flow of EAP in the diagram to create an awareness of the practices. This researcher wrote notes on the informal observation of sites and took videos or pictures of any related site materials. This exercise was reliable for tacit knowledge, especially in explaining emotional expressions (Tracy, 2013). In this study, the researcher took notes in each location, as stated in Table 3.

For data analysis, these data were uploaded in a qualitative software analysis known as ATLAS.ti. This software analysis is helpful as it enhances the reliability of the findings (Hwang, 2008). All interview results, document analyses and observations were triangulated to support the data, provide comprehensive insights and answer the research questions. In this study, the thematic analysis approach was used (Attride-Stirling, 2001), and the data was divided into 50 codes. Then, the data were arranged based on three main areas: characteristics of the role sender, the focal person and the relationship between them. The next part gives an overview of the case study.

4. Local government authorities in Malaysia

MLGs are regulated by the Local Government Act 1976 and Street, Drainage and Building Act 1974 for Peninsular Malaysia; Local Authorities Ordinance 1961 (Sarawak) for the State of Sarawak; Local Government Ordinance 1996 (Sabah) for the State of Sabah. The second subgroup is a municipal council, which is the local government council within an urban or town centre with a population exceeding 150,000 people and annual revenue exceeding RM20 million.

4.1. ALPHA

ALPHA is situated in the northern region of Malaysia. It is headed by the head known as Chairman. The ALPHA has six standards from the International Standard of Organization (ISO), including ISO 14001, a certification for the environmental management system. The ALPHA management consists of two sections: the advisory section and the executive section. The advisory team consists of 24 councillors appointed by the state government. The role or function of the advisory team is mainly to prepare the organisation's policy. The senior management of the MLGs selects the YDP. The EAP is headed by the Head of Internal Auditors, the Head of Internal Audit Department and is assisted by members from various departments.

4.2. BETA

BETA is a central region in Malaysia. The Chairman is the head of the BETA administration. Similar to ALPHA, the Chairman acts as the CEO of the organisation. However, the Chairman in BETA is appointed by the State Administration and Diplomatic Officer (PTD). The Chairman is appointed for not more than two terms or four years. In other words, the Chairman of BETA changed every four years. The position of Deputy Secretary, who is the assistant of the Chairman, must be held by a senior executive of the organisation. The environmental auditing practices are headed by the Internal Audit Department's head and assisted by the Internal Audit Department's staff.

5. Findings

The data were analysed based on five stages of environmental auditing practices by the authority department, namely establishing, implementing, monitoring, reviewing and improving the audit programme. After the coding was identified, this study identified how governance influences the roles of internal auditors in every stage. The findings discussion depicted five elements.

5.1. Role authority

Role authority is the process of delegating authority and deliberating the instruction to the internal auditor to perform the process. The highest authority of the Malaysian Local Government is the State Government, which issues instructions, including the appointment of the councillors. The councillors of both organisations are appointed by the

representatives of the political parties that won a particular state election. A unique feature for the appointment of the councillor in ALPHA is the instruction to appoint the NGO Watchdog Group. In other words, the roles of authority from the State Government are delegated to the councillors to execute any policies approved by the State Government.

The councillors in this study can be regarded as the second-level authority. The councillors in both organisations are the policymakers who must prepare the policy and plan the programme. In 2014, the State Government introduced the concept of the audit committee from the private sector in BETA, and several councillors were appointed as members of the audit committee, who have also monitored the audit process in BETA.

The councillors delegate the authority to the Chairman, who instructs the staff members to execute the approved plan and programme. This study also found that the authority level was a delegate from the State Government to councillors and finally to the Chairman.

This study also found that the internal audit department's structure influences the internal auditors' roles. In BETA's case, the authority exists when the internal audit department is independent. The internal auditors directly report the results of the audit programme to the Chairman or Audit Committee. The reporting can be done without prior approval from the management or other departments. Besides, they can perform the audit procedures without any interference from other departments and not bother with any criticism during the implementation of the audit programme, as they simply focus on the specific tasks given by the HIA.

The internal auditors have full power to perform these practices in BETA without interfering with other departments. Audit Committee 1 said:

[...] As for Ms Y and her team, they do not bother if people do not like them; they do their job

5.2. Roles of set's latitude and resources

Based on the data gathered, it was discovered that resource allocation plays a role for internal auditors in executing the environmental auditing programme. The resource allocation depends on the tenure of the Chairman. The frequency of the tenure of the highest authority might influence how internal auditors perform their roles. The study found that the tenure of the Chairman, the highest administration officer for the organisations, influences the frequency of environmental auditing practices.

In ALPHA, the current Chairman is appointed from the previous management executive of the organisation. However, in BETA, the State Public Officer appoints the organisation's Chairman. If the next successor of the Chairman has the same plan as the current Chairman, the practices are continued.

The audit documentation, such as the previous year's audit working papers, circulars and training, also function as the necessary resources for the internal auditors to perform their roles in the practices. The internal auditors draft the documentation by referring to the previous year's audit programme as part of their references. In addition to that, the agreed checklist provides the auditee with the required criteria for environmental auditing practices. The following statements demonstrate the process:

- [...] To conduct an audit, they [internal auditors] will explain their needs and their checklists. They will consult me on matters that need audits. (Auditee 3
- [...] They have consulted me earlier on aspects they are about to monitor, matters to be audited. So, they will conduct audits on the aspects stated earlier. (Auditee 2)
- [...] We will inform the purpose of audits, and once received by the auditees, it will be easy for them to prepare audit objectives. We inform early itself. (Internal Auditor 5)

Although the internal auditors have informed the auditees about the gathering process of audit evidence, the internal auditors remain silent

about the date of the spot check at the audit site in both MLGs to ensure that the concept of independence remains intact. The following supports the previously mentioned statement:

- [...] I have to conduct a surprise check for a proper inspection. If staff members are informed earlier, they may be prepared by wearing the equipment. Following our SOP, we must inform a particular department that we are coming for audits. Another procedure is more like a mystery, like a supermarket that gives mystery gifts; we usually go anytime to check to discover if the staff are working correctly. If we were to wait for the audit, every process and procedure would be 'cleaned'. 50% of the inspection must be in the form of surprise checks. (Internal Auditor 2)
- [...] We usually performed the surprise check in gathering the audit evidence [showing report on the EAP for waste management]. We always performed that [surprise check]. (Head of Internal Auditor 2)

The finalisation of the audit documentation is used as evidence for the reviewing stage. The internal auditors carefully prepare the audit documentation to maintain their independence by selecting significant audit findings from their previous experiences or issues about the noncompliance issues to be presented during the Review Meeting. The following statements support the preceding:

- [...] During the inspection, if we find minor errors, we ask them to amend them. As for significant errors, they will not be amended if we were not to issue NCR (non-compliance). It has to be on the record; we know this based on experience (Internal Auditor 2)
- [...] During an audit, we will ask them to rectify small and trivial issues on the spot and not create a fuss about it. Then we felt that if we did not label at least an NCR, there would make no changes, and it had to be on the record. We issue NCR for minor matters such as placing the document so small matters can be resolved on the spot, within a few minutes, 30 minutes or even an hour. It depends on our jurisdiction if the matters are serious or not (Internal Auditor 3)
- [...] Most of the time, we will meet the internal audit team at work; the team does not look for mistakes done by colleagues but rather inform the errors before others find them. The errors should be found by the internal audit team (Auditee 5)

5.3. Roles of diversify

The unique governance in the environmental auditing practices is the multiple roles diversified inside the ALPHA. Currently, ALPHA has received five International Standard Certifications. The Head of the Internal Auditor in ALPHA is in charge of any audit procedures and therefore, can integrate the roles of internal auditors into various standards.

In addition, the Head of the Internal Auditor in ALPHA also has a solid team to perform the internal audit required by the National Audit Department and other audit requirements. The team's full support can ensure that the duties are carried out successfully. The following statement was given by the Head of the Internal Auditor in ALPHA:

[...] I am responsible for any jobs that comprise the word "audit". I am the Head of the Internal Audit Unit and the Head of the Audit Secretariat.

5.4. Member variability

In ALPHA, the internal auditors are appointed from selected employees in various departments during the implementation of the audit programme. Differences in the background may help the internal auditors to speed up the process of auditing the environmental management system. It also reduces any miscommunications between the members of the audit team. Furthermore, Audit Secretariat can explain in detail the process involved in their departments and improve clarity. Auditee 1 said:

[...] Each department needs to be visited to understand the workflow process, certification, and health so it is easier to recruit people from that department to ease their workload.

The statement of Auditee 1 was supported by the following statement of Auditee 2:

[...] Once a new staff joins, like Ms L, needs to go to every department to learn the workflow processes. It seems to be time-consuming. Recruiting people from the other department is better as their workload is lighter.

5.5. Expectation strategist

The final reports are prepared by the Head of Internal Auditors based on the expectations of the authority. In ALPHA, the authority is the expectations of the State Government, NGO and the Chairman. Meanwhile, the authority of BETA includes the expectations from the State Government, Audit Committee and the Chairman. Comparatively, the expectations from the authority between ALPHA and BETA are different due to the jurisdictions of the State Government itself.

It is based on the written speeches by the Chairman in both MLGs that emphasise each employee to fulfil the annual work plan they have initially concurred. The followings are the statement to support the earlier claim:

[.....] Each employee was obliged to fulfil the job description as stated in the agreement when you are coming to report your duty. (Chairman, BETA)

[...] You are responsible for fulfilling your duty because you need to answer why you cannot complete your duty in this world and hereafter. (Chairman, ALPHA)

6. Discussion and conclusion

It has been argued, based on Employing Functional Role theory, that five criteria help internal auditors play their role in environmental auditing programmes. The first criterion is the role of authority. The highest authority for environmental auditing practices is the State Government, which delegates the plan to the Councillors. The State Government's policy that highly emphasises Green Projects helps the ALPHA to receive the ISO 14001 Environmental Management Standards Certification. This direction of the auditing process cascades to the internal auditors to perform the audit programme (Asaoluet al., 2016; Bananuka et al., 2018; Schyf, 2000).

From the findings of this study, it was discovered that ISO 14001 facilitated ALPHA in performing the EAP for annual monitoring. It led to continuous monitoring of the outcome of the environmental programme instead of reacting to complaints, as portrayed in BETA. It was also found that the audit programmes in ALPHA were established through the consensus of multiple level stakeholders, including suggestions from the NGO Watchdog Group. The independent party played the role of authority in ALPHA. The ALPHA created a particular post for the NGO Watchdog Group to participate in developing environmental programmes to strengthen the relationship between both parties.

The results revealed a similar practice to the findings from previous studies (Bananuka et al., 2018; Onumah & Krah, 2012; Schyf, 2000), which found that the Audit Committee has the power to instruct the implementation of the environmental audit programme. However, this study found that the Audit Committee was more of a political-driven appointment with no absolute power in setting up environmental programmes in BETA. It was found that the environmental auditing programmes established in BETA adopted the top-down approach, which depended on the Chairman's decisions. It may assist the MLGs in strengthening the audit committee's role in this organisation.

The BETA's environmental auditing programme structures the internal audit department's independence. Internal auditors are free to exercise their duty if they have direct reports to the higher management (Asaolu et al., 2016; Bananuka et al., 2018; Schyf, 2000). It will help the internal auditors to maintain their independence. This study also explained the influence of budget on the internal audit departments and concluded that some budget allocations were given to the internal auditors to exercise their roles. This finding agreed with the previous study regarding budget allocations (Asaolu et al., 2016; Onumah & Krah, 2012; Usang & Salim, 2016; Schyf, 2000).

The second criterion is the role of the set's latitude and resources. The training sessions and the previous audit documentation facilitate the internal auditors in performing the environmental auditing process. Similar to the previous studies, internal auditors may not execute their roles efficiently without sufficient training (Onumah & Krah, 2012; Usang & Salim, 2016). This study also found that previous documentation helps the internal auditors to draft audit procedures and review the audit coverage and the effectiveness of audit procedures. They may refer to the documentation process of the audit procedures for further explanation.

The continuity tenure of the Chairman influenced the environmental audit programme. This study revealed that environmental auditing practices would be effective if the Chairman was familiar with and understood the philosophy of adopting the ISO standards from the beginning. It may help the organisation's management concisely itemise the environmental auditing process. The new Chairman may understand the whole process after reviewing the documentation.

The Head of Internal Audit, who fulfils multiple functions in enhancing the roles of internal auditors in ALPHA, can integrate all the audit procedures to reduce the workload of the internal auditors. Besides that, the composition of the audit team influenced the role of internal auditors. The ALPHA audit team comprised members from various departments, and the internal auditors played the role of member variability (Fondas, 1994). Requiring the internal auditors to understand the environmental programme technical processes, the EAP was assisted by the internal auditors with diverse backgrounds in running the execution smoothly across departments (Anuntaakalakul & Lamberton, 2007; Moor & Beelde, 2005; Raman et al., 2008; Vinten, 1996).

Another advantage of having diverse background is that an internal auditor can clarify specific issues with other internal auditors. This exercise is helpful for task interdependence amongst departments. The internal auditors in BETA consisted of members from the internal auditors for BETA. The auditees would not be able to implement the suggestions recommended by internal auditors because their practices are different. Hence, it benefits the MLGs to form a dynamic group to perform the effectiveness of environmental auditing programmes.

The last criterion reflects the audit findings reporting submitted to the review committee in ALPHA, which involved the head of the audited department in finding a solution to the identified issues. Such arrangements may help the organisation find the solution as a team in ALPHA.

A limitation of this study is that it focused on the data between 2017 and 2019 only. Thus, future research may include recent years. The data also focused only on two MLGs with unique characteristics. The study may open another research on environmental auditing practices in different institutions and the effectiveness of the Audit Committee in MLGs.

Credit authorship statement

Muthyaah Mohd Jamil: Conceptualisation, Methodology, Formal Analysis, Writing - Original Draft. Nor Hafizah Zainal Abidin: Validation, Conceptualisation, Supervision, Writing - Review & Editing. Norhayati Mohammad: Supervision, Methodology, Writing - Review & Editing.

Funding

This author expresses her appreciation and thanks to the IAREF fund [IAREF21-012-0036] for financially supporting this research.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

Appendix

Appendix 1

SET A: INTERVIEW QUESTIONS FOR INTERNAL AUDITORS Interview Protocol - Understanding the EAPs in Malaysian Local Governments

Time/Date of the Interview Place/Department Interviewee Position of Interviewee Years in Service Contact Information Research Objectives

Question	Justification	
Do you perform environmental auditing practices? To what extent the practice being conducted? How many departments involved in environmental auditing practices?	To understand the flow of the EAP being implemented	
1. Who initiates the EAPs? 2. Why does that department involve? 3. How do you conduct EAPs? Why do you do so? 4. Is there any standard do you follow? 5. If yes, why do you follow the standard?	To have an in-depth understanding of EAP	
What do you expect from the auditees? What do you regard as the most important activity in EAPs? What is the impact of audit for environmental practices? Please rank the impact of these practices, 1 is the lowest, 9 is the highest?	To understand how do internal auditors perceived the role of auditees in EAP	
1. How do you perceive the roles of Councillors? 2. What is the task of Councillors? 3. Do you have the Audit Committee? 4. What do you expect from the Audit Committees? 5. Is the audit process conducted effectively? Why do you say so? 6. How happy are you with your interaction with auditee? Why do you say so? 7. How happy are you with your interaction with the Audit Committee?	To understand how do internal auditors perceived the role of Councillors in EAP	

Appendix 2

SET B: INTERVIEW QUESTIONS FOR AUDITEE

Interview Protocol - Understanding the Environmental Auditing Practices (EAPs) in Malaysian Local Governments

Time/Date of the Interview Place/Department Interviewee Position of Interviewee Years in Service

Question	Justification
What do you feel about the EAPs? When did the environmental auditing practices start in your department? Do you receive any letter before the audit process?	To understand the flow of the environmental auditing practice being implemented
How do you do preparation for the audit process? How do you handle it? In that way, the auditing department help your environmental program? What is the content of the letter?	To have an in-depth process in each stage of environmental auditing practice
What do you expect from the internal auditors in the environmental program? Why do you say so? What if there is no internal audit function, what it is that you value most? Is the environmental auditing differ with the traditional audit? Do you think the internal auditor able to conduct the environmental auditing practices? Why do you say so? Is the internal auditor do a good job? Why do you say so?	To understand how do auditees perceived the role of internal auditors in environmental auditing practice
What do you think about the involvement of the Audit Committee? Why do you say so?	To understand how do auditees perceived the role of Councillor in environmental auditing practice

Appendix 3

SET C: INTERVIEW QUESTIONS FOR COUNCILLORS/AUDIT COMMITEE

Interview Protocol - Understanding the Environmental Auditing Practices (EAPs) in Malaysian Local Governments

Time/Date of the Interview Place/Department Interviewee Position of Interviewee Years in Service Contact Information

Question	Justification	
What are your roles as the Councillors? Are you Audit Committees? What are your roles as Audit Committees?	To understand how do councillors perceived their roles in environmental auditing practice	
1. What do you expect from the internal audit? 2. Why do you say so? 3. Are you satisfied with the involvement of internal auditor in the environmental program? 4. Why do you say so? 5. How do you perceive the current internal audit function? 6. Are the internal auditors doing the right job? Why do you say so?	To understand how do councillors perceived the role of internal auditors in environmental auditing practice	
What do you expect from the auditees? Why do you say so?	To understand how do councillors perceived the role of auditees in environmental auditing practice	
When do you involve in environmental auditing practice? What do you do? Are there any issues during the environmental auditing practice? Why do you say so?	To understand how do the councillors involved in environmental auditing practice.	

Appendix 4







KULLIYYAH OF ECONOMICS AND MANAGEMENT SCIENCES

I volunteer to participate in a research project conducted by Muthyaah Binti Mohd Jamil from the International Islamic University of Malaysia. I understand that the project is designed to gather information about the involvement of internal auditors in environmental programs. The purpose of this interview is to gain insight into how internal auditors involved in environmental programs. It includes how the auditing process being conducted in the environmental programs and challenges during the process itself. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. I understand that most interviewees in will find the discussion engaging and thought-provoking. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview. Participation involves being interviewed by Muthyaah Binti Mohd Jamil from the International Islamic University of Malaysia. The interview will last approximately 30-45 minutes. Notes will be written during the interview. An audiotape of the interview and subsequent dialogue will be made. If I feel uncomfortable for the dialogues to be taped, I have the right to decline the audit tape while interviewing. I understand that the researcher will not identify me by name in any reports using information obtained from this interview and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions. Faculty and administrators from my university will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions. I have read and understood the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study. I have been given a copy of this consent form. Details of Interviewee:

Date

Name of Interviewee

Organization

Signature

Name of Interviewer

Organization

Signature

Muthyaah Binti Mohd Jamil International Islamic University of Malaysia

References

- Anuntaakalakul, K., & Lamberton, G. (2007). Internal Auditor Involvement in Environmental Audit: Evidence from Thailand. The Icfai University Press. IV(4), 14–24.
- mental Audit: Evidence from Thailand. The Icfai University Press, IV(4), 14–24.
 Asaolu, T.O., Adedokun, S.A., Monday, J.U., 2016. Promoting good governance through internal audit function (IAF): the Nigerian experience. Int. Bus. Res. 9 (5), 196–204.
- Attride-Stirling, J., 2001. Thematic Analysis: an analytic tool for qualitative research.

 Oualitative Research 1 (3), 385–405.
- Axelsen, M., Green, P., Ridley, G., 2017. Explaining the information systems auditor role in the public sector financial audit. International Journal of Accounting Information Systems 24. 15–31.
- Baber, W.R., 1983. Toward understanding the role of auditing in the public sector. J. Account. Econ. 5, 213–227.
- Bae, S., Seol, I., 2006. An explanatory empirical investigation of environmental audit program in S&P 500 companies. Manag. Res. News 29 (9), 573–579.
- Bananuka, J., Nkundabanyanga, S.K., Nalukenge, I., Kaawaase, T., 2018. Internal audit function, audit committee effectiveness and accountability in the Ugandan statutory corporations. J. Financ. Report. Account. 16 (1), 138–157.
- Biddle, B.J., 1986. Recent development in role theory. Annu. Rev. Sociol. 12, 67–92.
- Byington, J.R., & Campbell, S. (1997). Should the internal auditor be used in environmental accounting? *J. Corp. Account. Finance*, 139–146.
- Buang, A., 2007. Emerging Issues and Global Challenges in the Public Sector Audit in the 21st Century Malaysian Perspective. The National Audit Department, Putrajaya.
- Campbell, S., Byington, R.J., 1998. ISO 14001: environmental auditing for manufacturing companies. J. Corp. Account. Finance 107–118.
- Chambers, A.D., Odar, M., 2015. A new vision for internal audit. Managerial Auditing Journal 30 (1), 34–55.
- Christopher, J., 2014. Internal audit: Does it enhance governance in the Australian public university sector? Educational Management Administration & Leadership 1–18.
- Earnhart, D., Leonard, J.M., 2013. Determinants of environmental audit frequency: the role of firm organisational structure. J. Environ. Manage. 128, 497–513.
- Evans, M.F., Liu, L., Stafford, S.L., 2011. Do environmental audits improve long term compliance? Evidence from manufacturing facilities in Michigan. J. Regul. Econ. 40, 279–302.
- Fondas, N., 1994. Enactment in managerial jobs: a roles analysis. J. Manag. Stud. 31 (1), 84–103.
- Gupta, P.P., Ray, M.R., 1992. The Changing Roles of the Internal Auditor. Managerial Auditing Journal 7 (1), 3–8.
- Case Study Research Hartley, J., Cassell, C., Symon, G., 2004. Essential Guide to Qualitative Methods in Organisational Research. SAGE Publication Ltd, New York, pp. 323–334.
- Lenz, R., Sarens, G., 2012. Reflections on internal auditing profession: what might have gone wrong? Managerial Auditing Journal 27 (6), 532–549.
- Lynch, K.D., 2007. Modelling role enactment: linking role theory and social cognition. J. Theory Soc. Behav. 37 (4), 379–399.
- Mantere, S., 2008. Role expectations and middle manager strategic agency. J. Manag. Stud. 45 (2), 294–316.

- Mihret, D.G., James, K., Mula, J.M., 2010. Antecedents and organizational performance implications of internal audit effectiveness: Some prepositions and research agenda. Pacific Accounting Review 22 (3), 224–252.
- Moor, P.D., Beelde, I.D., 2005. Environmental auditing and the role of the accountancy profession: a literature review. Environ. Manage. 36 (2), 205–219.
- Morin, D., Hazgui, M., 2016. We are much more than watchdogs:: The dual identity of auditors at the UK National Audit Office. Journal of Accounting & Organizational Change 12 (4), 568–589.
- Onumah, J.M., Krah, R.Y., 2012. Barriers and catalysts to effective internal audit in the Ghanaian public sector. Res. Account. Emerg. Econ. 12A, 177–207.
- P. Malaysia. (2003). P.S 3.2 Penubuhan Jawatankuasa Audit di Peringkat Kementerian Persekutuan dan Kerajaan Negeri. Putrajaya: Ministry of Finance.
- P. Malaysia. (2013). PS 3.1 Pekeliling Perbendaharaan Malaysia. Pekeliling Perbendaharaan Malaysia. Putrajaya: Kementerian Kewangan Malaysia. Retrieved from Kementerian Kewangan Malaysia: http://lpp.treasury.gov.my/.
- Raman, N.S., Makode, M., Devotta, S., 2008. Environmental auditing in India: a case study from the wood pulp industry. Environ. Qual. Manage. 55–65.
- Vinten, G., 1996. The objectives of the environmental audit. Environ. Manag. Health 7 (3), 12–21.
- Walker, S.P., 2017. Accountants and the pursuit of the national interest: a study of role conflict during the First World War. Critic. Perspect. Account. 47, 8–25.
- Wittmayer, J.M., Avelino, F., Steenbergen, F.V., & Loorbach, D. (2017). Actor Roles in transition: Insights from Sociological Perspective. Environmental Innovation and Societal Transition. 24, 45–56.
- Woldeyohannis, G.Z., Mihret, D.G., 2008. Value-added role of internal audit: an Ethiopian case study. Managerial Auditing Journal 23 (6), 567–595.
- Tracy, S.J., 2013. Qualitative Research Method: Collecting Evidences, Crafting Evidence, Communicating Impacts. Wiley & Sons, United Kingdom.
- Schyf, B.D., 2000. Obstacles in establishing and operating a public sector internal auditing function in a developing country: the South African experience. Meditari Account. Res. 145–181.
- Simon, A, Yaya, L., Karapetrovic, S., Casadesús, M, 2014. An empirical analysis of the integration of internal and external management system audits. J. Clean. Prod. 66, 499–506
- SIRIM QAS International Sdn. Bhd. (2017). EMS Certification. Retrieved from Malaysian Certified: http://www.malaysiancertified.com.my/EMSCert.aspx?company=&scope= &standard=&cyear=&status=&country=&state=&licenceno=.
- Usang, O.U., Salim, B., 2016. Performance effects of internal audit characteristics and relationships in Nigerian local governments. Mediterranean J. Soc. Sci. 7 (3), 110–117.
- Xiangdong, W., 1997. Development trends and future prospects of internal audit. Manag. Audit. J. 12 (4/5), 200–204.
- Yismaw, A.W., Mihret, D.G., 2007. Internal audit effectiveness: an Ethiopian public sector case study. Managerial Auditing Journal 22 (5), 470–484.