



INSPECTION

# COST AUDIT

REPORT

Cost Centers

Costing Department

Consistent Cost Records



## Insights from the Cost Audit in a State-owned Manufacturing Company in Bangladesh

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### Abstract

This study explores several aspects of the cost audit conducted in a state-owned manufacturing company. Specifically, this study focused on the complications faced by the cost auditor in terms of the criteria used and responses received from the case organization while conducting the cost audit and the perception of both the cost auditor and the case organization concerning the benefits derived from the audit. To achieve the objectives, this study collected data from a state-owned fertilizer company using an unstructured questionnaire through an in-depth interview. Using the notion of grounded theory, the findings showed that the Rules followed to maintain cost accounting records (i.e., Cost Accounting Record Rules 1997) require substantial revision as they were developed around two decades ago. Moreover, while both the cost auditor and the case company claimed several benefits of conducting a cost audit, the organization conducting such an audit cited several limitations in terms of both resources and competent workforces in implementing recommendations noted by the cost auditor. The findings are critical for the policymakers (concerned Ministries) and professional accounting bodies like ICMAB in the endeavor to revise the Rules used to record costs and conduct the cost audit one hand, and to eliminate or at least trim down the complications faced by both the auditor and entity on the other hand.

**Keywords:** Cost audit, state-owned enterprise, case study, developing country, emerging economy, Bangladesh.

## 1. Introduction

By law, specifically as per the provision of the Companies Act across the globe, the annual financial statements of public companies need to be audited at least annually by an independent auditor (AICPA & CIMA, 2023). However, substantial debate exists about whether such audit can add value to a company unless they contribute to enhancing public trust (Razaee, 2004).

Another form of mandatory audit that received trivial attention worldwide is known as 'cost audit' (Chatterjee and Zaman Mir, 2006). This form of audit is apparent in several South Asian Countries, specifically India, Bangladesh, and Pakistan (Chatterjee and Zaman Mir, 2006; Bala, 2017). India is considered as the pioneer globally in making this form of audit mandatory for specific entities, and the list is being extended each year persistently (Chatterjee and Zaman Mir, 2006).

A financial audit is criticized as a post-mortem evaluation (Batra and Kaur, 1993) and has an insignificant contribution to improving management soundness (Chatterjee and Zaman Mir, 2006). In contrast, a cost audit is expected to benefit various stakeholders, including the management, shareholders, Government, customers, and cost accountants (or accounting people without such designation) (Basu and Das, 1999; Chatterjee and Zaman Mir, 2006). Moreover, cost audit is found useful in eliminating faulty treatment of costs and supervising of detailed cost records, and the errors of principles that might eventually emerge over the years (Bennett, 1922). In the absence of cost audit, these errors might lead to serious misstatement of costs results (Bennett, 1922). Additionally, cost audit can provide invaluable assistance to management and cost department by assuring the adequacy of cost system and reporting and interpreting the policy-making and control information as per the needs of management (Green, 1948). Furthermore, cost audit reports on whether the cost accounting system maintained can make the operation cost-effective or not, and provide greater insights into the use of materials, fair treatment of wastages, by-products, scrapes, allocation of overhead costs and reasons for idle capacity and other variances more meticulously (Ather and Ullah, 2010). Considering the prospect of the impact of cost audit on diverse stakeholders, this study provides several aspects of the insights gained from a cost audit.

Cost audit was made mandatory in Bangladesh in 1994 by the Companies Act, 1994, adding a provision for "Audit of certain matters by Cost and Management Accountants" (Government of Bangladesh (GOB), 1994; Bala, 2017). However, it was not earlier than November 1997 when the Ministry of Commerce issued the Cost Audit (Report) Rules, 1997 (Bala, 2017). Surprisingly, the said Rules have rarely been refined with time, which might make them less relevant in several instances. Apart from that, the Institute of Cost and Management Accountants of Bangladesh (ICMAB) has issued 31 Bangladesh Cost Accounting Standards (BCAS) to guide the recording, reporting, and analysis of costs across several sectors (ICMAB, 2023).

Empirical evidence on cost audit is scarce globally (Chatterjee and Zaman Mir, 2006), and Bangladesh is no exception. In Bangladesh, Ather and Ullah (2010) conducted a survey among 126 Chartered Accountants, CMAs, and Executive of Accounts working in the manufacturing entities, and university teachers teaching in the business field to learn about the scope of application of cost audit, needs, importance and other aspects of cost audit in Bangladesh. Their findings demonstrated substantial variations in the perceptions of the respondents regarding the importance, needs, and applicability of cost audit. However, the opinions of cost auditor having experience of cost audit, and the employees of costing department responding to the queries raised by cost auditor are scarce in this region. Accordingly, this study attempts to provide insights from a cost audit conducted in a state-owned fertilizer company, specifically the perception of the cost auditor and the accounting staff/management involved and responded to while performing the cost audit. As this kind of study is rarely found, it expects to add to the existing literature of a particular type of mandatory audit in the emerging and developing country context.

The subsequent sections of the study are organized as follows. Section 2 discusses the existing literature. Section 3 presents the methodology adopted in the study. Section 4 outlines the theory adopted, followed by section 5 that presents the findings and discussion of the study. Finally, section 6 offers the conclusion including the limitations and avenues for future research.

## 2. Literature Review

The extant literature on cost audit is very limited as the issue has yet to attract academics, regulators, and practitioners globally, specifically from Europe and the USA. The first international empirical evidence on cost audit, to the best of our knowledge, is presented by Chatterjee and Zaman Mir (2006). Their study focused on whether mandatory cost audit in India can enhance the trust of investors and preparers of financial statements as assumed by the regulators. Unfortunately, they documented that the preparers and users of financial reports do not have trust to a considerable level in cost audit and noted an insignificant impact of mandatory cost audit on the investment decisions of users of financial reports (Chatterjee and Zaman Mir, 2006). Specifically, high-level officials of the sample companies and sophisticated investors believed that mandatory cost audits failed to provide any value-based service.

However, it is interesting to note that the cost auditors of the sample companies still believe that cost audit can provide several benefits to a company. Of these benefits, proper calculation of sales tax, detecting the efficiency of management, tracing inefficiency of materials usage and thereby improving effective utilization of scarce resources, and assisting investors in making a more accurate judgment in evaluating the profitability of companies are citable (Chatterjee and Zaman Mir, 2006). In the context of Bangladesh, Ather and Ullah (2010) documented that 93.65% of the respondents recognized the importance of cost audit in manufacturing entities in finding facts for corrections, while other 96.83% considered cost audit as the super foundation of financial audit. The study also noted that cost audit should be made mandatory for all sorts of manufacturing entities as held by the respondents (85.71%), and that 57.14% stated that cost audit is not burdensome to the entities. Manoj (2008) commented that cost audit can lead to enhanced cost competitiveness through better cost control, productivity, and profitability. Basu and Das (1999) also cited several benefits of conducting cost audit from the viewpoints of management, shareholders, Government, customers, and accountants. These benefits are presented in Figure 1:



Figure 1. Benefits of Mandatory Cost Audit.

[Source: Motivated by Basu and Das, 1993 and Chatterjee and Zaman Mir, 2006]

Thus, the present study is designed to demonstrate insights gained from the cost audit conducted in a state-owned manufacturing company through a case study which has rarely been addressed by the existing auditing literature, and whether such audit can contribute to avoid adverse impact of monitoring by principals and signals management about the responsible performance of concerned employees.

### 3. Theory

As this case study is unusual in nature, no existing theory is supposed to provide a plausible explanation of the findings of the study. Accordingly, the notion of grounded theory is adopted to explain the findings. Glaser and Strauss (1967) offered the conceptual basis for this theory (i.e., ground theory in the data or generate theory from data), followed by several academicians (e.g., Stauss and Corbin, 1990; Glaser, 1992) in developing diversified approaches into it. This theory was originally developed to emphasize the importance of allowing the concepts, issues, and relationships while researching social phenomena that might emerge out of data gathered from the participants and their social setting (Norris and Innes, 2002). More importantly, the respondents are allowed to set the agenda, communicate their own views and provide their own accounts (Norris and Innes, 2002). The researcher begins with a field of study and the theory to emerge from the data (Stauss and Corbin, 1998). Moreover, the researcher should not avoid the influence of prior research while attempting to generate theory from data; rather try to bring accumulated knowledge of prior studies to the research site without allowing it impose itself on the experiment and so prevent fresh insight (Stauss and Corbin, 1990; Norris and Innes, 2002).

### 4. Methodology

This study is based on a case study in a state-owned fertilizer company. Case study research is assumed to provide an in-depth understanding of a specific phenomenon (Alsmadi et al., 2014). Both qualitative and quantitative data can be gathered if required to serve the purpose of the study (Yin, 2003; Gerring, 2007).

Scapens (2004) discussed how case study research may be carried out. Of the methods of data collection, interviews are considered as the type of evidence most usually associated with case research (Scapens, 2004). Furthermore, to recommend the type of questionnaire used, Scapens (2004, p.267) noted that “unstructured interviews, which is the way I tend to do my research, allow the researcher the flexibility to pursue new issues and ideas as they arise and thereby to explore emerging lines of enquiry.” In addition to the use of interview data collected using unstructured questionnaire, Scapens (1994) also recommended the use of evidence gathered from “observing actions and meetings”.

In line with these recommendations, the present study collects data using an unstructured questionnaire and observing actions to learn about the perception of the cost auditor and the company’s employees involved in preparing the cost statement and responding to the cost auditor's inquiry.

**Table 1: Interview status**

Interview No.	Designation of the respondents	Education	Year of experience	Duration of the interview
1	Cost Auditor	M.Com, FCMA	23 Years	30 minutes
2	Cost Auditor	M.Com, ACMA	12	30 minutes
3	Chief Engineer	B.Sc. Engineer	20	30 minutes
4	Chief Accountant	Masters	20	30 minutes
5	Operational Engineer	B.Sc. Engineer	18	30 minutes
6	Controller	M.Com	22	30 minutes
7	GM (Accounts)	M.Com	18	30 minutes

#### The Case Organization

The ABC Fertilizer Company Limited (the respondents intended to keep the name of the company anonymous in the study) is one of the biggest fertilizer companies administered by the Bangladesh Chemical Industries Corporation (BCIC) under the Ministry of Industries (MOI) of GOB. BCIC is fully owned by the Government and was established in July 1976 by a presidential Order. The Corporation started functioning in 1976 with 88 nationalized enterprises under its administrative control and is now managing 13 large and medium-sized industrial enterprises engaged in producing a wide range of products like Urea, TSP, DAP, Paper, Cement, Glass sheet, Hardboard, Sanitary ware & Insulator, etc. (BCIC, 2023).

This modern technology-based, energy-efficient, and environment-friendly granular urea fertilizer factory with an annual capacity of 0.58 million tons was installed to meet the growing demand for urea fertilizer. However, it is noteworthy that despite its yearly turnover of around 6,000 million Bangladeshi Taka (BDT), its annual report shows negative retained earnings (accumulated loss) of around BDT 14,000 million. The underlying cause of such loss is that the GOB allocates a substantial amount of subsidy in fertilizer each year. Accordingly, this company set the prices of its outputs below costs, considering its crucial impact on the agricultural outputs of the country. Nevertheless, its annual audited financial statements reported total assets around BDT 54,000 million.

## 5. Findings

### 5.1 Findings from the case

Strauss and Corbin (1998) recognized three phases of data analysis under the grounded theory approach—open coding, selective coding and axial coding—the use of any of these approaches depends on the purpose of the study (Norris and Innes, 2002). Following Strauss and Corbin (1998), the present study uses open and axial analyses. The open coding showed a number of issues which were grouped into three categories. The issues are given the following labels:

#### 5.1.1 Complications Experienced by the Cost Auditor

As this kind of audit is uncommon in Bangladesh, it is not unusual for the auditor to face complications while conducting the cost audit. Specifically, the company that hired the cost auditor needs to have a concrete idea as to what standard procedures are to comply with to maintain sound cost records. In this respect, the cost auditor stated that:

*“The case company does not maintain cost center-wise cost records, which is a must as prescribed by the Rules. They did not even create cost centers and costing department to accumulate data for recording and reporting purposes. Moreover, they are unaware of the Bangladesh Cost Accounting Standards (BCAS) that could be followed to maintain the records properly.”*

The auditor traces lack of awareness about the Record Rules and BCAS as the underlying cause for not

maintaining the cost accounting records consistently. In most cases, they kept records by adopting a procedure their employees have learned from their formal academic education. More surprisingly, while the official responsible for maintaining those records transferred to other departments/locations, the nature and forms of recording changed. Consequently, the cost auditor reported substantial variations in the structure of recording and reporting over the years.

The cost auditor also recognized that while the provision of International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) are mandatory, BCASs are not. ICMAB needs to focus on this issue and should communicate with the entities about the BCAS, specifically those subject to mandatory cost audit. The cost auditor holds that:

*“ICMAB needs to strive to align BCAS with the Record Rules. Additionally, as technological and other environmental factors have changed drastically since the issuance of Record Rules, a massive refinement is required to make it compatible with the changing business landscape. ICMAB should pursue relevant authorities in this respect.”*

Apart from that, the cost auditor raised questions regarding the rationality of audit fees set in the agreement. The cost auditor states that:

*“The audit fees are set very low as compared to the volume of work required to be carried out, and also in comparison to the fees of statutory financial statements audit.”*

As the market for cost audit has yet to be established up to the mark, the negotiation power of cost auditors is bound to be limited. ICMAB and the regulators must work on this issue to set a fair audit fee, as suggested by the cost auditor.

#### 5.1.2 Complications Experienced by the Case Organization

The case company experienced several novel situations while the cost audit was conducted. Specifically, as they have no concrete idea about what standards/rules/guidelines are to be complied with, in most cases they found it difficult to respond to the cost auditor. For example, one of the employees of the case company dealing with the cost auditor holds that:

*“We maintain cost records using multiple forms and styles designed by our senior official, which change over the years to meet our requirements. We tried to meet the requirements of our top management and external auditor requirements for the purpose of financial statements audit. Our cost centers are not defined precisely as we did not previously face such kind of audit.”*

Apart from that, the officials also recognized that they need a clearer idea about the Record Rules and BCAS, which is another reason for not being able to respond to the queries raised by the cost auditor. Another official maintaining cost records states that:

*“We do not have concrete ideas about the Cost Accounting Record Rules and BCAS. This could benefit us in maintaining cost center-wise records and proper allocation of costs among the cost objects.”*

Regarding the plan of complying with the requirements of the said Rules and standards, they expressed their worry about the implementation possibilities. One of the official states that:

*“BCIC wants us to maintain proper cost records by complying with relevant Rules and Standards. However, sanctioning additional funds required to hire competent workforces and creating additional departments, such as the costing department, would not be easy.*

Accordingly, it is apparent that the concerned agents, including the regulators and the professional accounting body, have to do a lot to flourish this unusual sort of mandatory audit.

### **5.1.3 Benefits of conducting cost audit**

The Cost Accounting Record Rules allow the auditor to report on several issues, including the appropriateness of the cost accounting system, analysis of each component of costs such as materials, labor, and other overheads, budgeted and actual capacity utilization, appropriateness of process costing system, and adequacy and suitability of cost centers. Consequently, the cost audit can provide several benefits to the entity. In support of this view, the cost auditor states that:

*“Cost audit ensures effective internal control, facilitates decision-making, and helps increase*

*productivity. Cost audit benefits management, shareholders, Government, and society by preventing consumer exploitation, controlling prices, reducing costs, and utilizing resources efficiently.”*

Further, as cost audit report includes recommendation on what to do next to achieve superior performance or create competitive advantage, this audit appears to be forward-looking as opposed to financial audit which is backward-looking. The cost auditor states that:

*“Cost audit is forward-looking and concerned with propriety and efficiency, while financial audit is historical and concerned with reliability”.*

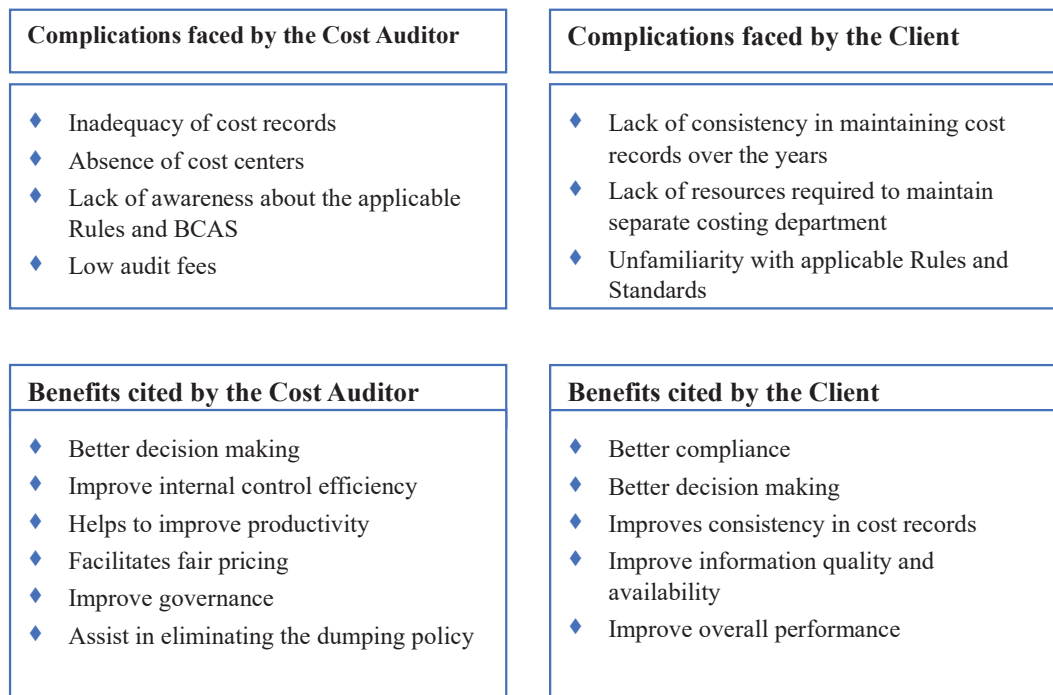
This finding appears to be consistent with the Chatterjee and Zaman Mir (2006) study which depicted that cost audit provides, in the opinion of cost auditor, several benefits to a variety of stakeholders.

Apart from the benefits enjoyed by the entity, the cost audit can help establish good governance and provide meaningful feedback to regulators. Moreover, it can play critical role in eliminating dumping policies. For example, the cost auditor holds that:

*“Cost audit report provides reliable feedback to the regulators and serve as effective tool for good governance. Cost audit report plays a critical role in defending local industries against dumping allegations and provide authentic cost data for determining fair price”.*

In addition to the cost auditor, the case company also perceives diverse benefits from cost audit. The most important benefits that could be derived from the cost audit are opportunities to be familiar with the applicable Rules and Standards, procedures about maintaining appropriate records, and how to analyze costs using different bases to facilitate better decision-making. For instance, one of the employees dealing with cost audit states that:

*“We learned a lot while dealing with the cost auditor. How to maintain cost records for each cost center, analyze capacity utilization, analyze different variances, and analyze each item of production costs are most significant of the benefits we derived from this audit.”*



**Figure 2. Insights from the cost audit. [Source: Authors' creation]**

Accordingly, cost audit provides several benefits to the entity conducting such audit.

### 5.2 Developing propositions

Based on the discussion presented in the foregoing section, the following three propositions can be developed.

#### Proposition 1

**Cost audit work is complicated by the ignorance of Cost Accounting Record Rules 1997 and BCAS, outdated record rules, and low audit fees.**

#### Proposition 2

**The maintenance of an appropriate cost accounting system is restricted by the support of top management team, sanction of required resources, and lack of competent work forces.**

#### Proposition 3

**Cost audit can lead to consistent cost recording and reporting, improvement of compliance and performance, and efficient and effective resource utilization.**

## 6. Conclusion

This study aims to present the insights gained from a cost audit conducted in a developing economy's state-owned manufacturing (fertilizer) company. The case study method is used to learn about the problems associated with and benefits of conducting a cost audit from the perspectives of both the cost auditor and the organization initiating such an audit. The findings revealed that the Record Rules used in assessing the level of compliance need to be updated and significantly revised, as raised by the cost auditor. Moreover, both the cost auditor and the case company cited several complications faced while the cost audit was carried out. However, both parties cited diverse benefits derived from conducting cost audit which goes against the findings of Chatterjee and Zaman Mir's (2006) study.

From several perspectives, the study findings are critical to professional accounting bodies, prospective cost auditors, regulators, and corporate management. Prospective cost auditors and corporate management can get meaningful insights regarding the learning of cost auditors involved and benefits derived by the company undertaking cost audit. Regulators and professional accounting bodies, specifically ICMA, can use the findings to make the outcome of cost audit more relevant and valuable for the company initiating such audit. Moreover, refining Cost Accounting Record Rules may benefit the auditor and corporate entities further.

The findings of the study are subject to several limitations. First, this study focused on a single state-owned fertilizer company in learning about the insights gained from a cost audit. The picture of other companies, such as non-manufacturing and private sector companies, can differ. Second, a longitudinal study is more appropriate for conducting case study research, which cannot be followed because of the tenure of mandatory cost audit. Further studies may focus on these issues.

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