

The Role of Environmental Auditing in Improving the Performance of Economic Institutions

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Abstract:

This paper aims to explore the role of environmental auditing in enhancing the environmental performance of economic institutions, while identifying the factors influencing environmental audits and the challenges associated with financial practices, as well as the oversight role played by specialized environmental protection agencies. The growing interest from researchers and stakeholders in the field of environmental auditing has led to the development of this professional practice to include environmental accounting aspects. Given the existence of various types and classifications of environmental audits, along with the diversity of their fields and methods, their objectives have also diversified to serve the specific goals of each type. These objectives reflect the importance of environmental auditing within institutions and for related entities, such as environmental protection organizations. The success of environmental auditing is closely linked to its significance and its ability to be comprehensive and integrated—covering all activities of the economic institution, whether related to environmental monitoring of projects or environmental accounting—which contributes to the disclosure of the institution's environmental performance and ultimately ensures its sustainability.

Keywords: Environmental Auditing, Environmental Performance, Economic Institution.

Introduction:

Auditing has witnessed significant growth and development over the past two decades, as top management and environmental management of economic units have come to recognize environmental auditing as one of the essential components of environmental management systems. Management has increasingly become interested in a broad range of environmental review services and performance improvement tools to help manage organizational operations in a manner that meets the expectations of stakeholders, aligns with emerging responsibilities, and ensures transparent reporting on how the organization is fulfilling these responsibilities. These assessments and various review processes fall under the concept of "environmental auditing."

Today, the auditing profession faces a range of contemporary challenges due to environmental changes and developments surrounding it. Undoubtedly, economic shifts and advancements in management practices have significantly influenced the type of services expected from the auditing profession. The transformation imposed on the field, aimed at aligning it with society's evolving needs, presents a challenge to researchers and practitioners alike. These challenges are encountered in day-to-day professional practice and require practical solutions grounded in scientific principles. Among the most critical contemporary issues facing the auditing profession is the **environmental issue**, which has worsened in recent years. Economic institutions are both a major cause and a primary victim of environmental degradation, underscoring the need for environmental risk management and the adoption of environmental auditing.

Given the environment's direct impact on human health and safety, and its fundamental link to national economies and development programs, it has become one of the most pressing global concerns. Both developed and developing nations are striving to preserve and protect the environment from pollution and degradation by designing appropriate policies and plans, ensuring their implementation, and exercising oversight—all within the framework of international and regional efforts to protect the environment. As a result, the environmental performance of economic units has gained greater attention, and there has been an increasing need for comprehensive information that reflects the extent to which these units fulfill their environmental responsibilities and disclose such information transparently.

Since every scientific study is based on a central research problem, the research question of this study is formulated as follows:

How does environmental auditing contribute to improving the environmental performance of economic institutions?

To answer this question, it must be broken down into the following sub-questions:

- What is environmental auditing?
- What is meant by environmental performance, and what are its indicators?
- What are the procedures followed in the environmental auditing process to assess and enhance an institution's environmental performance?

**1. Environmental Auditing:
1.1 The Concept of Environmental Auditing:**

There is no universally agreed-upon definition of environmental auditing due to its relatively recent emergence. As a result, various definitions and terms have been used to describe it—such as inspection, monitoring and surveying, evaluation, and auditing. Some even consider environmental auditing to be synonymous with environmental auditing in the broader accounting profession.

Auditing has been defined as the process of gathering evidence and information to determine the degree of conformity between institutions and pre-established standards. This process must be conducted by an independent individual (Mohamed Samir El-Sabbaan, 2005, p. 6).

The environment, on the other hand, refers to the totality of elements surrounding us that affect the existence of living organisms on Earth, including water, air, soil, minerals, climate, and the organisms themselves (MokaddemWahiba, 2014, p. 25).

Many attempts have been made to define the concept of environmental auditing, but a review of these efforts reveals a degree of confusion and inconsistency. This can be attributed to the wide variety of terminology and the often inappropriate use of the term "environmental auditing" to describe various services, some of which possess characteristics of auditing in the accounting profession, while others do not.

The U.S. Environmental Protection Agency (EPA) defines environmental auditing as:

“A selective, periodic, regular, documented, and objective examination conducted either by the institution or by an independent entity with legal authority, to assess production operations and related sub-activities in terms of their impact on the environment and its components.”
(Amin El-Sayed Ahmed Lotfy, 2005, p. 134)

The International Chamber of Commerce (ICC) defines it as:

“An internal management tool involving a regular, documented, and objective evaluation of what the environmental organization should do to protect the environment. This is done by facilitating administrative control over environmental practices and assessing the level of compliance with administrative policies and requirements.”
(Salem Saeed Ba'ajajah, 2016, p. 86)

The Association of Auditors defines it as:

“An integral part of the environmental management system, through which an enterprise's management can determine whether its environmental control systems are sufficient and appropriate, and whether it complies with legal and legislative requirements in addition to its internal policies. It is a coordinated process to verify the objectivity of obtained documents and to collect auditing evidence.”
(Amin El-Sayed Ahmed Lotfy, 2005, p. 135)

From these definitions, we conclude that environmental auditing is an internal evaluation process conducted by a team of internal auditors and technical experts in the fields of environment, health, and safety to assess the extent to which economic institutions comply with environmental legislation. The definitions highlight that environmental auditing involves

examining and evaluating the environmental systems managed by an organization and verifying its compliance with legal requirements, policies, and environmental activity programs.

1.2 Requirements for Environmental Auditing:

Auditing is a systematic and objective process that involves evaluating relevant audit evidence concerning financial data related to economic activities and events. This enables the determination of compliance with defined standards or benchmarks and the communication of audit results to interested parties (Youssef Mahmoud Jarboua, Salem Abdullah Hallas, 2006, p. 11).

The European Commission, in its environmental auditing project, outlined the basic requirements for environmental auditing. Likewise, the U.S. Environmental Protection Agency (EPA) specified key components and policies for environmental auditing as follows:

- Business organizations must participate in environmental auditing programs to encourage economic units to enhance their environmental performance and comply with environmental laws.
- Participating units must conduct an initial environmental assessment of their sites to identify potential environmental impacts of their activities.
- Economic units are required to design and implement an environmental protection system that includes environmental policies, goals, and programs, and must establish an environmental management system to provide data and information necessary to assess environmental performance.
- An environmental accounting system must be established to provide a scientific and practical basis for measuring and reporting environmental activities and impacts.
- Environmental audit reports must be certified by authorized auditors and submitted to the relevant state authorities, with results made accessible to the public.
- The frequency of environmental audits by business organizations must be determined based on several factors, including identified environmental issues, complexity of site activities, and emissions levels. Annual audits are required if the environmental impact of the site's activities is significant.
- The environmental audit team must possess the necessary knowledge, skills, and experience to achieve audit objectives.
- The environmental audit team must be independent from the activities being audited and must conduct the audit objectively.
- There must be standards to assess the quality of environmental audit performance.

Environmental auditing must achieve several goals, the most prominent of which include:

- Evaluating and improving environmental policies and practices.
- Providing environmental information needed by both internal and external stakeholders.
- Assessing environmental conservation systems.
- Evaluating resource use and environmental risk management.
- Ensuring the organization's compliance with laws and sufficient disclosure of environmental impacts. (Amin El-Sayed Ahmed Lotfy, 2005, p. 336)

It is also essential to have generally accepted environmental principles and standards, performance evaluation indicators, and performance benchmarks aligned with defined environmental policies. Additionally, environmental performance must be disclosed in financial statements, and organizations must have internal environmental policies.

It should be noted that the aforementioned requirements are not exhaustive but represent the fundamental prerequisites for implementing environmental auditing in any business organization.

1.3 Qualifications and Requirements for Environmental Auditors

Ensuring the quality of the environmental audit process, and thereby achieving its highest level of efficiency, necessarily requires verifying that those performing the audit possess the necessary professional competencies and skills, as well as neutrality and objectivity in carrying out their duties. The following are the essential qualifications and requirements for environmental auditors to conduct environmental audits effectively:

They must have the ability to understand and grasp the following areas:

- Environmental technology and sciences
- Technical and environmental aspects of operational facilitation
- Relevant legal and regulatory environmental requirements and associated documentation
- Environmental management standards and systems
- Audit methods, processes, and procedures
(Raad Hassan Al-Sarran, 2001, p. 308)

Auditors should also possess skills, knowledge, and experience in the following areas:
(Imad EddineBarachen, 2015, p. 80)

- Environmental laws applicable to economic units and the industries they belong to
- Operational activities of economic units and their resulting environmental risks
- Environmental systems, policies, programs, and practices
- The impact of economic unit activities on audit procedures
- Methods for evaluating the environmental impacts of economic activities
- Management of environmental risks that economic units may face

Auditor

Training:

Auditors must undergo formal training and on-the-job training to develop their competency in conducting environmental audits. This training may be provided by the institution itself or by an external organization, and auditors must demonstrate competency gained through training using appropriate means.

Formal training should cover:

- Environmental science and technology
- Technical environmental aspects that facilitate operations
- Relevant legal requirements, regulations, and documentation
- Environmental management systems and standards applicable to any type of audit
- Audit methodologies, procedures, and techniques

On-the-job training should include:

- At least 20 days of appropriate environmental audit work, or a minimum of four complete environmental audits
- This training must take place within a maximum period of three consecutive years

Therefore, auditors must undergo intensive training to enhance their competencies, skills, and capabilities necessary for conducting environmental audits. They must also attend all relevant conferences, lectures, and seminars to expand their environmental auditing knowledge.

Environmental auditors must also possess personal skills and traits including:

- The ability to clearly communicate concepts and ideas, both orally and in writing
- Personal skills such as diplomacy, tact, and active listening
- The ability to maintain proper independence and objectivity, allowing them to fulfill their responsibilities
- The ability to make sound judgments based on objective evidence
- The ability to understand the sensitivities and culture of the country or institution being audited

Additional requirements:

- Intensive training on environmental protection to understand mutual ecological relationships and impact dynamics
- Effective training in audit concepts, methods, and techniques through special auditor training programs
- Extensive knowledge of environmental technology, environmental economics, and environmental law
- Strong skills in collecting and analyzing audit evidence, problem identification, and solution development
- Fundamental understanding of evidence collection topics, information systems, and data, along with independent thinking

In summary, the most critical requirement for environmental auditors is comprehensive knowledge of environmental matters, legislation, and regulations, in addition to regular participation in training programs.

1.4 Reasons for Environmental Auditing

According to **Maltby (1995)**, there are two groups of pressures that have influenced the emergence and development of environmental auditing and have encouraged institutions to adopt it:

1. Direct pressures, which clearly promote the adoption of environmental auditing
2. Indirect pressures, represented by threats and opportunities arising from environmental awareness among consumers, competitors, and regulators. These pressures have made it necessary to move toward public environmental disclosure.

Legal pressures have also played a role, as regulatory bodies with the authority to impose pollution-related costs on polluters have been established.
(Saleh Abdulrahman Al-Saad, p. 7)

Environmental protection has become a key international concern in recent years due to the worsening global environmental crisis in its various forms. This has led to numerous conferences and forums—beginning with the 1972 Stockholm Conference on the Human Environment and continuing through the 2016 Marrakech Climate Change Conference.

Governmental and non-governmental organizations, along with environmental advocacy groups, have worked to implement the decisions issued by global, regional, and local conferences. As a result, economic institutions are now often required to include environmental feasibility studies in their broader project feasibility assessments and integrate environmental management systems into their overall organizational structures. They also need to focus on environmental accounting to avoid increasing pressure from environmentally concerned stakeholders, who seek to assess whether institutions are meeting their environmental obligations through audit reports.

Environmental auditing has seen successive developments in response to its expanding objectives and the ongoing theoretical efforts to refine it to meet stakeholder demands in various fields. Auditors now also bear environmental and social responsibilities.

The strong link between auditing and the environmental field was highlighted by the United Nations Environment Programme (UNEP) in Nairobi in 1990, which issued a report titled Environmental Auditing. International standard-setting bodies have also worked to define environmental standards. For example:

- INTOSAI (International Organization of Supreme Audit Institutions) is a leading organization in environmental auditing
- ISO (International Organization for Standardization) developed standards for environmental management system audits

(BouhafsRouani, 2018, pp. 7–8)

Environmental auditing is now a vital component of environmental protection in the European Union, which is working toward a green economy and sustainable development. Although the United States, through its multinational corporations, contributes significantly to global pollution, it has made notable progress in using environmental auditing as a key economic tool for environmental protection. Arab countries are also increasingly incorporating environmental auditing into their national legislation as one type of audit among others.

Major global corporations now issue full or partial reports disclosing their environmental performance. Just as financial audit reports reflect management's accountability to shareholders, environmental audit reports reflect the institution's accountability to a broader public—including civil society, investors, lenders, and government bodies.

However, the absence of a national framework for environmental auditing in Algeria forces local auditors to rely on foreign models, which may not align with Algeria's economic context or the needs of local stakeholders.

1.5 Types of Environmental Auditing

Audits are typically classified based on who conducts them:

- External audit: Performed by an independent party outside the institution, free from management influence
- Internal audit: Conducted by personnel within the organization who have knowledge of management and control practices, and whose role supports the organization's internal monitoring objectives

This classification also applies to environmental auditing, which can be internal or external depending on who performs the audit.

1.5.1 Internal Environmental Auditing:

Internal auditing refers to a department, activity, or team of consultants or other professionals who provide independent and objective assurance or advisory services, with the aim of adding value and improving organizational operations. This helps the organization achieve its objectives through a systematic and disciplined approach to evaluating and enhancing the effectiveness of governance, risk management, and control processes. (Ahmad Faisal Al-Hayek, 2013, p. 3)

To understand the internal environmental audit process, one must define its objectives and scope, as well as identify the stakeholders for whom the audit is performed. The main objectives of internal environmental auditing include:

- Reviewing compliance with environmental laws and regulations, such as those concerning pollution and noise.
- Evaluating the effectiveness of waste management controls and treatments.
- Identifying the environmental impacts of current operations, products, and services.
- Determining potential cost savings by minimizing waste and enhancing recycling.

- Assessing the organization's health, safety, and environmental care systems.
- Managing environmental risks that may affect the economic institution. (BouhafsaRouani, 2018, p. 13)

1.5.2 External Environmental Auditing:

A. General External Environmental Audit:

This type of audit assesses external environmental factors by addressing questions related to economic, social, natural, technological, cultural, legal, and governmental factors.

- **Review of Economic Factors:**
 - Is the organization responsive to surrounding economic changes?
 - What are the major developments and trends in prices, income levels, savings, and financing that directly affect the organization's activities?
 - Does the organization take timely and adequate measures to cope with economic changes?
 - What are those measures?
- **Review of Social Factors:**
 - What are the key demographic trends that pose opportunities or threats to the organization?
 - Is the organization taking proper and timely measures to adapt to social developments?
 - What specific measures are being implemented?
- **Review of Natural Factors:**
 - What natural resources affect the organization?
 - Are the costs of natural resources reasonable or high? If high, what are the causes?
 - Are changes in resource and energy costs anticipated?
 - Is the organization seeking alternative natural resources?
 - What strategies is it adopting to conserve and protect necessary environmental resources?
- **Review of Technological Factors:**
 - What technological systems are in use? Are they aligned with industry trends?
 - What technological developments are expected in the products and services offered by the organization?
 - Are the systems in use flexible and upgradable?
 - Is the organization actively tracking and leveraging technological advancements?
- **Review of Cultural Factors:**
 - How does the community perceive the organization and its products/services?
 - Is the organization leveraging public perception—whether positive or negative?
 - What actions are being taken to benefit from this perception?
 - What cultural or behavioral changes in society might affect the organization's mission, vision, goals, or policies?

- **Review of Legal and Political Factors:**

- What laws impact the organization's strategy and objectives?
- Who are the legislative bodies issuing decisions that directly affect the organization?
- What proposed or anticipated laws may impact the organization's operations, strategies, or goals?

B. Specific External Environmental Audit:

This refers to the audit of external factors directly related to the organization, such as competitors, clients, suppliers, and government bodies. This is done by answering the following questions:

- **Review of Competitors (Competitive Position):**

- Who are the current competitors? What is our position relative to them?
- What is the quality of their products? What is their financial position? What advantages do they offer?
- What is their competitive strategy (cost leadership or differentiation)?
- What is their market reputation (brand image), branch network, production capacity, marketing strategies, and R&D strengths?

- **Review of Customers:**

- Who are the users of the organization's services and products?
- Who are the key clients for savings, investments, or financing? What is their volume of transactions with the organization?
- What are the features of current services and products?
- Are there any issues customers face? What are the possible solutions?
- What are the market needs in terms of tools and products?
- Who are the target clients (new clients or those from competitors)? What outreach methods are used?

- **Review of Suppliers:**

- What supplier network does the organization rely on?
- What advantages do each supplier offer in their field? How are they rated in terms of service quality?
- Are the current suppliers sufficient, or does the organization need new ones?
- Are current suppliers keeping pace with operational changes?
- Do suppliers assist the organization with cost and quality challenges?

- **Review of Government:**

- What government laws or restrictions hinder the organization's operations? What solutions are available?
- What legislative changes are expected, and how might they impact the organization?
- What changes in taxes or wages are anticipated, and how might they affect the organization's strategies and objectives?

2. Environmental Performance of the Economic Institution

A responsible environmental management approach at the micro-level requires adopting the concept of environmental performance, which involves institutions acting in an environmentally responsible manner by engaging in environmental

activities aimed at protecting and preserving a pollution-free environment. The ultimate goal is to achieve sound environmental performance that aligns with environmental requirements and standards, leading to improved overall institutional performance.

2.1 Definition of Environmental Performance

Environmental performance refers to the institution's efforts to protect the environment from pollution and to remedy the damage caused by its operations. According to Amin El-Sayed Ahmed Lotfi (2005, p. 132), it is defined as "the result of how an organization manages its environmental aspects, which are the potential interactions of its activities, products, and services with the environment."

Nabil Hashem Al-Aaraji (2010, p. 5) defines it as "the measurable results of the environmental management system related to the organization's control of environmental aspects, based on its environmental policy, objectives, and goals."

According to the ISO 14013 standard, environmental performance is "the results obtained by an organization from its interaction with the environment" (Raheem Hussein, 2011, p. 619).

Every organization has a unique environmental impact. Therefore, environmental management systems are established to improve environmental performance, measure the side effects of producing and consuming goods and services, and manage waste processes.

This approach represents a shift from a shareholder-oriented view—focused on financial returns to shareholders—to a stakeholder-oriented view, which includes all affected parties such as customers, employees, the community, suppliers, etc. The stakeholder approach broadens the definition of performance to encompass environmental and social responsibilities, emphasizing environmental protection, social engagement, and consumer information.

According to Slimani Malika and MaghniaHouari (2018, p. 253), comprehensive performance includes the integration of economic, social, and environmental performance. Likewise, AbdelrazakQassem Al-Shahada (2010, p. 283) considers environmental performance as the mandatory or voluntary activities and processes carried out by an organization to prevent environmental and social harm from its operations.

Thus, environmental performance in the context of environmental management refers to the various measurable outcomes within the environmental management system. These outcomes reflect how well an institution controls its environmental aspects in accordance with its environmental policy and objectives.

Environmental performance should be seen as a reflection of both the positive and negative, direct and indirect environmental impacts of the organization's activities, as well as the efficiency and effectiveness of the preventive and corrective actions—whether mandatory or voluntary—taken by the institution.

- Environmental efficiency refers to minimizing resource usage and reducing negative environmental impacts.
- Environmental effectiveness relates to the success in achieving environmental objectives and goals.

2.2 Importance of Environmental Performance

The importance of environmental performance is reflected in the following points:

- Reduces environmental risks arising from the organization's activities.
- Decreases energy consumption and, consequently, operating costs.
- Enhances the institution's public image.
- Integrates the institution's concerns into sustainable development strategies.
- Satisfies consumer demand for environmentally friendly products.
- Identifies environmental impacts.
- Improves environmental impact management (e.g., pollution prevention). (Jaber Dahimi and ZineddineBrouche, 2011, p. 6)

Ultimately, environmental performance is a key tool for reflecting the environmental status of organizations concerned with sustainability.

2.3 Environmental Performance Indicators

Environmental performance indicators should possess several characteristics, similar to general performance indicators. These include:

- Objectivity
- Clarity and comprehensibility
- Alignment with institutional goals
- Responsiveness to stakeholder expectations
- Enabling understandable comparisons
- Reasonable cost and practicality

These criteria serve as a basis for selecting and evaluating environmental performance indicators.

According to Eddy Bauraing et al., environmental performance indicators are essential tools for evaluating an institution's environmental performance. They provide information about the organization's environmental efforts.

Dohou Renaud considers them as mechanisms expressed in quantifiable and measurable data, reflecting environmental impacts caused by institutional activities. These are often organized in tabular formats, showing effects on biotic and abiotic ecosystems, including land, air, and water. Indicators help identify the most critical environmental impacts and assist in linking organizational environmental goals with employee effectiveness and efficiency. (MahawatLaabidi, 2015, p. 148)

Key characteristics of environmental performance indicators include:

- Delivering meaningful insights into environmental conditions and pressures (avoiding ambiguity).
- Being simple and easy to interpret.
- Based on international standards for comparability.
- Well-documented with demonstrable quality.

Examples of general metrics that reflect an institution's environmental engagement include:

- Ratio of pollution reduction R&D spending to total R&D budget.
- Ratio of environmental protection costs to total production costs and annual operating revenues.
- Ratio of capital environmental protection costs to total environmental protection costs.
- Ratio of environmental capital expenditures to the institution's total capital expenditures.
- Ratio of workplace environmental protection costs to total environmental protection costs.
- Ratio of surrounding environmental protection costs to total environmental protection costs.
- Ratio of mandatory environmental protection costs to total environmental protection costs.
- Ratio of voluntary environmental protection costs to total environmental protection costs.
- Indicators must be updated periodically according to documented procedures.

2.4 Environmental Performance Measurement Requirements

The success of implementing a system to measure and evaluate an organization's environmental performance depends on fulfilling a set of fundamental requirements and components, including:

- Defining and studying the organization's environmental objectives;
- Developing detailed plans to achieve these objectives, covering all areas of environmental activity;
- Establishing an environmental management system to monitor environmental activities within the organization;
- Providing an information system to track and collect environmental data;
- Preparing regular reports on environmental performance;
- Defining clear and specific standards for measuring actual environmental performance.

Failure to implement this system is attributed to several reasons, including:

- The absence of a performance measurement framework leading to the use of metrics and indicators for limited purposes;
- Linking environmental metrics to vague objectives instead of well-defined and management-supported goals;
- Significant variation in practices across departments and poor communication between senior and operational management.

(Najwa Abdessamad, 2015, p. 36)

2.5 The Impact of Environmental Performance on Organizational Performance

The traditional perspective among managers and economists has long assumed that improvements in environmental performance increase costs and reduce productivity. From this viewpoint, addressing environmental issues—such as controlling harmful waste—is considered a non-value-adding cost.

Conversely, a growing school of thought argues the opposite: that enhancing environmental performance can positively influence organizational performance, based on empirical studies. This view is championed by the “corrective school,” led by Michael E. Porter, who sees pollution as a waste of resources, and reducing it as a means to improve resource efficiency. (Najwa Abdessamad, 2015, p. 32)

Among the positive effects of good environmental performance is reducing labor costs. According to Baker, the ISO 14001 standard motivates employees better than ISO 9000, thereby doubling productivity. Additionally, companies with such certifications are more attractive to highly qualified candidates. (ZineddineBrouche& Jaber Dahimi, 2011, p. 659)

3. Environmental Auditing and Its Role in Enhancing Environmental Performance

3.1 Environmental Concerns in the Organization

An organization's environmental concerns stem from a variety of factors—some promoting the integration of environmental dimensions, others hindering it.

3.1.1 The Organization and Environmental Problems

Environmental problems in an organization are linked to:

- The nature of its activities;
- The products it produces;
- External pressures exerted upon it.

a. Environmental risks related to organizational activities:

- Production-related risks: Risks arise at all stages of production—from purchasing raw materials (e.g., non-biodegradable packaging), to production technologies, to the final product that may harm the environment.
- Overexploitation of resources: Excessive use of natural resources (oil, gas, water) leads to deforestation and irreversible environmental degradation.
- Energy consumption: Energy production and consumption release toxic gases that exacerbate global warming.
- Waste and by-products: Waste is not exclusive to large producers—all industrial, commercial, and service activities generate waste, which creates challenges in collection, sorting, and treatment.

b. Environmental risks related to products:

- Product usage: Some products cause severe environmental damage (e.g., CO₂ emissions from cars, CFCs from cooling devices causing ozone depletion).
- Product disposal: Disposing of used products (e.g., mercury-containing batteries) poses a growing environmental threat, especially as consumption increases and space for waste treatment centers becomes scarce.

c. External environmental pressures:

The organization's external environment includes all factors outside its boundaries that influence its challenges and strategies. Environmental pressures vary by:

- Industry (e.g., food vs. heavy industry);
- Region (e.g., developed vs. developing countries).

3.2 Drivers of Environmental Integration in the Organization

Three main perspectives shape how organizations incorporate environmental concerns:

- Traditional economic view: Assumes natural resources are inexhaustible and can regenerate naturally (dominant until the 1960s).
- Societal view: Considers growing environmental pressures and is the most common management approach today.
- Integrated view: Embeds environmental behavior across all organizational functions as part of a long-term strategy.

According to ATLL's classification, the motivations for environmental integration are divided into:

- Regulatory drivers
- Economic and administrative drivers
(Imad EddineBrashin, 2015, p. 26)

3.3 Environmental Auditing and Its Relationship with Environmental Performance

One of the most significant evolutions in auditing has been its expansion into evaluating environmental performance within organizations. In today's business landscape, companies must consider:

- The environmental impact of their operations;
- Compliance with environmental laws and regulations;
- Proactive efforts to protect the environment and mitigate harm.

The International Organization for Standardization (ISO) has developed standards outlining the principles, procedures, and qualifications required for conducting environmental audits:

- ISO 14010, ISO 14011, ISO 14012, ISO 19011
(Imad EddineBrashin, 2015, p. 98)

The emergence of ISO 12111 has expanded environmental auditing beyond regulatory compliance to include:

- The environmental management system (EMS);
- Information sources;
- Disclosure of environmental results.

Environmental auditing now focuses not only on identifying gaps but also on correcting deviations to ensure continuous improvement of the EMS.

Furthermore, environmental performance positively impacts economic performance by:

- Attracting new clients through improved brand reputation;
- Increasing revenue and
- Reducing costs by preserving resources and ensuring sustainable usage.
(Slimani Malika &MaghniaHouari, 2018, pp. 254–255)

Three Core Contributions of Environmental Auditing:

1. Evaluation Tool: A fundamental tool for assessing an organization's environmental performance.
2. Component of EMS: It identifies and corrects deviations within the environmental management system.
3. Monitoring Tool: Given the link between auditing and accounting, environmental auditing monitors environmental accounting, assesses its information, and examines how environmental issues impact financial statements and disclosures.

Conclusion

This study aimed to highlight the role of environmental auditing as a monitoring tool used to evaluate and improve the environmental performance of economic institutions. We began by examining the motivations that drive organizations to care about environmental issues and reduce their negative impacts through environmentally integrated management practices.

Growing environmental awareness has led organizations to seek tools that monitor and improve environmental performance. This need has driven the evolution of auditing to encompass environmental dimensions, resulting in new uses that help organizations identify environmental impacts and legal compliance.

Key Findings:

- Organizations' interest in environmental auditing is largely driven by the risk of penalties, external pressures, and consumer awareness.
- Environmental auditing is a critical examination carried out by qualified professionals to ensure compliance with environmental laws.
- Audits are classified into internal and external audits, and further into types like EMS audits, environmental accounting audits, and compliance audits, depending on the focus.
- Despite its advantages, environmental auditing has drawbacks, especially its high cost, disruption of operations, and possible incomplete detection of past or present violations.
- Improved environmental performance directly enhances economic performance in four ways: demand-side, technology, organizational structure, and financing.

- Environmental auditing is one of the most important **tools** for evaluating environmental performance, forming the foundation for improvement.
- Its success depends on three key elements:
 - I. Commitment and support from management and staff;
 - II. A systematic process with clearly defined steps;
 - III. Qualified auditors with the necessary skills and credentials.

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