An Introduction to the Concept of Environmental Audit: Indian Context

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Abstract—Phenomenal growth of population and industry exploits the environment in varied ways. Consequently, the greenhouse effect and other allied problems are threatening mankind the world over. Protection and up gradation of environment have, therefore, become the prime necessity all of mankind for the sustainable development of environment. People in humbler walks of life including the corporate citizens have become aware of the impacts of environmental pollution. Governments of various nations have entered the picture with laws and regulations to correct and cure the effects of present and past violations of environmental practices and to obstruct future violations of good environmental disciplines. In this perspective, environmental audit directs verification and validation to ensure that the various environmental laws are complied with and adequate care has been taken towards environmental protection and preservation. The discipline of environmental audit has experienced expressive development throughout the world. It examines the positive and negative effects of the activities of an enterprise on environment and provides an in-depth study of the company processes any growth in realizing long-term strategic goals. Environmental audit helps corporations assess its achievement, correct deficiencies and reduce risk to the health and improving safety. Environmental audit being a strong management tool should be administered by industry for its own self-assessment. Developed countries all over the globe have gone ahead in environment quantification; but unfortunately, there is a lack of awareness about pollution and environmental hazards among the common people in India. In the light of this situation, the conceptual analysis of this study is concerned with the rationale of environmental audit on the industry and the society as a whole and highlights the emerging dimensions in the auditing theory and practices. A modest attempt has been made to throw light on the recent development in environmental audit in developing nations like India and the problems associated with the implementation of environmental audit. The conceptual study also reflects that despite different obstacles, environmental audit is becoming an increasing aspect within the corporate sectors in India and lastly, conclusions along with suggestions have been offered to improve the current scenario.

Keywords—Environmental audit, environmental hazards, environmental laws, environmental protection, environmental preservation.

I. PROLOGUE

INDIA is one of the few countries in the developing world that has comprehensive regulations belonging to the environment. Administration of pollution controls has been dreary due to lack of reliable information on the violation and implementation of these regulations. People from all walks of

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life, including corporate citizens are becoming aware of the impacts of environmental pollution or degradation. Various laws and regulations have been enacted by the governments all over the world to correct and cure the effects of past violations of environmental practices and to prevent future violations of good environmental disciplines. In such cases, accounting being a social science cannot flourish in a vacuum; rather, it has been adorned with various environmental guidelines and standards in different spheres of the globe. Environmental accounting as a strategic weapon may help companies thrive to obtain reputation. Keeping an efficient environmental accounting system needs two major areas, namely, valuation and quantification of environmental issues and control through proper environmental auditing. With the passage of time, the new accounting systems develop to accomplish the requirements of the changing times, and similarly, the auditing practices of examining environmental accounts also developed. The need for auditing has appeared to examine the correctness of accounts prepared by others and to see that the profit and loss account exhibits true and fair results of the year's activities and the balance sheet shows a true and fair view of the financial position of business.

The natural resources of any country affect the business activities. For the last few decades, it has been widely believed that the revenues and costs of natural resources, their estimates, depreciation and values must be registered in the books of accounts and, therefore, necessity has been felt for environmental audit.

II. OBJECTIVE & METHODOLOGY

This paper is basically based on concepts; as such the opinions expressed in this paper are the manifestation of the author's own opinion, thought, etc. and also the opinions, thoughts, etc. of some reputed authors. This paper is concerned with certain fundamental and theoretical aspects of the concept of "Environmental Audit". It also makes an attempt to examine the importance of environmental audit today. This paper does not search for new solutions to the underlying problems facing environmental audit; it may, however, throw some light on the theoretical development of environmental audit research. The study is expected to provide penetration and a basis from which anybody can test their current practices and seek to feed them in terms of providing a better knowledge of interaction between the corporate sector and the natural environment. More attention is placed on environmental audit in India, as this is supposed to be the dire need of the day.

III. ENVIRONMENTAL AUDIT – WHAT IS IT?

Audit acquires information and provides additional discipline on the internal process to validate proper functioning of the distinct system. The concept of environmental audit has experienced expressive growth and development over the decade globally. Environmental audit should include not only all the constituents of what goes on by the brand name, but also the impacts created thereupon and elimination or minimization of any deleterious consequences. Industry can clearly benefit from a critical self examination of the processes and technologies it employs, to observe in which areas there is opportunity for improvement and surmise the dormant problem areas, particularly pollution and human health. Environmental audit is a very clear part of that selfanalysis. Environmental audit investigates the positive and negative consequences of the activities of an enterprise on environment. Environmental audit evaluates environmental performance and provides an in-depth study of the company processes and any progress in realizing long-term strategic goals. It is a vast area under the authority of companies, stakeholders, environmental protection organizations and departments of law and justice at all levels of government in all the countries- underdeveloped, developing and developed. Though third world governments do not exert much of the regulations as far as environmental regulations and reporting are concerned, the urge to introduce environmental accounting and audit standards is being felt in most of these countries. Environmental audit is fundamentally a management tool comprising a methodical, documented, periodic and objective evaluation of environmental organization, management and equipment in order to know how well they are performing to safeguard the environment with the help of facilitating management control of environmental practices and assuring compliance with company policies, which would include meeting regulatory requirements. Environmental auditing is a discipline which has its origin in the United States and its importance is slowly increasing the world over. Both private sector companies and public sector companies have become aware of the environmental management, health and safety risks. In the absence of accepted practices of environmental auditing, different companies have been working on environmental audit in different directions and perspectives. In simple words, environmental audit is the examination of the correctness of environment accounts. In broad sense, environmental audit is the examination of accounts of revenues and costs of environmental and natural resources, their estimate, depreciation and values recorded in the books of account. It is a series of activities undertaken on the initiative of an organization's management to evaluate its environmental performance [1]. It is a managerial tool to facilitate the management control over environment practice and assessing compliance with company policies which would include satisfying regulatory requirements.

IV. ENVIRONMENTAL AUDIT – FACTORS

Environmental audit helps organizations assess their performance, control deficiencies and reduce risk to the health and improving safely [2]. The important factors influencing environmental audit are:

- 1. Increasing pressure of various regulations and acts on the company and the related cost.
- 2. Corporate environment, health and safety pressures.
- 3. Threat of legal and financial liabilities under various acts.
- Increasing public and media awareness towards corporate matters.
- 5. Assurance by senior managers relating to sufficiency of corporate environmental performance.
- 6. Ensuring improved safety to employees due to awareness of staffs, workers, unions, etc.

V. ENVIRONMENTAL AUDIT – OBJECTIVES

The aim of environmental auditing is to improve environmental performance, evaluate the effectiveness of environmental management systems, help communicate effective solutions to common environmental issues and bring to light the current and proposed regulatory requirements of managers [3]. The objectives of environmental audit may be stated as follows:

- Evaluation of the competency and capacity of resource utilization.
- 2. Identification of areas of risk, environmental liabilities.
- 3. Defect in management systems.
- 4. Problems in complying with regulatory requirement.
- 5. Ensuring the control on waste generation.
- 6. Defining the environmental objectives in specific terms and if not, identification of objectives.
- 7. Specifying in quantitative terms and formulating each responsibility centre.
- 8. Listing clearing the tasks and obligations.
- 9. Existence of clear-cut policy directions in various areas of environmental management.
- 10. Consideration of all regulations, acts etc. in specifying the objectives and guidelines and existence of prompt, adequate and methodical reporting procedures and actual operating procedure.
- 11. Identification and documentation of the environmental compliance status.
- 12. Providing assurance to top management.
- 13. Increasing the overall level of environmental awareness.
- 14. Protecting the company from statutory liabilities.
- 15. Assisting facility management in improving environmental performance.
- 16. Developing a basis for utilizing environmental resources and overall environmental control systems.
- 17. Formulating short and long-range plans for environmental management.
- 18. Adequacy in a system actually in operation for formulation, scrutiny, approval, implementation and review of the plans.
- 19. Having a well-designed formal organizational framework

covering the persons in charge of environmental management and prescribing the line of authority and vertical and horizontal relationships.

20. Seeking opinion of the management, staffs, workers, suppliers, business associates, customers, green groups and the general public about the state of affairs of the particular company.

A few other objectives of environmental audit are as follows:

- 1. To see that the natural resources are rightly utilized.
- 2. To control the costs incurred for procurement of the natural resources and to ensure that their clarifications have been properly done.
- 3. To see that natural resources have been properly shown in the nation's balance sheet, as they are the nation's precious assets.
- 4. To see that proper steps have been taken to control or to hinder adverse effects like pollution.
- 5. To ensure that the natural resources are utilized for industrial development and for national advance.
- 6. To see that proper steps have been taken for maintaining health and prosperity of the community, and also for removal of harmful wastes and social risks. In India, certain laws have been enacted for pollution control to preserve the environment. Environmental audit is needed to discern that such laws have been followed.

VI. ENVIRONMENTAL AUDIT – ITS ADVANTAGES

The following are the important advantages of environmental audit:

- 1. Ensuring cost-effective compliance with statutes, regulations and company policies.
- 2. Saving cost from improved practices.
- 3. Preparation of a data-base relating production to pollution potential of all facilities.
- 4. Development of social repute of the organization.
- Developing confidence of customers and society towards output.
- 6. Developing labor co-operation and confidence.
- 7. Developing overall awareness, identifying problems and areas of risk.
- Encouraging the use of low waste technologies and prudent use of resources and identifying hazards and risks

Unfortunately still, there is a lack of awareness about pollution and environmental hazards among the masses in India. Even after the calamitous incident of the Bhopal Tragedy in 1984, many companies are still disinclined to realize this importance of environmental management. The local populace often gets estranged in its own land and develops xenophobia owing to the setting up of an industry. Social audit may evaluate the impact of an industry in the local populace in their smooth transformation from the agrarian environment into industrial environment.

VII. ENVIRONMENTAL AUDIT – ITS IMPORTANCE

A suitable environmental audit program with a combination

of internal and external auditors is a means for minimization of organizational environmental risk. This audit activity can be a part of self-regulation. Audit ratifies the justness of the information disclosed by corporate. Both the financial audit and environmental audit are done internally and externally in most of the same areas but for different purposes. The audit teams must be qualified for the operation. In addition to the personnel with audit experience and ability, the teams should consist of qualified environmental engineers as advisors and legal expertise, as and when required. The audit teams should have independence and objectivity, and each member of the team should be free from any organizational constraints and should have the power to directly report to top management. The task of audit should be performed in a systematic and well-organized manner. It should be planned and audit program should be a logical guide based on comprehensive preliminary survey progress. The audits should be well documented and all elements of the audit reports should be well supported in the working papers. The internal audit operations should cover the areas like compliance audits, environmental management system audits, issue audits, preacquisition studies, insurance audits, etc. Attempts by the external agency to force the conduct of internal audits of environmental operations have had a difficult time even in the developed countries. External auditors should be familiar with the environmental aspects of reviewing assets and liabilities to determine exact valuation and not to reduce the carrying value of the assets and lastly to record properly the expending and capitalization of remedial costs. The external auditors will also determine that financial statements reflect actual the liabilities of the organization, and also, either by themselves or with environmental experts will determine that the organization is complying with governmental regulations in the discharge of pollutants, the disposition of pollution and waste and the detoxification of contaminated assets. The external auditor should also determine that proper exposition in compliance with legal regulations has been made.

For small and medium industry, the task of audit may be performed so informally that no one, including the manager, feels the existence of the audit. However, for large industries, it has to be well-planned. The internal audit should be more frequently supplemented by random audit through external agencies which help identify the training needs of audit staff. The domains of audit vary depending on the nature of industry. Different types of audit should be conducted by distinct groups to maintain absolute objectivity. The report should be supported by documentary evidence of the site management and should include action plan for corrective measures with specific responsibilities and deadlines. A specific questionnaire may be prepared for stability and follow-up action. A follow-up action plan should be drawn up by the site officials in consultation with the auditor for implementing the recommendations of the audit and minimizing deficiencies or shortcomings in the system. Difference of opinion, if any, could be sorted out through discussion with the top management. The strategy for conducting an environmental audit is much like the strategy

for conducting ordinary audits with the exception that the elements of the strategy are unique to the environmental area. Both internal and external audit functions should be well organized and the audit staff must be knowledgeable as to the normal audit operations. The elements of the strategic approach usually include objective, personnel, audit scope, documentation, plans, audit program, scheduling, cost estimates, criteria, plans for review, report, media, etc. Both the internal and external auditors should review internal controls relating to environmental operations. Their review should focus on control procedures over the generation, transfer, elimination and clear-up of toxic substances. These internal control audit procedures should extend themselves to the consideration and creation of liabilities for potential costs or for costs incurred in clean-up and other remedial measures. Both sets of auditors should hold discussions with management, and finally, with legal counsel-internal and external, regarding these controls and potential litigation, claims and assessments related to environmental activities and situations, legal fees, etc. The environmental risks and exposures to which internal auditors are subject may be enumerated. A method of establishing the priority of risks would be to assign as index for materiality and an index for probability. The combination of these indexes can build a priority measure. However, it should be admitted that risks would require mandatory prompt attention. The concept of environmental audit has wide scope covering material audit, energy audit, waste audit, health and safety audit, environmental quality audit, waste disposal audit, engineering audit, etc. and the environmental audit approach has different distinct processes e.g. pre-audit activities, planning and preparation of environmental approach, on-site activities, postaudit activities, etc.

VIII. INDIAN PERSPECTIVE

Protection and up-gradation of environment have now become key problems and have drawn the attention of varied parties like planners, economists and accountants globally. Owing to the phenomenal growth of population and industry, environments are being exploited in many ways in India. Various nations of the world have framed rules and regulations to protect the environment. Developed nations of the world have gone ahead in such environment quantification. Corporate sectors of the world, particularly India, should develop the concept of environmental accounting and auditing. Environmental accounting is an attempt to identify and bring to light the resources consumed and the costs rendered reciprocally to the environment by a business house. Environmental audit covers a multi-disciplinary services, investigation, assessments, and methodologies. Such audit improves environmental performance, effectiveness of environmental management systems. In most of developed nations, a variety of environmental auditing practices have enjoyed the attention of corporate sectors, public utilities and governmental organizations. In India, after the tragic accident of Union Carbide, Bhopal, the country's corporate sectors have become more aware. Industry has now realized that only

sound environmental management ensures resource saving, and hence, helps cut down production cost. Recycling and reuse of waste have led to increase the savings in many industries, along with the latest technology and better productivity.

IX. LEGAL PROVISIONS

In India, various pollution control legislations have been enacted to prevent and control pollution. The main aim of these legislations is to administer the industries with reference to its environmental impact. As a consequence, industries are required to take necessary steps to prevent environmental deterioration. Further, they are to submit an environment statement to the State Pollution Control Board. The main aims of such requirement are:

- i. To create a data bank and compare the data of similar industries.
- ii. To achieve resource conservation including energy, water and raw materials for different industries.

In India, environmental audit and auditors are not satisfactory; however, in the last few decades, the importance of this field is increasing. This audit is now being carried out by many companies, but the scheme of submitting an environmental statement every year could not be complied effectively by all industries due to reasons such as a lack of interest on the industry side and a lack of manpower and infrastructural facilities, etc. Consequently, non-compliance of legal provisions has not been proved to be beneficial to the industry. The government has created the Central and State Pollution Control Boards and Laboratories under the various laws and regulations. No industry can be established without taking prior environmental clearance. The Boards have been entrusted to collect samples, inspect plants and prevent pollution control. The submission of a statement on environmental pollution to the Pollution Control Board remains mostly on paper.

Amongst Indian companies, TISCO is pioneer in leading such audit. However, we also find examples of the Bhopal Gas Tragedy. Many industries in India are causing massive environmental pollution. The toxic wastes of some units are responsible for the death of fish in the Indian Sea, and textile, chemical and sugar units are emitting chemicals and other effluents in open spaces. Developed countries have imposed tight environment related legislations in their countries. Many units are shifting their production base and chemical plants to developing countries to evade the sever requirements. Developing countries have insufficient monitoring and regulating agencies. The general public is also not united and vocal. Multinational tobacco companies are facing legal problems in developed countries, and as such, are shifting their focus on developing countries like India. Of late, we find the courts also after taking a pro-activist stand in cases related to environmental pollution. In the recent past, Gujarat State experienced rapid industrialization. With industrialization there has been inseparable environmental degradation in the state. There was a strong feeling that the pace of environmental degradation can be reduced by adopting

appropriate Environmental Management System (EMS) to reduce the discharge or emission of pollutants. In Gujarat, measures to reduce pollutants have not been taken in proportion with the rapid industrialization causing environmental pollution. The year 1995 witnessed the reaction of society to the problem created by the industrial pollution when people approached the Honorable High Court of Gujarat to get justice. This period witnessed the closure of about 756 industries in Ahmedabad due to inadequate Environmental Management System (EMS) and failure to comply with the statutory requirements for disposal of the wastages. This has been popularly referred to as "Judicial Activism" [4].

X. ENVIRONMENTAL AUDIT SCHEME

The Honorable High Court of Gujrat first devised the Environmental Audit Scheme (EAS) in India to direct the Gujrat Pollution Control Board (GPCB) to implement the scheme for systematic, objective, documental and periodic evaluation of (EMS) with the aim of:

- 1. Waste reduction and prevention.
- 2. Facilitating control of environmental practices by company's management.
- 3. Placing environmental information in the public domain.
- 4. Assessing compliance with regulatory requirements.

EMS is a management tool to safeguard the environment [5]. Moreover, there should be a system where technical professionals would frame a link between the individual industries and the state PCB, as well as other public authorities, industrial associations etc. In order to improve the efficiency of the task, a Data Bank is to be created at the state and national levels with the help of a credit scheme of all industries. The Scheme for Environmental Audit Industries is to be implemented by the respective PCB all over India. EAS should consist of:

- 1. State Pollution Control Board.
- 2. Internal Auditor.
- 3. External Auditor.

In India, the public awareness towards environmental issues has grown tremendously. This is evident from the contemporary regulatory regime which is in enforcement for business by the Central and State Government of India. A number of legislations have been executed since the midseventies for environmental protection and management. The Government of India has also taken initiative to direct every company to disclose briefly in the Report environmental laws followed by it, measures taken or proposed to be taken towards adaption of modern technology for prevention of pollution, waste minimization, waste recycling and utilization, investment on environmental protection and effect of these measures on conservation like water etc. Auditor should also be held responsible for misfeasance of law. Now, every industrial unit is required to submit the Environmental Audit Report (now known as Environmental Statement) to the concerned State Pollution Control Board (SPCB) every year. In the environmental statement the concerned industry is required to provide information on:

1. Water and raw material consumption.

- 2. Pollution generated.
- 3. Nature of hazardous wastes and solid wastes and disposal practices.
- Impact of pollution control measures on conservation of natural resources.

Environmental auditing is a forcible management tool and should be followed by industry for its own self-assessment. Environmental audit is a powerful complex, amorphous and rapidly developing area and possible future environmental regulations and serves for all organizations, as a first step towards environmental sensibility and a regular and essential part of environmental management. It is a systematic examination of performance to ensure compliance with requirements during the operational phase of industrial activity including full management commitment, audit team objectivity, professional competence, well defined and methodical approach, written reports, quality assurance, follow-up, etc. Actually, environmental audit could be part of a program to enhance the corporate image of a company, and to create business advantages and maximize its profitability.

XI. SHOULD ENVIRONMENTAL AUDIT BE MANDATORY?

Maintaining environmental accounting is a national and international level task, according to which, the revenues and costs of natural resources are recorded in books of accounts. It is debatable whether environmental auditing is to be made mandatory for industrial development and national progress and social responsibility or in other words, for the sustainable development of a country. A strong opinion is being built up in favor of making environmental audit mandatory recognizing its importance globally. In India, Gujarat State is the first state to make environmental audit compulsory; as a result the manufacturing process will become safe, the environmental hazards and waste generation will be conserved. We hope that the other states in the country will follow the commendable step of Gujarat Government of making the environmental audit mandatory. In most of the developed nations, a variety of environmental auditing practices have enjoyed the attention of companies, public utilities and governmental organizations. In India, corporate sectors are becoming aware. In the last few decades, industry has realized that the sound environmental management ensures resource saving and hence helps cut down production cost. Recycling and reuse of waste have led to an increase in savings in many industries with the latest technology and many industries get more production and better productivity. One great advantage of a regular audit is that it provides the company with a greater overall awareness of its workers and processes, identifying compliance problems and areas of risk. Pinpointing both the strengths and weaknesses encourages continual improvement. In this regard, environmental accounting encourages the uses of low waste technologies, product utilization of resources and identification of potential hazards and risks.

The requirement of environmental audit will surely vary from one plant to another and there is no necessary single approach. In principle, such audits are carried out by a small, qualified, independent team of people who would assess the risk a particular site, basically to check on the environmental management and performance of the plant in question. Since this is a process of self-analysis for the industry, the industries themselves can contact the professionals. Environmental audit software can also assist industry in performing this task.

XII. ENVIRONMENTAL AUDIT PRACTICE

The development of the Environmental Audit can be traced back to the early 1970's. ISO-14001 is a methodology for environmental management. It provides the necessary requirements and recommendations for any organization to develop and implement a cost effective system of management with the help of environmental audit. ISO-14001 is a concerted international effort to improve the quality of life with minimum effect on the environment to transform with minimum alteration and distortion. The Ministry of Environment of Forests, Government of India first notified and recognized the importance of environmental audit procedure for environmental accounting etc. in India under the Environment (Protection) Act, 1986. The analysis of the data and necessary suggestions for improvement in environment and efficiency is not outlined in environmental statement or environmental audit. Most of developed countries have already taken up environmental auditing for their corporate sectors; while India is yet to popularize environmental auditing in its corporate sectors. The audit is carried out by a team of qualified and experienced personnel who are not directly involved in the day-to-day affairs of the company. They should, however, be well-versed with various processes of the industry which would thereby help management to an unbiased evaluation and diffused information. Owing to vast diversity, the task of environmental audit is indeed, herculean in a country like India. It would, therefore, be prudent to contemplate setting up of an Institute of Chartered Environmentalist (ICE) on the lines of Institute of Chartered Accountant in India. The members of ICE could encounter challenges of the 21st century in the liberalized Indian economy and Industry.

XIII. AUTHENTIC ENVIRONMENTAL REPORTS

Industry's affirmation of commitment to environmental protection can only be established to be true when industry's published environmental reporting data is supported by subjecting it to independent attestation. The Annual Financial Statements of companies have a wider readership than any other publication or document, in as much as it is read by the considerable part of society. Being a public document under the statute, it is easily available and accessible to all. The Annual Reports of the Indian Corporate Industry usually mention Environmental aspects reflecting the end of the top management to safeguard the environment. This could further be made clear by incorporating Environmental Audit Report in the Annual Report for the information of shareholders and common people. The efficient and honest reporting will increase the reputation of the company and the value of shares.

The annual accounts being legally required to be compiled and published at regular intervals have inevitably to be made out in the prescribed format to include disclosure and are submitted to various parties like authorities, shareholders and institutions on pain of penalties and prosecution for nonsubmission. It makes the public aware of the environmental policies of the company and its risk and liabilities. Such type of audit not only helps the industry but also helps the nation develop a sound scientific data base for decision on achievable technologies and standardize the regulatory requirements accordingly. Environmental audit would gradually pave way for adopting total quality management systems for the industry and similar to the quality control would not add to cost of the product but to value of the product and company. Everything that needed to be done is to incorporate environmental data in the disclosure requirements of the Company's Act which lays down the specific items which have to be mandatorily disclosed in the annual financial statements and also to incorporate reporting thereon by extending the scope of the Manufacturing and Other Companies (Auditor's Report) Order by including specific certification thereof. Any reservation, qualification or adverse remark by the auditors compels the Board of Directors to offer the fullest information and explanations under the provisions of the Company's Act. The preparation of environmental statement has become obligatory for all Indian industries since 1993. This has made environmental audit indispensable for a proper statement and full meaningful disclosures in regard to the environment and recommendations for a long-term pollution-free operation.

XIV. CONCLUDING OBSERVATION & SUGGESTIONS

Business and industries cannot remain a silent spectator to all these developments. Though in under-developed and developing countries environmental degradation is largely due to population explosion and poverty, in developed countries, business and industries are the major pollutants of the environment. The Environmental Audit Scheme may have its non significance and limitations. The ultimate aim of the audit scheme will be achieved only when the audit scheme is "willingly" accepted by the industry. In the cases of unwilling industries, they must be forced to comply with this provision in a phased manner. The implementation of environmental audit is expected to bring about a change in the managerial attitude and thinking. There is no doubt that many difficulties are associated with environmental audit but there are also evidences that many corporations and other organizations throughout the world have honestly attempted to pick-up such new challenges and threats. Economic activity need not necessarily be guided by "profit motive" alone but it should include also "quality of life" and "ecological balance". Environmental audit belongs to certain specific characteristics. The approach is characterized by a well-defined and planned structure, careful, methodological investigations and strong emphasis on reporting to all appropriate management. These characteristics form the basis for the reputation that the environmental audit has earned for providing reliable and useful information to management in all settings where it is

practiced around the world. Now, in order to popularize the environment audit in India, and to serve as a management tool for effective corporate management, it is essential to make environmental reporting by Indian Corporate Sector mandatory. Companies are finding that good corporate citizenship sells. To attain environmental sustainability, modernization of the intellectual application is required, and as a result, companies wanting to survive in the long-run should be giving ongoing thought to different environmental valuation techniques and accounting principles. At the same time to achieve efficiency, the principles of an environmental audit may be executed in these companies. The objectives of corporations should be productivity, efficiency, quality and social justice in the modern era. Management has to formulate a goals program and the priority of the goals for an environmental audit. An environmental audit report should be part of corporate annual reporting, and should highlight different expenses incurred by the enterprise for improvement of environmental problems. Such a report is necessary for the betterment of the ecological balance; the environmental audit, being an efficacious instrument for solving environmental issues, has to play a vital role in the development of a better green environment. Under the new socio-economic environment, sustainable development is the only solution for this beautiful green planet to overcome environmental problems and to maintain ecological balance for a better future. A few more suggestions are offered below:

- 1. A periodic check at certain interval in regard to prevailing conditions and the improvements effected vis-à-vis the investments made and planned for.
- Environmental reporting by Indian Corporate Sectors should be made mandatory. The proposal of requiring disclosure about the particulars of compliance with environmental laws, etc. should be materialized; it should be published as a part of the Annual Reports of Companies.
- 3. Considering the complexities and expertise involved in an environmental audit, questions arise regarding the involvement of accountants and the accounting profession in such audit. The audit team should comprise of professionals drawn from different areas. An institution of environmental auditors may be founded by professionally interested and adequately experienced in the techniques employed in an environmental audit.
- 4. The communication gap between the public and industries can be minimized by the publishing of an environmental audit report. The wrong notion held by the public that industries are major pollutants can be minimized if industries are transparent in this regard.
- Efficiency or inefficiency of the various departments of a unit can also be judged by the environmental audit and incentives should be provided to efficient departments and penalties given to the inefficient ones.
- In major polluting industries, environmental audit should be made compulsory and phase-wise, this should be extended to other industries, if not annually, at least occasionally.

- 7. Environmental audit should be included in the curricular for Production Management, Industrial Management, and Environmental Engineering, and also in Commerce.
- 8. The savings in money for the measures taken on the basis of environmental audit report should be invested for better environmental management.
- Environmental statement should be submitted to the respective state PCB's and these should also be made available for the public.
- 10. Various companies, institutions, municipal corporations, state governments, central government etc. are trying their best to maintain the environment intact. Careful attention is of extreme necessity, so that efforts at the national and corporate levels do not run counter to each other.

The Indian tradition of conservation of natural resources can be traced back to prehistoric times. The theme of conservation pervades Indian culture, art and its entire religions. In modern times, industrialization has posed a threat to the quality of environment through effluents discharged from industries. Harmonious development accompanied by environmental preservation is the ultimate objective of the Ministry of Environment and Forests, Government of India. In addition to the measures taken at the national level, people, now, at large have also become conscious of the healthy environment. More and more efforts will create greater awareness in this regard.

From the auditing and reporting aspects of environmental protection, some companies in India can make policy statements in their annual financial statements. Environmental audit is a strong management tool and should be used by industry for its own self-assessment. It also incites the industry to resort to transparent environmental auditing. The neglect of the responsibility of industry could precipitate public action since there is an increasing awareness among the public to have a clean environment.

It is said that a witness cannot be more active than a plaintiff. In the case of the environmental audit, society may demand, the government may exert pressure, academic and research institutions may assist, and professionals may be willing to serve, but the environmental audit may only go into practice when corporate management appreciates its role as a management tool. It is heartening to note that industry is responding to the governmental guidelines on environment. Increasing awareness for the environment should be translated into reality by the practicing of the environmental audit by the Indian corporate sectors, and thereby, making the next millennium a green millennium. Experience has proven that industrial output could be increased several times with reduced waste. The key to sustainable growth, therefore, is not to produce less, but to produce efficiently with the help of adopting a proper environmental accounting system accompanied by environmental auditing system. It is also suggested that the defaulting industries may be disconnected with water and electricity facilities as the first phase of action. To attain environmental sustainability, modernization of the intellectual application is needed, and as a result, companies seeking to survive in the long run should be giving more

thought to different environmental valuation techniques and accounting principles. At the same time, to achieve efficiency, the principles of an environmental audit may be executed in these companies.

India, as a country, is not better off. It should not adopt western complacence. Rather, an interdisciplinary approach with environmental audit professionals is required to be built-up to supervise and report the environmental matters authentically by honoring the preserver and vilifying the exploiter.

Let us come to fulfill the universal motto, "Health and Wealth for All".

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