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Environmental accounting at corporate level in India

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ABSTRACT

Environment is a very wide term which includes everything in all its manifest forms, on the earth, beneath the earth and above the earth. The natural resources of a nation affect the business activity of every enterprise. Similarly, the functioning of an enterprise has some favorable and some adverse effects on the environment. Hence, there is a need for maintaining accounts of the effects of the activities of a business entity on the environment and on natural resources. Environmental accounting is a faithful attempt to identify and bring to light the resources exhausted and cost rendered reciprocally to the environment by a business corporation. It is henceforth concerned with recording environmental elements. Environmental accounting is still at an early stage of evolution and it is being groomed under the voluntary leadership of a variety of enterprises around the world.

During the period of 1981-1990, the emphasis in the accounting literature shifted from 'social responsibility accounting' to 'environmental accounting', reflecting the strong interest in the latter. From 1990-todate, the emphasis on environmental accounting continues unabated and engages the interest of both academic and practicing accountants, hence accounting and disclosure of environmental matters have been rapidly emerging as an important dimension of corporate reporting. This paper describes the evolution, nature, significance, areas and methodology of environmental accounting and also examines general issues concerned with it. This paper throws light on how corporate are responding to pressures to keep accounting records of the impact that their productive process have on the environment.

Introduction

Responsibility towards environment has become one of the most crucial areas of social responsibility. Recent years have witnessed rising concern for environmental degradation. It is a worldwide phenomenon. It spoils human health, reduces economic productivity and leads to loss of amenities. A careful assessment of the benefits and cost of environmental damages is necessary to find the tolerance limit of environmental degradation and the required level of development. But unless the proper accounting work is done either by the individual firm or by the Government itself, it cannot be determined whether both have been fulfilling their responsibilities towards the environment. Therefore, the need of environmental accounting has emerged.

Environmental Accounting – A Conceptual Analysis

Environmental accounting is a process of economically, recognizing the exhaustion of natural goods and services, analyzing the benefits rendered by the environment to a corporate citizen and the cost of benefits to the environment by the corporate citizen. It is broad based term that refers to the incorporation of environmental cost and information into a variety of accounting practices. It is an inclusive field of accounting. It provides reports for both internal uses, generating environmental information to help make management decisions on pricing, controlling over it and capital budgeting and external use, disclosing environmental information of interest to the public and to the financial community.

Need / Significance of Environmental Accounting at Corporate Level

The significance of environmental accounting arises due to the following causes:

a. Meeting regulatory requirements or exceeding that expectation.

b. Cleaning up pollution that already exists and properly disposing of the hazardous material.

c. Disclosing to the investors both potential & current, the amount and nature of the preventative measures taken by the management (disclosure required if the estimated liability is greater than a certain percent say 10 per cent of the company's net worth).

d. Operating in a way that those environmental damages does not occur.

e. Promoting a company having wide environmental attitude.

f. Control over operational & material efficiency gains driven by the competitive global market.

g. Control over increases in costs for raw materials, waste management and potential liability.

Evolution of Environmental Accounting

Environmental accounting has proceeded through a period of uncertain status. Mathews

(1997) describes the development in four phases:

1970's - Descriptive with normative models of conduct;

1981–1990 - Debate on the role of accounting in disclosing information on environmental activities;

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1991–1995 - Maturing of environmental accounting, in making environmental disclosures, andin launching environmental auditing; now the role of environmental accounting is view edas measuring environmental performance exceeding regulatory standards. This role was initiated in about 1996.

Legal Status of Corporate Accounting and Reporting in India

The various laws relevant to environmental protection in India are as under:

a. Directly related to environment protection:

i. Water (Prevention and Control of Pollution) Act, 1974.
ii. Water (Prevention and Control of Pollution) Cess Act, 1977.
iii. The Air (Prevention and Control of Pollution) Act, 1981.
iv. The Forest (Conservation) Act, 1980.
v. The Environment (Protection) Act, 1986.

b. Indirectly related to environment protection:

vi. Constitutional provision (Article 51A).
vii. The Factories Act, 1948
viii. Hazardous Waste (Management & Handling) Rules, 1989.
ix. Public Liability Insurance Act, 1991.
x. Motor Vehicle Act, 1991.
xi. Indian Fisheries Act, 1987.
xii. Merchant of Shipping Act, 1958.
xiii. Indian Port Act.
xiv. Indian Penal Code.
xv. The National Environment Tribunal Act, 1995

Areas of Environmental Accounting

Environmental accounting may be understood from two broad perspectives:

1. National level environmental accounting – It indicates modifying the national income accounts to include environment accounting in the sense that it does not represent corporate environmental accounting nor does it include social cost-benefit analysis of projects affecting environment or disaggregated regional or local data about environment.

2. Corporate environmental accounting – It denotes voluntary and involuntary disclosures by corporate entities on the impact of its activities on environment.

Forms of Environmental Accounting

The various forms of environmental accounting are:

Environmental Management Accounting (EMA)

Management accounting with a particular focus on material and energy flow information and environmental cost information.

Environmental Financial Accounting (EFA)

Financial Accounting with a particular focus on reporting environmental liability costs and other significant environmental costs.

Environmental National Accounting (ENA)

National Level Accounting with a particular focus on natural resources stocks & flows, environmental costs & externality costs etc.

Methodology of environmental accounting

A corporate citizen utilizes both economic and natural (free) resources. Conventional accounting incorporates economic resources and ignores natural resources available free of cost. Environmental accounting is a rational attempt to value natural resources before incorporation for ascertaining the real profitability of the corporate citizen. In other words, environmental accounting envisages cost-benefit analysis from the point of view of both the corporate citizen and the environment.

Environmental budget

Environmental budget is allocation for environmental activities. It is the responsibility of the management to check up whether such amounts are spent on such activities.

Profit & Loss Account

All revenue expenses incurred for the protection of environment have to be debited to the Profit and Loss account.

Balance sheet

All natural resources exhausted by the corporate entity are to be shown as asset in the Environmental Balance Sheet and the corporate entity is liable to the society for the effective utilization of natural resources without any adverse affect to the society. All capital expenditure incurred by the organization should be shown in the Balance sheet.

Cost Benefit Analysis

Most common benefits derived by the corporate citizen from the environment are: air, water, sunlight, sand, clay, oil, minerals, coal and biological resources like plants, animals, microbes etc. On the other hand major activities of corporate citizen which cost the environment are: ground water loss, destruction of forest, soil erosion, air pollution, water pollution, loss of ozone layer, acid rain etc. Environmental impacts arising from indifferent attitude of corporate citizen can be like:

ii. extreme climatic condition
iii. famine and epidemics,
iv. flood and drought,
v. natural fire incident,
vi. Human health hazard etc.

Acts of corporate citizens viz.,

i. river purification system,
ii. social forestry,
iii. greening barren land,
iv. installation of effluent treatment plant,
v. Setting up of system of dust extraction etc. benefit the environment.

Major issues related to Environmental Accounting

Major accounting issues relate to the following:

1. There is no standard accounting method.
2. Comparison between two firms or countries is not possible if method of accounting is different which is quite obvious.
3. Input for EA is not easily available because costs and benefits relevant to the environment are not easily measurable.
4. Many business and government organizations even large and well managed ones do not adequately track the use of energy and material or the cost of inefficient material use, waste management and related issue. Many organizations therefore significantly underestimate the cost of poor environment performance to their organization.
5. It mainly considers the cost internal to the company and excludes cost to the society.
6. It is a long term process hence drawing conclusion with its help is not easy.
7. EA cannot work independently; therefore it should be integrated with financial accounting which is not easy.

Corporate_environmental reporting in India

The Indian corporate structure has brought a revolutionary change in the economic scenario of the country in the last two decades. The present growths of the economy and changing living standard of the people have been possible due to a substantial contribution from the rising corporate activities. The corporate giants have taken various steps for the overall growth of the corporate at the same time contributing substantial return to the stakeholders and to the management. The managements looking at the various requirements of different parties, have taken many investment decisions, but have not been serious enough about the environmental losses, costs and liabilities. At the end of the year, accounting has rendered the actual service of commun9icating and reporting the end results to give a clear picture of the utilization of all the resources, through mandatory accounting statements. But, in near past, many environmental hazards have been confronted in several situations due to lack of proper attention to the environmental aspects, which have cast many adverse effects on the social and corporate lives; may it be Bhopal gas leakage tragedy, polluting Ganges, ash pond leakage of Nalco and so on. In environmental risks and their protection through identification, measurement and allocation investments in the environmental losses, costs and liabilities.

An evaluation of different literatures and findings of research studies reveal that in Indian perspective there is absence of physical form of accounting or system for recognition of environmental costs and liabilities and guidelines for costing treatments. Voluntary disclosure is simply a statement in annual reports about environmental protection, but do not specify any norms of guidelines of specific provisions impending environmental liabilities or losses. There is also no requirement by the Indian Companies Act about such reporting requirements covering the environment cost and liabilities. Even Accounting Standard Committees at national and international levels have not formulated accounting standards for their disclosures. However, there is limited disclosure requirement on environmental issues by listed companies as required by Stock Exchanges. Even the securities and Exchange Board of India (SEBI) has not issued any specific guidelines about the investors' protection measures for the environmental losses and liabilities. Even though, today companies are concerned with the environment and making various provisions to safeguard the environment losses and liabilities by different provisions, but there is no systematic reporting, their careful evaluation and incorporation in the final accounts. Now, this is high time for all the regulating bodies, accounting associations and the Government, to be careful enough and to seriously think over different aspects and make provisions of environmental losses and making their proper disclosures. Attempts should be made on identification of environmental costs and liabilities, their valuation and measurement, introduction of new costing, new appraisal system, appraisal of relevant environmental factors and other concealed overheads and formulation of long environmental accounting goals.

In India level of environmental related disclosure in the corporate annual reports, both financial and non-financial is not at encouraging level. Neither the company law nor the accounting standards or guidelines issued by the ICAI prescribes disclosure norms for the environment related matters in the corporate financial statements. Indian position is surveyed with reference to UNEP industry and environmental programme which has classified the corporate environmental reporting into five levels:

Stage 1: "Green glossies", newsletters, videos etc. short statement in annual report.

Stage 2: Special initial environmental report often linked to a first formal policy statement.

Stage 3: Annual reporting linked to the environmental management system, but more text then figures.

Stage 4: Provision of full TRI – Style performance data on annual basis.

Stage 5: Sustainable development reporting Environmental disclosure as contained in Directors' report of four Indian companies are reproduced below:

Asian paints (india) ltd. (1993-94): "Ecology and safety samples of treated effluents are periodically checked for compliance with standards".

Chloride industries ltd (1993-94): "Environment safety and pollution". During the year under review the company continued its efforts toward environmental protection and safety measures, effluent treatment system have been further improved at the company's plants and efforts are to meet the required standard.

Goodlassnerolac paints ltd (1993-94): "Pollution – The company regularly monitors measures in force in accordance with pollution control act for the protection of the environment and for ensuring industrial safety. The company carries out improvements regularly to ensure full compliance with the statutory requirements"

Maruti Udyog Ltd: "Environment – Modification of the existing effluent treatment plant was undertaken to take care of additional effluents generated due to capacity expansion. Data on non-methane hydrocarbons in paint shop and engine testing shop, ambient air quality, stack emissions and effluents are being regularly monitored and the parameters are maintained well within prescribed limit. Development of green belt around gas turbine and R&D areas was further augmented by plantation of three thousand additional saplings"

Conclusion

The value of environment accounting has long been recognized by leading international environmental organizations and many countries as an important policy design and resource management tool for creating a sustainable future.

In recent years, it has become increasingly viewed as particularly relevant for many of the world's paramount environmental challenges most notably climate change and as an important aide in helping governments better devise defensible, measurable and practical solutions to respond to them. Environmental accounting as a discipline, however, is still evolving. Environmental accounting covers complex and diverse topics, some of which are still subject to debate. In particular, valuing some natural assets, such as clean air and water, is complicated by the fact that these goods are generally not traded in markets and alternative techniques for establishing their prices face conceptual and empirical challenges.

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