A Study on Green Accounting and Its Practices in India

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Abstract: Green accounting is a popular term for environmental and natural resource accounting. It is an expanding field focused on factors like resource management and environmental impact, in addition to company’s revenue and expenses. Companies are incorporating the concept of environmental element in their business operation. Green accounting will help the organization to identify the resource utilization and incurred cost. Practically for developing countries like India it is a twin problem about saving environment and economic development. This method records cost and benefits of a business concern. Green Accounting and reporting in India is in developing stage both at the corporate level and at the national level. The present research paper concentrates on understanding the concept of green accounting.

Key words: Green accounting, Environmental impact, Economic development, Business operation

I. Introduction:
Green accounting which is also called as environmental environment was introduced by an economist and Professor PETER WOOD in the year 1980. It plays a vital role in today’s CORPORATE SOCIAL RESPONSIBILITY. It incorporates environmental sources and assets into company’s accounts. It measures social, economic and environmental impact of business. It is one the system emerged for sustainable development. It is a new kind of accounting which aims at accounting for environment and its well-being. It is a kind of accounting which takes into consideration environmental cost for calculation of income of an enterprise. There is a need for calculating revised method of accounting which includes environmental cost.

Literature Review
Environmental accounting, also known as green accounting, is to measure, record and disclose the impacts of corporate environmental activities on its financial status through a set of accounting systems. The definitions of green accounting in different countries are similar, as shown in Table.

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<thead>
<tr>
<th>Country and name</th>
<th>Regulations or definitions</th>
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<tr>
<td>International Federation of Accountants, 2005 Environmental Management Accounting Guidelines</td>
<td>Environmental management accounting manages environmental and economic performance by development and execution of a proper environmental accounting system, including reports and auditing of corporate information and environmental management accounting. Generally speaking, it includes lifecycle accounting, total cost accounting, an effective process and strategic planning of environmental management.</td>
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<td>Ministry of Environment, Japan, 2005 Environmental Accounting Guidelines</td>
<td>Green accounting is a quantitative assessment of the cost and effectiveness of enterprises in environmental protection activities. Enterprises are required to have systematic records and report and are guided to maintain a positive relationship with ecological environment to implement effective and efficient environmental activities. The final goal is to accomplish sustainable development.</td>
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<td>Environmental Protection Administration, Taiwan, 2008 Industrial Environmental Accounting Guidelines</td>
<td>By measurement, records, analyses and explanation, enterprises resources invested in environmental improvement and protection and executive outcomes are completely and consistently reorganized, and the outcomes are provided to stakeholders of enterprises.</td>
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Types of EMA

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<th>Subfield of Environmental Accounting</th>
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<td>Environmental Accounting</td>
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<td>Environmental Management Accounting</td>
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1. Environmental management accounting
2. Environmental financial accounting
3. Environmental national accounting

1. Environmental management accounting: the identification analysis and use of two types of information
   A. physical information: which focuses on physical use of scarce resources and how much waste occurs?
   B. monetary information: information on environment-related costs, earnings and saving
2. Environmental financial accounting: EFA is applicable for accounting of transactions which have an impact on financial performance of the company.
3. Environmental national accounting: It is national accounting done for natural resources and green cost.

II. Environmental Protection Laws:

As per Indian Constitution, Article 51A of Directive Principles “It shall be the duty of every citizen of India, to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. The constitutional provisions are backed by a number of laws - acts, rules, and notifications like Factories Act 1948; (Prevention and Control of Pollution) Act 1974; Forest (Conservation) Act 1980; Air (Prevention and Control of Pollution) Act 1981; Water Biomedical waste (Management and Handling) Rules 1998; Municipal Solid Wastes (Management and Handling) Rules, 2000; Ozone Depleting Substances (Regulation and Control) Rules 2000; Noise Pollution (Regulation and Control) Amendment Rules 2002; Biological Diversity Act 2002. The Department of Environment was established in India in 1980 to ensure a healthy environment for the country. This later became the Ministry of Environment and Forests (MOEF) in 1985. The EPA (Environment Protection Act), 1986 came into force soon after the Bhopal Gas Tragedy and is considered an umbrella legislation as it fills many gaps in the existing laws.

The various laws relevant to environmental protection are as under:
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(a) Directly related to environment protection.

(b) Indirectly related to environment protection:
- Constitutional provision (Article 51A).
- The Factories Act, 1948.
- Merchant of shipping Act, 1958.

Objectives:
1) To provide accurate quantitative information on volumes and economic effects to people.
2) To provide numerical environment-related for decision making.
3) To identify that part of the gross domestic product.
4) To Analyze and assess of environmental costs & benefits.

III. Research Methodology:
Research type: Descriptive Research
Data Base: Secondary Data/Data source. The present study is based on secondary data; information has been derived from various websites.

Environmental Accounting Practice In India:
1. The first announcement regarding this green accounting was made in the year 1991.
2. The Ministry of Environment and Forests has proposed that “Every company shall, in the Report of its Board of Directors, disclose briefly the particulars of steps taken or proposed to be taken towards the adoption of clean technologies for prevention of pollution, waste minimization, waste recycling and utilization, pollution control measures, investment on environmental protection and impact of these measures on waste reduction, water and other resources conservation.”
3. The Union Ministry of Environment and Forests has issued various instructions in to prepare environment statements.
4. It is mandatory in the country to get an environmental clearance for all new projects that concerns both the Union Ministry of Environment and Forests and the corresponding State Government department of environment. There are various guidelines in this regard and all such projects are expected to obtain environmental and antipollution clearance before they are actually set up.

It can be observed through their accounts that mainly the following set of information is disclosed.
A. Type of devices installed to control pollution
B. Steps taken for energy conservation.
C. Optimum utilization of resources.
D. Steps for decomposition of waste.
E. Steps taken for improving quality of the product.

In this environment statement, the concerned industry is required to provide information on:
A. Water and raw material consumption.
B. Pollution generated
C. Impact of pollution control measures on conservation of natural resources.
D. Nature of hazardous and solid wastes produced and disposal practices adopted
E. Measures taken for environmental protection
F. Steps taken to popularize the benefits of environmental accounting and reporting among the corporate sector.

Importance Of Green Accounting For Business:
1. Poor environmental behavior can give an adverse effect on an organizations image, which may lead to loss of sales as customers boycott the organizations product.
2. Many governments may impose heavy fines on companies which harm the environment. Companies may also have to pay large amounts to clean up any pollution for which they are responsible.
3. Increasing government regulations on environmental issues such as pollution has increased the cost of compliance of the business.
4. Improving environmental behavior can reduce cost.
5. Business as corporate citizens has a moral duty to play their part in helping to reduce the harm they do to the environment.

It deals with 3 most important factors
- People
- Profitability
- Planet

It also deals with the costs and the advantages or benefits an environment brings to a business concern.
1. Sustainable development: meeting the needs of present generation without compromising the needs of future generation.
2. Firms can know about their resources used and when to use them. It helps them to reduce the costs which are related to utilities and waste.
3. Employees even feel good to work for companies which think for society rather than companies which concentrate on earning money.
4. Measuring environmental performance as stakeholders are becoming more interested in the impact that organizations have on the environment
5. Involving management accountants in longer-term strategic planning for environmental-related issues.

Chapter-1: (Information on volumes and economic effects to people)

The commonly used national accounts, therefore, focus narrowly on observable market activities and economic growth. Indicators of sustainable development, well-being, human development, quality of life, or environmental sustainability seek to show that such a focus is misleading. They combine selected concerns and statistics, deemed to be representative of our broader goals in life. All these indicators are proxy measures for something bigger than what the underlying statistics suggest. Their meaning and validity need careful examination before they can be used in policy and decision making. Some indicators give equal weight to unequal issues when calculating averages of, for instance, health, education, or pollution data. Other measures apply controversial money values when pricing “priceless” environmental services like waste disposal and the supply of natural resources. It is not surprising that national statistical offices are reluctant to include these indicators in their regular data collection programs. Nor is it a surprise that policymakers continue to focus on the economy and its established statistics and accounts. The national accounts provide the standard indicators of economic performance and over time economic growth. Gross domestic product (GDP) is just one of many national accounting indicators, but has been the focus of economic analysis and policy. It has also been accused of being a misleading measure of well-being.

Chapter-2: (Environmental decision making)

Environmental decisions are complex decisions. By definition, the environment comprises many components, numerous processes and complex interconnections and feedback mechanisms. We use the term “ecosystem” to describe these components and processes within a defined area. The complexity of ecosystems exceeds that of human-created technological systems and our scientific understanding is limited because we cannot be sure we have identified all the components of ecosystems, let alone that we understand more than a small part of the processes and interactions between them.

However, uncertainty over the workings of the “natural” world is further complicated by adding influences from human activities. Social processes are equally as complex as those in the “natural” world and we cannot be sure how the interaction between humans and the environment will unfold in the future.

Chapter-3: (Gross domestic product)

GDP is considered by economists to be the most important measure of economic activity in nations for several reasons:
1. It tells us something about the relative size of different countries' economies
2. It is a monetary measure, so it tells us how much income a country earns in a year (assuming everything that is produced is sold).
3. When we divide GDP by the population, we get GDP per capita, which tells us how many
Goods and services the average person consumes in a country.
4. When real GDP grows more than the population, that tells us that people on average, have more stuff than they did before.
5. If you believe that having more stuff makes people better off,
6. Then GDP per capita tells us how well off people in society are.

Chapter 4: (Environmental costs & benefits)
• Cost-benefit analysis is one of the main ways that economists analyze major development proposals and environmental problems
• Similar to Net Present Value technique commonly applied in finance
• Works by identifying all the costs and benefits that would result from a particular resource use
• These include non-money costs and benefits

IV. Conclusion:
The major purpose of Green accounting is to help businesses understand and manage the potential quid pro quo between traditional economics goals and environmental goals. The countries which are adopting green accounting are Norway, Philippines, Namibia, Chile, USA, and Japan…etc. Green accounting in India is in developing stage. It is one of the best methods to be followed for sustainable development.

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