

ROLE OF GREEN ACCOUNTING IN DEVELOPMENT AND GROWTH OF ENTERPRISES

(Comparative study of public and private sector enterprises of India)

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Abstract

Natural environment is important for every economy and the account which studies its importance is called as green accounting. It highlights both the positive sides and negative, i.e. natural benefit from the resources as well as pollution degradation. Enterprises are key concerns in an economy they must conserve natural resources that's why they are important for structural transformation. Such system must be developed in our society which can keep an eye or regular monitoring can be done of such enterprise. Green Accounting is in day to day practice and frequently used in environmental literature. In green accounting position, costing, application all such things are included. This study has been done on the use of green accounting in different enterprises.

Key Words: *Green Accounting, Natural Environment, Enterprises, Costing, Pollution.*

Introduction :-

The performance of an industry judge not only by its profitability, but also its contribution to towards environment. Due to environmental issues, it gives birth to new issues, new accounting called as Green Accounting. Mishandling of natural recourses has increased the environmental issues in the recent past. So it is the duty of each and every person on this earth to take care and to conserve the environment for a happy life on earth. The term Green Accounting was first introduced by economist Peter wood in 1980's. In our country, the indicators of Economic growth, such as GDP are not considering the depletion of environmental resources into account. Even at the national level no such type of policies and procedures are implemented. Even in the accounting standards which are issued by Institute of Chartered Accounts of India had not considered green accounting as a matter of financial statement. Green accounting helps to overcome these problems. Green accounting is a mechanism for quantifying analysing environmental conservation activities

of an enterprise. Such as helping in making management decision on pricing, controlling overheads, external use, disclosing environmental information of interest to the public.

Review of Literature:

According to the International Federation of Accountants (2005) EMA is an important term and adds value to the system. But this the system improves its performance and brings sustainable development still the companies of many countries, specially the developing countries are not realizing the importance of improving environmental performance. This is due to lack of awareness of environmental benefits. (Burrit, 2004). It has become an important topic for discussion among the researchers.

It has been defined in (IFAC 2005) as the management of environmental and economic performance by implementation of the environment related accounting system including reporting and auditing.

According to Wilmsheer and Frost, 2001 By applying the environmental management system different areas such as resources, processes, practices, procedure, responsibility, planning, activities and structure are assisted and fulfils the goal of the companies.

Yusoff and Norzima, 2000, has given emphases on internal and external factors contributes to the success of any company. They said that EMA is as much important as any other and becomes an important part of accounting infrastructure. Also failure of EMS result in the failure of results and targets.

In view of Mehenna and Vernon is that green accounting is a type of expansion and coordination of environmental policy with business policy for environmental performance. According to Jennifer Ouellette, green accounting would be much more beneficial to the chemical company, as it has not been described in the traditional method of accounting. It does not describe adequate information on their environmental cost, which results in costly management decisions. By indulging environmental accounting company will definitely increases profit, use resources more efficiently and save environment.

Ramanathan stressed on the fact that green accounting should be multidisciplinary knowledge in engineering, sociology, behavioural science and biology. The fundamental fact behind this is to internalize environmental costs. It has been expected that, if internal cost are borne by company, definitely minimize the harmful effect of such activities.

Thus, this current study argues the proper techniques of EMA are crucial for the companies to be successful and attain sustainable development.

The Definition of Green Accounting:-

Before describing green accounting, it is necessary to first define Green Accounting. Green Accounting means involvement of environmental cost in the financial accounts of an enterprise. It can be taken into account for environmental benefits and costs. The main role of green accounting to help business understand and manage the consistency of economic goal and environmental goal.

Need of Green Accounting:-

1. A well known fact that change in environment change in environment results in change in economy. Also gross domestic product of our country can be directly affected by environmental issues, hence Green Accounting.
2. As a business ethics and social responsibility of business towards environmental safety. Green accounting is needed.
3. For a developing country, saving environment and economic development, Green Accounting is necessary

Objectives of the study:-

1. Coordination of physical resources, approach and monetary environment approach.
2. Cost benefits of green accounting in different enterprises.
3. To analyze the need of green accounting in different enterprises.

Why Green Accounting:-

- Improvement of environmental performance and the benefits to the society can be seen with the better management of environmental cost.
- Continuous supply of raw material and produced supplies in the storage racks should be considered as environmental costs. (If these raw material and produce are supplied before the expiry date)
- Certain decision making, cost calculation related to the environment are made by using traditional accounting and finance principles. For ex. close down of a manufacturing plant which is polluting air, instead of it, putting chimney and also can be saved to those who are getting unemployed.
- In order to reduce the cost and to prevent environment certain physical and monetary approaches are to be taken. Such as use of insulated cables and wires, water management, waste management, waste water reuse , waste minimization and recycling.

Research Methodology:-

The study is based on secondary data, taken as sustainability report and annual report of eight companies of India. The analysis and interpretation of data related to green accounting are considered. The researcher has taken 8 different categories of companies as some are reputed and have business all over the country and some are less reputed. Those reputed companies considering the green accounting will be the benchmark for others.

Approach of study:-

Physical and Monetary, two approaches are taken for the purpose of study. Physical approach indicates the non monetary terms use full which are totally in physical terms. For example waste recycling, water and waste management, etc., whereas monetary approach are used where no physical approach are in reach for environmental aspects. For example Insulating materials, Insulated cables and magnet wires.

Table 1
Physical and Monetary Approach

Name of the Company	Physical Approach	Monetary Approach
BHEL	Bio Diversity, Waste generated, Hazardous and Non Hazardous, Conservation Projects.	Insulating materials, insulated and magnet wires.
TATA	Tree plantation, water pollution control, Air and Noise Pollution Control, Energy Consumption.	Ferrous and Non Ferrous material
RELIANCE ENERGY	Water Consumption, Waste Recycling, Energy Consumption	Environment Expenditure and Investment.
POWER GRID CORPORATION	Energy Consumption, Wind and Solar Power, Water and Waste Management.	----
NTPL	Solar Energy Generation, Waste Water Reuse	---
ONGC	Green Building, Water and Waste management, Nuclear Power Energy Consumption.	Environment Expenditure and Investment.
HEG	Water Waste Reuse, Energy Consumption.	---
HERO CYCLE	Tree Plantation, Waste Management	----

Source: Annual / Sustainability Reports

Parameter wise Disclosure:-

Table 2 shows the detail description regarding following up of parameters in their green accounting. The researcher has taken 5 parameter aspects for the calculation of green accounting.

Table 2

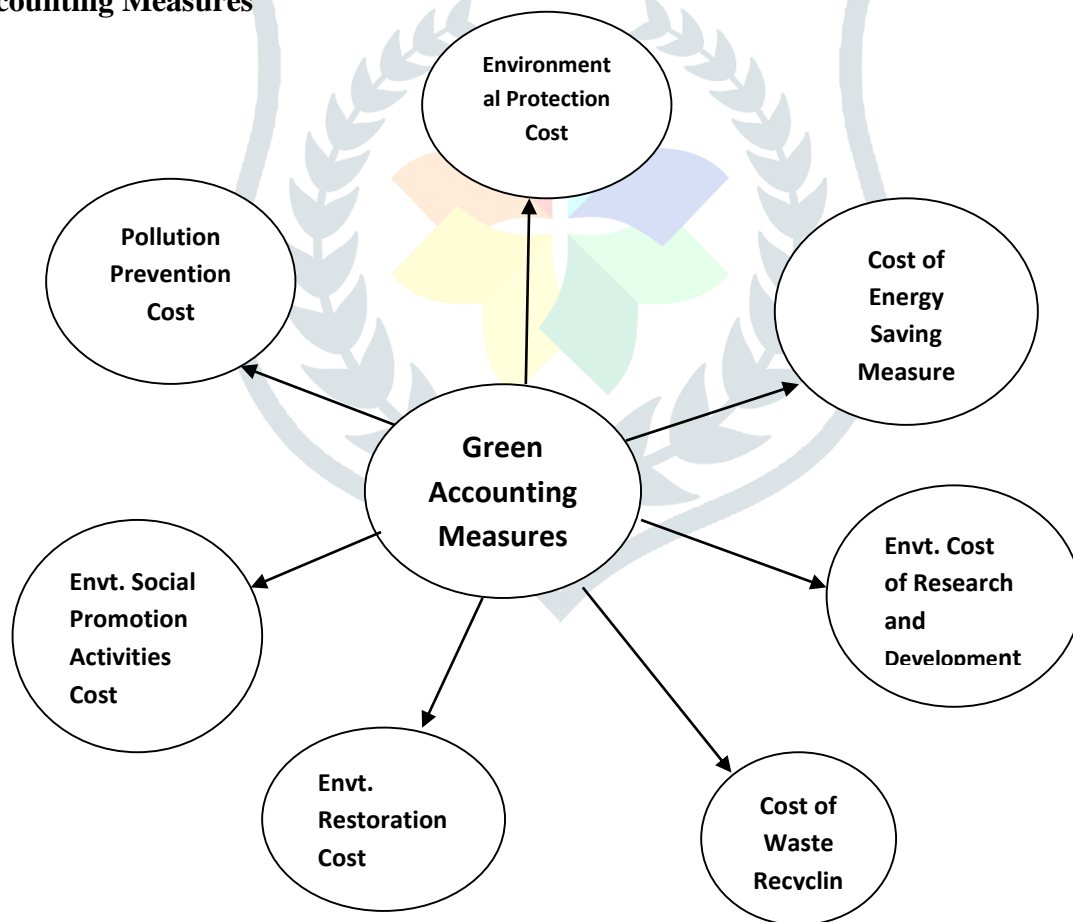
Name of the Company	Parameter 1	Parameter 2	Parameter 3	Parameter 4	Parameter 5
Year 2014-15					
BHEL	YES	YES	YES	YES	YES
TATA	YES	YES	YES	YES	YES
RELIANCE ENERGY	NO	YES	YES	YES	YES
POWER GRID CORPORATION	NO	YES	YES	YES	YES
NTPL	NO	YES	NO	YES	NO
ONGC	YES	YES	YES	YES	YES
HEG	NO	YES	NO	NO	NO
HERO CYCLE	NO	YES	YES	NO	NO
Year 2015-16					
BHEL	YES	YES	YES	YES	YES
TATA	YES	YES	YES	YES	YES
RELIANCE ENERGY	NO	YES	YES	YES	YES
POWER GRID CORPORATION	NO	YES	YES	YES	YES
NTPL	NO	YES	NO	YES	NO
ONGC	YES	YES	YES	YES	YES
HEG	NO	YES	NO	NO	NO
HERO CYCLE	NO	YES	YES	NO	NO
Year 2016-17					
BHEL	YES	YES	YES	YES	YES
TATA	YES	YES	YES	YES	YES
RELIANCE ENERGY	YES	YES	YES	YES	YES
POWER GRID CORPORATION	YES	YES	YES	YES	YES
NTPL	YES	YES	YES	YES	YES
ONGC	YES	YES	YES	YES	YES
HEG	YES	YES	YES	NO	NO
HERO CYCLE	YES	YES	YES	NO	NO

(Parameters- 1. Recycling of Waste materials, 2. Social responsibility, 3. Sustainable development of Environment, 4. Conservation of Natural Resources and 5. Pollution Control.)

Table 3

Compnay Name/Year	2014-15	2015-16	2016-17	Mean	SD
BHEL	5/5 (100)	5/5 (100)	5/5 (100)	100	0
TATA	5/5 (100)	5/5 (100)	5/5 (100)	100	0
RELIANCE ENERGY	4/5 (80)	4/5 (80)	5/5/ (100)	86.66	9.428
POWER GRID CORPORATION	4/5 (80)	4/5 (80)	5/5/ (100)	86.66	9.428
NTPL	3/5 (60)	2/5 (40)	5/5 (100)	66.66	24.94
ONGC	5/5 (100)	5/5 (100)	5/5 (100)	100	0
HEG	1/5 (20)	1/5 (20)	3/5 (60)	33.33	18.85
HERO CYCLE	2/5 (40)	2/5 (40)	3/5 (60)	46.66	9.42

Green Accounting Measures



The above measures depicts the following :

Information is collected about allocation of specific cost accounting, which the accounting based costing method can provide. For example, In Pollution- prevention cost, green accounting issue is cost incurred to prevent air and water pollution along with water treatment facilities and other. Same as in cost of Resources Recycling, green accounting issue is cost incurred for waste reduction and disposal as well as for water conservation and usage of rainwater and other measures.

Conclusion:-

The study reveals the analysis and interpretation of different enterprises regarding green accounting. It has been seen that four companies viz. BHEL, ONGC Reliance Energy and TATA are following both physical and monetary approaches for green accounting. Others show an increasing trend of following the green aspects. Thus the present study shows that some Indian companies are preliminary stage of disclosing environmental reports. It is not possible to have a green accounting system, unless awareness of environmental measures is created in India.

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