ANALYSIS OF GREEN ACCOUNTING

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ABSTRACT
Green accounting is a form of accounting that sets out to comprise the factor called environmental costs into the financial outcome of operations. It has been debated that the gross domestic product (GDP) disregard the environment and consequently the policymakers require a revised model that assimilates green accounting. The predominant objective of green accounting is to aid the business in comprehending and manage the prospective tradeoff between environmental goals and traditional economic aims. Green accounting requires several synthesizing cognizance in sociology, behavioral science, biology, engineering. It also deals with management and accounting problems confined to social and environmental ramifications, rules, constraints, economically feasible production of energies, safety etc. The elemental theory confined to green accounting is internalizing the environmental costs within the organizations; this is subject to the attempt to find solutions to the decreasing negative consequences of process and ventures on the environment. The crux of green accounting relies on handling the problems in line with the social environment and its possible impact in achieving environmental and sustainable development in any nation and thus influencing an organization's behavior in tackling issues related to environment and social responsibilities.

KEYWORDS: Green Accounting, Environmental cost, Engineering, Gross domestic product & Behavioral science

INTRODUCTION
An attempt in factoring the environmental costs into financial outputs of operations is called green accounting. It has been debated that the gross domestic product always doesn’t take into consideration the environmental factors and thus the decision framers need to reconsider and incorporate green accounting as their revised model. Green accounting is termed environmental accounting as well. This seeks in better measurement of sustainability by expansion towards gross measures of welfare towards the nation such as investment, products and services etc. The non-market values include environmental goods and services. Apart from the stated green accounting includes the cost and benefit relationship between environmental protection and decrease in capital, these two are not part of principles in national accounting like domestic product. Although the school of thought varies this methodology is used across the nation.

Green accounting finds its traces from environmental accounting; it is knit with the operations of accounting into the interests of management and investors of organizations. The concept includes a holistic entity comprising of individuals, stakeholders and the community at large. Green accounting is pivotal in process of resources which are moved to recognize in the sustainability of organization. It emphasizes campaigning among the government, employees, corporations, community, dealing with causes and effects alongside its advantages in dealing with activities to secure the environment together with care. This can state the people that it happened.
OBJECTIVES OF GREEN ACCOUNTING

- Identification, collection, calculation and analysis of costs related to material and energy.
- Facilitating with cost related data in decision making process as a result of adapting efficient decisions in contribution towards environmental protection.
- Usage of information confined to costs related to environment and internal reporting.

Requirement of Green Accounting

With its buzzing terminology called “Green Accounting” in recent decade and gaining its awareness as many corporations, in particular, the Small Medium Enterprises are very much into the accounting for the environment or being “green”. This has led to placing a huge value towards a responsible environment by the investors.

Environment costs can be reduced remarkably or banished as an outcome of the following:

Green movement and Corporations are gliding towards harmony on the vital theory of sustainability and its development. More desirable environmental resources and green accounting would portray beneficial insights towards the blend of natural resources and economy.

The nation's accounting process is primitively a collection of economic structures and does not fit for an ample representation of all the changes in the environment. Valuation of environmental stocks and resources involves complex problems. This holds true with developed countries where the primary concern of the environment lies with the impacts of pollution, green accounting is of limited evaluation. Nevertheless, unified resource accounting is important for budding countries which hold a heavier dependence on environmental resources and to this which can cause an outcome of destructive and twisted trade policies in macroeconomics.

Postulates of Green Accounting

GDP doesn’t hold well on “economic and accounting framework if the sales of natural assets are included in the calculations of the gross domestic product”. Subtraction of depreciable value of assets is essential to arrive at the right figure of net value added. This can be undertaken for the production of assets while calculating the net national product or NDP. Although the net national product is estimated quite rare, the production of depreciated assets is predictable as it is fairly minimal. Tail-off in the natural assets, on the flip side may be humungous and fluctuating and are not projected at all in the figures of GDP commonly dealt with analysis of macroeconomics. It plainly incorporates a systematic accounting
postulate for the estimation of sustainable incomes.

CREATION OF GREEN NATIONAL ACCOUNTS

The creation of green national account cannot completely apprehend multiple dimensions of environmental downturn like loss of biodiversity or facilitating with outcomes confined to a wide range of environmental complexities. For this objectivity, physical when compared to the economic forecasts of environmental variation are more pertinent. The need of the hour is creating a green national account rather than creating a better environment policy.

Chiefly for the nations whose environmental resources are swiftly crumbling, and the fall apart is taken into account misleading into the value added to the GDP. Once the accounts are turned green the postulates in macroeconomics has to be re-looked alongside the statements intricate in the current paper.

Activity-Based Costing (Abc) Method

Environmental accounting upholds the ABC method and this aid in cost savings as an outcome of reduction in cost of raw material during the reuse or recycling period. As a result, Activity-based costing method dispenses a better understanding and targets those areas for taking into account the chances of creating costs confined to primitive environmental actions. The applicability of ABC principles is highly suggested for the better improvement towards environment results.

Measures of Green Accounting

It includes the questioning of department and functional areas formed in accordance to the activities and within its process with regards to particular natural resource activities. A particular technique of selection can be applied, which is reflected to decrease the excess number of a particular environment based activities and even reforming of these set of activities into process can be framed.

<table>
<thead>
<tr>
<th>Costs confined to the following</th>
<th>Scope and Issues centric to Green Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>Costs protecting to management related environmental activities and promotions. Costs incurred in maintenance and acquisition of ISO certification.</td>
</tr>
<tr>
<td>Prevention of Pollution</td>
<td>Prevention of costs in line with water and air pollution through providing water treatment provisions.</td>
</tr>
<tr>
<td>Restoration of Environment</td>
<td>Elimination of contamination of ground water and soil, through compensation of environment and restoring the costs involved in environmental operations.</td>
</tr>
</tbody>
</table>
Protection of Environment

- Recycle of Resource

- Promotion of Social Activities

Costs measuring in reduction of global warming and saving energy.

Costs given rise for reduction and disposal of waste, for conservation of water, usage of rainwater and various measures aiming towards the usage of efficient resources.

Rooting from the social activity like partaking in preservation and protection of environment.

Aping Green Accounting

- Establishing the objective of green accounting.

- Establishing the Green Accounting project and team.

Green Accounting Team will aim on analysis of the following pointers:
## Analysis of Green Accounting

<table>
<thead>
<tr>
<th>Elements of Environmental Analysis</th>
<th>Impact on Environment through the following</th>
<th>Steps undertaken post Environmental analysis</th>
</tr>
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</table>
| Products activities & services    | • Letting industrial discharge in the river bodies.  
• Using sewage waters let out in underground which leads to contamination of ground water.  
• Emission of toxic gases into the atmosphere.  
• Noise Pollution caused by vehicles. | Prevent the impact of environment by adapting to legal requirements, in accordance to the prerequisites of legislation. |
| Technological element             | • Environmental sensitivity and creation of products and services through incidents/accidents.               | • Study confined to the product based ecological framework depending on the client’s interest.  
• Control over environmental impact |

### Diagram:

1. **Enterprise Environment**
2. **Enterprise Consumption of Raw material, energy, water, air,**
3. **Enterprise**
4. **Communication measures**
5. **Decides**
6. **Analysis**
7. **Environment management**
The above flow chart process is according to the transversal organization specific to Activity Based Costing method (ABC)

COMPARATIVE ANALYSIS OF GREEN ACCOUNTING AND CONVENTIONAL ACCOUNTING

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Conventional Accounting</th>
<th>Green Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outlook</strong></td>
<td>Economic or Financial perspective</td>
<td>Connection between the environment and economy.</td>
</tr>
<tr>
<td><strong>Charge</strong></td>
<td>Management of Cost and depicts situation of economy.</td>
<td>Portrays environment performance and cost of environment.</td>
</tr>
<tr>
<td><strong>Legal Requirements</strong></td>
<td>Mandatory Legal (financial accounting) Voluntary (management accounting)</td>
<td>Few aspects are essential</td>
</tr>
<tr>
<td><strong>Reports</strong></td>
<td>Internal &amp; External Reports, Financial Statements.</td>
<td>Environmental Reports.</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td>Excluding Inventory (Financial Analysis)</td>
<td>Natural Units and Financial Units</td>
</tr>
</tbody>
</table>

Strategy Put into Action at Industrial Level Post Introduction of Green Accounting – Abc Method

Taking into account the adaptability with Activity Based Costing methodology, green accounting paves the way for the specification of its costing method provided the identification of cost of environment and usage of specific costs are involved pertaining to the calculation of process/ production cost. Thus it will enable in depicting the exact data which will necessitate the corporation or industry in the inclusion of green costs.

ADVANTAGE

Getting accustomed to the financial aspects of the corporations’ green accounting aids in giving resourceful information in projection of minimization of costs upon targets based on environment for estimation of the financial outcome of initiatives such as the following:

- Estimation of life cycle in the environmental costs.
- Prevention of pollution.
- Design of environment.
- Improvement of Green Accounting.
- Administration of product and process cycle from the point of view of environment.
- Liability of producer’s and process of supply from environmental framework.
- Management System – environment centric.
- Assessment, test and reporting of activities related to environment.
- Sourcing information to management based activities namely – product and process designing, distribution of cost, controlling cost, pricing policy, capital budget, process of supply and evaluation of performance.
LIMITATION

The effect of putting into action green accounting practices does not result in a guarantee of securing a better establishment of financial or environment oriented performances. The socio elements for environment based goods or services are dynamic and not certain and they take a new shape very often. Non-Economic items are vital in the political progression of the country. The aggregate of individual priorities sometimes may not reap a positive net societal preference as legit industrial data may not be available handy.

Existing Issues Pertaining to Research of Green Accounting

Walden (2014) found out that 4 industries namely producing goods and services from materials of forest, chemical, oil and consumer goods was in line with environment disclosure. An analysis found the relationship positive between the voluntary environment disclosures and external report of events through company’s annual report. An Empirical Research undertaken by Lawrence (2012) at Government entity and Superfund Liability, probed into the impact of financials and cleanup of landfill by municipal government and amount of environment liability disclosed in financial reports by municipal government. The findings revealed that lesser municipality increased the estimated costs of cleanup and these costs collectively led to financial damages. Boer’s paper in Journal of public policy accounting revealed (2018) a greater aspect of environment based accounting issues as well.

SCOPE FOR FURTHER RESEARCH

The evidence through literature reviews shows that green accounting is probed less in comparison to other forms of accounting (financial accounting, management accounting, and cost accounting). It is also observed that people haven’t reduced the carbon footprints and not recognized the aftermath of various pollutions caused due to non-concentric environment. Furthermore, the green accounting papers suggest that it is more complex to direct the economic measurement, technological aspects as well do not lead in producing goods & services which is subjected to greater demand of resources i.e. water, natural gas, air, oil etc., into production and responding to the needs of the society at large. Further researches should aim to explore the socio and structure based causes in line with the environmental problems and expanding into global framework. The major issue so far through disclosure of reports shows the accounting factors leading to environment liability, rules & regulations, nature of accounting practices, international regulations and quantification of environmental accounting.

CONCLUSIONS

Though Green Accounting is emerging in the field of accounting it will create a wide exposure in the future influencing the industries and stakeholders. The major ice breaker will be the adoption of Green Accounting into basic accounting elements of business decision making this will enable in depicting the major role of environmental factors in the development of nation’s economy and facilitating the macroeconomics jinx with the aid of green accounting assessment, consequently leading to the better economic viability.

REFERENCES

1. Adams Carol, Patty Mc Nicholas. Making a difference Sustainability reporting, accountability and organizational change. Accounting, Auditing & Accountability Journal, 2006; 20(3):382-402


10. Mukesh Chauhan (2005), Concept of Environmental Accounting and Practice in India, The Chartered Accountant November 720-726