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Study on Green Accounting Practices: A Sustainability Initiative by Selected Companies

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ABSTRACT: Green accounting is an emerging field of research that aims to incorporate environmental costs and benefits into traditional accounting frameworks. This study delves into the significance of adopting green accounting practices in businesses and organizations, with a focus on promoting sustainability and reducing environmental impacts.

By accounting for the natural resources used and the environmental damage caused by various activities, green accounting provides a more holistic perspective on the true costs of production and consumption. The study explores the various methods and tools available for implementing green accounting, including environmental management accounting, carbon accounting, and life cycle assessment.

These approaches offer valuable insights into the environmental performance of organizations, helping them make informed decisions regarding resource allocation, cost management, and risk assessment. Moreover, green accounting enables businesses to identify opportunities for improving efficiency, reducing waste, and minimizing their ecological footprint. One of the key findings of the study is the potential for green accounting to drive innovation and promote sustainable business practices.

In conclusion, this study underscores the importance of integrating green accounting principles into mainstream accounting practices to address the pressing challenges of climate change, resource depletion, and environmental degradation. By recognizing the value of nature and incorporating it into economic decision-making, organizations can move towards a more sustainable and responsible approach to business that benefits both society and the planet as a whole.

KEYWORDS: Green Accounting, Environment, Carbon accounting, Efficiency, Management

I. INTRODUCTION

Green accounting assists businesses in proactively identifying, evaluating, and mitigating risks while attaining cost savings and operational enhancements through resource optimization, waste reduction, and energy conservation. This is done by incorporating environmental considerations into decision-making processes. Additionally, implementing green accounting not only demonstrates a company's commitment to social responsibility and the environment, but it also gives it a competitive advantage by enhancing brand recognition, drawing in eco-aware clients, and opening up new markets for sustainable products and services. Credibility and confidence are fostered by the efficient communication of environmental actions and measures made possible by green accounting. Green accounting offers the standardized procedures for environmental reporting and disclosure that are required by the strict global environmental rules and reporting standards.

Financial performance and corporate operations are severely hampered by environmental risks such supply chain interruptions and reputational damage.

In the end, taking environmental considerations into account in addition to financial considerations promotes organizational resilience and long-term sustainability by guaranteeing that operations are financially feasible, ecologically sound, and socially responsible.

Frameworks like the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiative (GRI) provide essential standards and criteria for environmental reporting and disclosure, supporting the effective implementation of green accounting practices.

II. REVIEW OF LITERATURE

Dr RK Tailor (July-Sept.,2022), in a study the impact of green accounting on sustainable development, tries to analyze green accounting in an Indian concept. Growth cannot be measured only in monetary terms. Green accounts emphasize inclusion of environmental costs into the accounts of the company. This will help us know the environmental impact the company is making. But this has a lot of problems. For example,the natural stock accounting is difficult when the stock is not usually sold in market, either to know the change in stock level or the flow of stock. Next depreciation of natural capital is accounted for as income. A nation that has plenty of resources may show a considerable increase in performance in the initial years but will later on face the problem of sustainability.

Dr. Minimol M.C and Dr. Makesh K.G (February 2020), in their research paper, green accounting and reporting practices among Indian corporate, has developed a model specifying 6 aspects to be covered to measure the performance of the company. It has also studied the level to which environmental reporting is actually practiced in India. The green accounting is at a nascent stage in India at corporate as well as national level. It has 3 faces: physical accounting, monetary valuation and integration with economic accounting. This study helped find out the parameters upon which companies does green accounting. The study comes out with the conclusion that even though there are regulations in respect of environmental pollution there are no clear-cut rules and procedures to account for them.

Ramesh L (December 2019) In his study titled “A study of environmental accounting practices”, tries to analyze the measurement, recognition and measurement of environmental costs. The main limitation is that it is very difficult to exactly quantify environmental costs and benefits incurred by the company. Therefore, their inclusion is accounts are a major concern. This paper reveals that majority of corporate are aware of the environmental issues as well as laws regarding disclosure requirements. Yetthe number of companies following it is low. Moreover, there are some trends observed such as large companies disclose more than that of small companies. Also, when the company discloses it discloses in descriptive manner and not quantitative terms.

Maniparna SyamRoy (2021) In their research paper, “green accounting for sustainable development: Case study of industry sector in West Bengal (2017)”, throws light on the fact that the conventional indicator (GDP) cannot be the right indicator for sustainable development and that green accounting is a better means for that. But it has been further explained here that due to inadequate knowledge available there are data gaps in case of green accounting. Thus, this paper takes into account water and air resources as industrial source of West Bengal as the source of data for study to illustrate the methodology and data types that can help provide the balance between green accounting system of the state and the country as a whole for the formulation of sustainable development-oriented policy.

Sherine Farouk, Jacob Cherian & Jolly Jacob (2019), in their research paper “green accounting and management for sustainable manufacturing in developing countries”, discuss that how limited literature is available on social and environmental accounting in emerging and developing nations. The objective of this paper is to evaluate how environmental accounting has been examined and evaluated by different authors, and based on such study a conceptual procedural model is to be selected which is most suitable for the developing countries. It has been discussed that how a sound accounting system can help in better environment performance of organizations. Further, Future research need to be presented in a manner that academicians are completely considerate towards approaches related to green accounting promotion so that the problems of environmental accounting practices are recognized.

N Anil Kumar, T Sai Pranitha and N Kiran Kumar (February 2020), in their title, “study on green accounting and its practices in India”, have discussed the various green practices adopted and the Environmental protection laws prevalent among the Indian companies. The concept of green accounting has been divided into three categories namely, global environmental accounting, national environmental accounting and corporate environmental accounting. The importance of green accounting has been explained in context of people, profitability and planet. Therefore, it has been concluded here that Environmental Accounting and reporting in India is in developing stage, at the corporate level as well as at the national level and that it is one of the best methods to be followed for sustainable development.

Lohmann (2023) recommend in his study about the significance of green accountancy. Green accountancy is supposed to talk reviews such disasters in two behaviors. Primary, it makes environmental disasters more noticeable to decision-makers, by categorizing them in a move that makes clear preexisting correspondences or quantifiable relations with possessions and other financial objects. Subsequent, green accounting assistances transform substances into commercial 'goods and services' Who’s worth can be 'discovered' in marketplaces themselves. Skill itself becomes a relative valuation and ecologist action.

(Le & Nguyen, 2019) Indicates green accounting administration uses environmental expenses and performance statistics to help manufacture business choices by collecting information on the charges of production, inventory, surplus treatment, and conservational performance. In further words, green accountancy management is a mutual approach that delivers the transition of information from financial accountancy and cost accountancy to improve substantial efficiency, decrease environmental influence and hazard, and decrease the cost of ecological protection.

Datta & Deb, (2016) This page outlines that green accountancy is a subtype of conservational accounting that exemplifies the events taken by a firm to combine ecological and cost assistances as important info into the firm's executive processes or as an economic outcome of professional. Conferring to the EPA, green accountancy is the ID, arrangement, qualification, and combination of environmental charges into business pronouncements.

Dr. Preeti Malik and Dr. Alka Mittal (2015), Green accounting is the best tool for assessing the cost and benefit of environmental practices. The standards and rules for reporting the same has been implemented at both national and international level by various authorities and organizations. Different kinds of reporting have also come into picture, be it satellite reporting with the help of internet or GRI reporting, each one has got its own prominence and usefulness. In India, there is a strong legal backbone which assists the protection of environment through the constitution, Acts and other legal bodies. Mere adherence to the standards and rules won't suffice the need of the hour. Everyone should be aware of this new concept and voluntarily should put in their part of contribution.

Research objective

- To understand the concept of green accounting and its theoretical foundations.
- To examine the importance of incorporating environmental costs and benefits into traditional accounting practices.
- To study the green accounting & sustainability practises followed by select companies and the level of achievement attained by the companies by incorporating green accounts.
- To identify challenges and barriers faced in implementing green accounting and propose potential solutions.

III. METHODOLOGY

Qualitative Statistics
A description of the primary features of the data is given by descriptive statistics like mean, median, mode, standard deviation, and frequency distributions. The central tendency, dispersion, and distribution of the variables pertaining to environmental performance and green accounting are all better understood with the use of these statistics.

Correlation Analysis
Environmental performance and the adoption of green accounting techniques are two examples of continuous variables whose relationships are evaluated using correlation analysis for both direction and strength. Measures of the degree of relationship between these variables include Pearson's correlation coefficient and Spearman's rank correlation coefficient.

Regression Analysis
The link between one dependent variable and one or more independent variables is investigated using regression analysis. Regression analysis can be used in the context of green accounting to model the effects of different factors on environmental performance, such as business size, industrial sector, and green accounting methods. Multiple predictors can be examined simultaneously with multiple regression analysis.

Qualitative Analysis
The process of methodically examining textual or qualitative material to find themes, patterns, and insights is known as qualitative content analysis. Qualitative content analysis can be applied to the green accounting context to analyse textual data from sustainability reports, interviews, or case studies to comprehend organizational perspectives, motivations, and obstacles regarding the implementation of green accounting and environmental performance.

Hypothesis testing
Here the analysis has been done using Chi square test which is a statistical hypothesis test used to examine the relationship between a dependent and an independent variable that is environmental performance and implementation of green accounting practices respectively.
H0 (Null Hypothesis): There is no significant relationship between the implementation of green accounting practices and environmental performance in organizations.
H1 (Alternative Hypothesis): There is a significant positive relationship between the implementation of green accounting practices and environmental performance in organizations.
χ^2= (60-35)2 + (40-65)2 =27.473
65 35
P-value = 1 - p (χ^2 (1) $\leq$ 27.473).

k	2	Number of categories
n	100	Sample size
χ^2	27.472527	Chi square test statistic
DF	1	df = k-m-1 =2-0-1 = 1
Phi effect (Φ)	0.524142	$\Phi=\sqrt{(\chi^2/n)}$

Goodness of fit, using χ^2 distribution

1. H0 hypothesis

Since p-value < α, H0 is rejected.

The statistical model does not fit the observations

2. P-value

The p-value equals 1.593e-7, ($p(x\leq\chi^2) = 1$). It means that the chance of type I error (rejecting a correct H0) is small: 1.593e-7 (0.000016%).

The smaller the p-value the more it supports H1.

3. The statistics

The test statistic χ^2 equals 27.4725, which is not in the 95% region of acceptance: [-∞: 3.8415].

4. Effect size

The observed effect size phi is large, 0.52. This indicates that the magnitude of the difference between the observed data and the expected data is large.

Regression line equation

$\hat{Y} = 2.4286 + 0.4857X$

Reporting linear regression in APA style

$R2 = .24, F(1,2) = 0.62, p = .514.$

$\beta = .49, p = .514.$

INTERPRETATION:

The calculated Chi square test here and the corresponding P-value strongly reject the null hypothesis indicating a positive relationship, supporting the notion that adopting green accounting practice helps in improved environmental performance of the organizations.

IV. RESEARCH OUTCOME AND FINDINGS

Green accounting involves incorporating environmental factors into traditional accounting practices. By adding environmental costs, it seeks to give a more realistic picture of the actual costs and benefits of economic activity. Green accounting helps organizations measure and manage their environmental impact, leading to more sustainable business practices. Through green accounting, companies can track their resource consumption and greenhouse gas emissions, and assess the effectiveness of environmental policies. Creating standardized measurement techniques and fusing environmental and financial data are two obstacles to overcome in the implementation of green accounting. In spite of obstacles, green accounting is becoming more widely acknowledged as a useful instrument for encouraging sustainability and openness in corporate operations.

- The above table takes into consideration a number of different factors in order to provide an accurate estimate of the subject's age. There were almost half as many responses who were under the age of 30 as there were who were in their twenties, with 23% in their twenties, 18% in their forties, and 15% in their fifties.
- You will find a table at the very top of the page that organizes the information according on gender for your own personal convenience. In all, there are 67 males and 33 women.
- The definition of "Occupation" is summarized in the table. The person in line following it is the one directly behind it. The circumstances can be decomposed as follows: Sales of products account for 12% of revenue, services account for 28%, student enrolment accounts for 47%, and other sources account for 13%.

- The results are shown in the graph. How effectively does green accounting contribute to environmental management? 30% of Very effectively, 30% of Moderately effectively 25% of Ineffectively, 15% of Not sure.
- The above table and graph Do the study show a correlation between green accounting and environmental performance? represents that 20 percent of the respondents recorded yes and the remaining 80 percent of the respondents have recorded no.
- The above graph is the impact of green accounting practices considered significant? The item had to get the respondent's 40% Significant, 25% Limited, 20% None, 15% Not applicable.
- The results are shown in the graph How would you describe the overall attitude towards green accounting practices? Positive for 14%, Negative for 58%, Neutral for 16%, Not applicable for 12%.
- The above table and graph analysis Are the outcomes of green accounting practices highly sustainable? represents that 25 percent of the respondents are Highly sustainable and the 45 percent of the respondents are Moderately sustainable and 30 percent is Not sustainable.
- The above table and graph analysis Has the adoption of green accounting led to an increase in environmental awareness? represents that 20 percent of the respondents are Increased 50 percent of the respondents are Decreased and 30 percent is No significant change.
- As can be observed How would you rate the overall sustainability of the green accounting approach? 60% of Highly sustainable, 10% of Moderately sustainable, and 20% Not sustainable 10% of Unsure.

V. CONCLUSION

By incorporating environmental costs and benefits into financial reporting, green accounting provides a more realistic way to evaluate a company's performance. This study demonstrates how measuring resource use and emissions using green accounting helps companies become more transparent and accountable by helping them to find and adopt environmentally friendly strategies. Businesses can make well-informed investment decisions in line with long-term sustainability goals by valuing ecosystem services and natural capital. Furthermore, through standardized reporting, green accounting provides policymakers with a platform to track environmental advancements and encourage sustainable practices. The potential of green accounting to promote innovation and growth in a sustainable company environment, harmonize financial incentives with environmental goals, and drive positive change is highlighted in this paper.

The study also emphasizes how critical it is to incorporate environmental factors into financial decision-making procedures. Businesses are better equipped to make decisions about their investments that consider resilience and sustainability over the long run when they value natural capital and ecosystem services. The movement in accounting towards a more comprehensive approach is in line with the increasing understanding of the interdependence of economic, social, and environmental elements.

According to the study's conclusions, green accounting is essential for improving corporate responsibility and transparency about their environmental impact. Green accounting helps firms to quantify their usage of natural resources and emissions in order to find areas for waste reduction and the adoption of more environmentally friendly practices. This boosts stakeholder trust and brand reputation in addition to increasing operational efficiency.

REFERENCES

1. Schaltegger, S., & Burritt, R. (2010). Contemporary Environmental Accounting: Issues, Concepts and Practice.
2. Herzig, C., & Schaltegger, S. (2011). Corporate Sustainability Reporting: A Review and Conceptual Framework.
3. Gray, R., & Bebbington, J. (2001). Environmental Accounting, Managerialism and Sustainability: Is the Planet Bankrupt?
4. Epstein, M. J. (2008). Implementing Corporate Environmental Strategy: A Manager's Guide.
5. Rahman, S. U. (2015). Environmental Accounting Practices and Environmental Performance: Evidence from China.
6. Schaltegger, S., & Wagner, M. (2011). Sustainable Entrepreneurship and Sustainability Innovation: Categories and Interactions.
7. Burritt, R., & Schaltegger, S. (2010). Sustainability Accounting and Reporting: Fad or Trend?
8. Rikhardsson, P. M., & Bennett, M. (2000). Environmental Management Accounting: Purpose and Progress.
9. Horngren, C. T., & Datar, S. M. (2012). Cost Accounting: A Managerial Emphasis.
10. Russo, M. V., & Fouts, P. A. (1997). A Resource-Based Perspective on Corporate Environmental Performance and Profitability.

11. Christ, K. L., & Burritt, R. L. (2013). Environmental management accounting: the significance of contingent variables for adoption.
12. Ayres, R. U. (1998). Accounting for resources, 1: economy-wide applications of mass-balance principles to materials and waste.
13. Burritt, R., & Schaltegger, S. (2010). Sustainability accounting and reporting: fad or trend? Accounting, Auditing & Accountability Journal.
14. Schaltegger, S., & Burritt, R. (2014). Measuring and managing sustainability performance of supply chains.
15. Unerman, J., & Chapman, C. (2014). Academic contributions to enhancing accounting for sustainable development.
16. Epstein, M. J., & Wisner, P. S. (2001). Using a balanced scorecard to implement sustainability.
17. Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions.
18. Dillard, J., & Roslender, R. (2011). The business case for financial accounting standards and social and environmental accountability standards: a review and research agenda for social and environmental accounting research.
19. Deegan, C. (2002). Introduction: the legitimising effect of social and environmental disclosures–a theoretical foundation.
20. Gray, R., Bebbington, J., & Walters, D. (1993). Accounting for the Environment.
21. Laine, M., & Laine, T. (2011). An empirical investigation of environmental management accounting: Implementation and benefits.
22. Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis.
23. Burritt, R. L., & Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend?
24. Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure.
25. Gray, R. (2013). Is accounting for sustainability actually accounting for sustainability…and how would we know? An exploration of narratives of organisations and the planet.
26. Hahn, R., & Figge, F. (2011). Beyond the bounded instrumentality in current corporate sustainability research: Toward an inclusive notion of profitability.
27. Bennett, M., & James, P. (2001). The measurement of environmental and social performance.
28. Hopwood, A. G. (2009). Accounting and the environment.
29. Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: An application of stakeholder theory.
30. Adams, C. A., & Frost, G. R. (2008). Integrating sustainability reporting into management practices.

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