IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

GREEN ACCOUNTING PRACTICES: A COMPARATIVE STUDY BETWEEN TATA CONSULTANCY SERVICES AND TECH MAHINDRA

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ABSTRACT

Environment protection is a major concern that's why Green Accounting becomes very popular term for environmental and natural resource accounting. Green accounting plays an important role to make balance between environment protection and economic development. It is also called environment accounting. It is a new system of accounting which records costs and a tool which express the damages from the business activities and the benefits from the natural environment. It focused on factors like resource management and environmental impact. For the developing country like India, there is a need to save environment and economic development. The present research paper concentrates on various practices of green accounting and importance of green accounting. This study has been undertaken to compare the green accounting practices of Tata Consultancy Company and Tech Mahindra. In this study, five sustainability reports of both companies are examined on the various parameters.

Key Words: *Green Accounting, Environmental accounting, Economic development, TCS, Tech Mahindra.*

INTRODUCTION

Environment Protection is a major problemin recent time and environment damages are the rewards from the human being. So a new system of accounting was introduced called green accounting. Green accounting which is also known as environmental accounting plays an important role in corporate social responsibility. It was introduced by an economist Peter Wood in 1980 and Norway was the first country which adopted Green accounting. In India, it was introduced by former environment minister Mr. Jairam Ramesh.It is an emerging branch of accounting which integrate environmental costs and benefits into conventional accounting.Green accounting is an accounting where environmental data gathered, recognized, classified, measured, estimated and recorded.

It is a tool which identifies social, economic and environmental impact on business and disclosure of environment related matters in financial statement.It is also communicates environmental related information to the various stakeholders. As we all know, there are simultaneous changes in the environment because of industrial operations which has negative impact on natural resources. Now-a-days environmental awareness is increasing and many companies are also coming forward to take responsibility of their actions. They also trying to reduce the negative impact on environment. The performance of the company and information regarding the environment is provided in the financial statement and annual report or a separate sustainability report.

Green accounting is a significant part of corporate social responsibility which helps to know about the resource utilization and cost incurred towards environment. It is also helps to know about responsibilities regarding environment and preventative measures taken by management to reduce the environment damages. It also provides the record of environmental information and by this a company can get environmental licenses from government. It provides helps to control over operational and material efficiency gains and lead to sustainable GDP growth.The Global Reporting Initiatives (GRI) is a not-for–profit organization which formulated standards. These standards provides assistance to the companies to enhance their decision making by recognizing various opportunities and reduces uncertainties.

In India very few Companies followed GRI Standards. Tata consultancy services limited and Tech Mahindra follows the GRI standards so for the present study we took these two companies.

OBJECTIVES OF THE STUDY:

This research paper is based on secondary sources such as research article and web sites. The following objectives are taken for the purpose of study:

1. To understand the concept of Green Accounting.
2. To study the benefits of green accounting.
3. To evaluate green accounting practices of TCS and Tech Mahindra.
4. To compare green accounting practices of two IT companies.

RESEARCH METHODOLOGY:

This research paper is based on descriptive research methodology to study about the basic concept of green accounting. This study compare the green accounting practices of two IT companies Tata Consultancy Services and Tech Mahindra. The environmental disclosure practices of TCS and Tech Mahindra for a period of four year (FY 2020-21 to FY 2023-24) has taken for the study.This study is based on secondary source such as journals, research articles, government reports & official websites and annual reports of TCS and Tech Mahindra. The present study focuses the initiatives taken by these Two IT companies. An effort is made to aware the people as well as the companies about the concept of green accounting. It will also help in regenerating and improving the environment conditions prevailing currently in India. It will also help in sustainable development of the environment and economic growth of country.

LITERATURE REVIEW

Dr.PriyankBenerji&Prerna Sharma (2023), stated basic concept and gist of green accounting as we as compared and evaluated the environmental practices on various parameters of top two IT companies of India such as Tata Consultancy Services Ltd. and Wipro. They also evaluate the environmental practices based on Global Reporting initiative. They also mentioned environmental policy of TCS and Wipro and sustainability of supply chain.

SalauddeenShaik (2022),explained the basic concept of green accounting. According to himthe economic losses that environmental resources, both renewable and nonrenewable, are now experiencing are measured through a method of accounting called "green accounting." Protecting the environment and attaining economic growth are two separate challenges for emerging nations like India. A management technique called "green accounting" helps take environmental expenses into greater account. This research set out to identify the key environmental metrics that Indian firms reported on.

ManjumolSebestian (2022), enlightened the concept of green accounting and its importance in the current scenario. This study also focused on unknown things about green accounting and environmental accounting to create awareness about it and thereby giving emphasis on conservation and protection of environment. This study also mentioned the history and development of green accounting as well as financial accounting and corporate social responsibility.

Dr. Shruti Sandeep Chavarkar(2020), focused on environmental practices in India and the improvement needed to improve quality in the disclosure practices. She also explained the importance of environmental accounting at corporate level. In her study she compared the environmental practices of five successive reports of Larsen & Toubro and Tech Mahindra. She also recommended that there is a need that corporates should follow common guidelines of environmental accounting.

AshimaSaxena (2020), emphasized that green accounting is a process of accounting for natural resources and the environment. She also mentioned that environment care is one of the most important aspects of the company’s social responsibility. A very few companies in India follow the Global Reporting Initiatives. Large corporations have adopted environmental accounting based on corporate social responsibility (CSR) as a form of corporate accountability for the effects of their operations on the environment. University Social Responsibility, sometimes known as USR, is a type of CSR used in higher education.

N Anil Kumar, T Sai Pranitha and N Kiran Kumar, stated the definition and knowledge about green accounting as well as they gave information regarding various environmental protection laws or regulations. they also enlightened the various types of environmental accounting and importance of green accounting for business. they also mentioned information on volume and economic effect to people, environmental decision making, gross domestic product and environmental cost and benefits.

Benefits of green accounting:

- It helps businesses identify various environmental risks and opportunities.
- It can help businesses to reduce their costs in many ways such as reducing energy usage, water consumption, waste management and greenhouse gasses emission.
- It can help businesses to improve reputation and receive government tax incentives and credits.
- It motivates companies to come up with new technologies that are more suitable and efficient.

Company Profile

Tata Consultancy Services Ltd.

Tata consultancy services is a multinational technology company and known for its IT services. It is providing consultancy and business solutions also. TCS is the largest IT Sector company in the world. It is established in 1968 by Jamshethji Tata.Its consulting-led, cognitive powered, portfolio of business, technology and engineering services and solutions is delivered through its unique Location Independent Agile delivery model, recognized as a benchmark of excellence in software development. A part of the Tata group, India's largest multinational business group, TCS has over 601,000 of the world's best-trained consultants in 54 countries. TCS is listed on the BSE and the NSE in India.

The Tata Consultancy Services Ltd is also the 1st Information Technology Company in the country for achieving the **"ISO 50001:2011" EMS (Energy Management System)** certification for its campus in the city of Pune.TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index. TCS is a only company which provide largest employment to women employee. The mission of TCS is to provide best consultancy and IT services. It also enhances its human capital by recruiting the best employees. TCS also plays important role for the creation of natural capital or environmental footprint. It enhance its social capital by investing in education, skill development, employability, health and wellness and the environment according to sustainable development goals.

TCS has systematic program for reduce its carbon and resource consumption footprint such as green IT, green buildings, intelligent energy management using its own IT-based solution and water and waste recycling. TCS follows GRI standards and play vital role in green accounting. It reduces carbon emission by increasing use of renewable source of energy, water recycling and large scale of rainwater harvesting and reduction, reuse and recycle of waste.TCS' environmental stewardship rests on four pillars: carbon footprint mitigation, water conservation and recycling, waste reduction and recycling, and preserving biodiversity. It has a target to reduce Scope 1 and scope 2 greenhouse gas emissions by 70% by 2025 and net zero emissions by 2030.

Tech Mahindra Ltd.

Tech Mahindra is a global consulting services and systems integrator that operates more than 90 countries, delivering solutions with a unique blend of digital innovation and robust, industry-strong processes. Tech Mahindra has a promise with their customer to help with "Scale at Speed". It is settled in Pune and has its enlisted office in Mumbai. They design solutions for industry leaders and offer innovative digital experiences that enable them to transform. Mahindra British telecom was established in 1986 and started business in 1987 and Satyam Computers Services is incorporated as a private limited company. In 1991 Satyam was recognized as public limited company and enters the BSE. In Jan. 2006 Mahindra British telecom name has changed into Tech Mahindra Limited and it launched the Tech Mahindra foundation to enhance employment, empower education and drive inclusion.

Satyam name was changed in Mahindra Satyam in 2007 and in 2012 it was merged in Tech Mahindra. In 2017 Tech Mahindra acquires US-Based healthcare IT services and consulting firm, the HCI group. In Jan. 2023it re-emerged as a leader in the Dow Jones sustainability world index for the ninth consecutive year. It is recognized as the 'Fastest growing organization in Brand Strength' by Brand finance. In 2022 it was the only Indian company in the Forbes Blockchain 50 list. Tech Mahindra follows a holistic approach towards sustainability and adopts the baseline process. This approach helps companies to meet stakeholder's expectations for sustainability reporting and enhance their ability to meet the evolving demands. It has three pillers social, environment and governance whichprovide a robust understanding of the organization's Sustainability maturity

Only few companies in India follow Green Reporting Initiatives Standards and Tech Mahindra is one of them. As a technology company, it leverages technology to minimize the impact of their business activities on the environment. They took many steps towards improvement of efficiency and environmental such as water consumption, water recycling, increasing renewable energy and reducing waste. They also tried to reduce the ecological footprints of the organization.The company's has started energy conservation initiatives for reducing their consumption because they purchase from the grid.

For the study purpose here we took two IT companies TCS and Tech Mahindra. The datas are as follows:

Table 1 Comparison for the year 2020-21 to 2023-24 for Tata Consultancy Services Ltd.

Environmental Indicators	2023-24	2022-23	2021-22	2020-21
Energy consumption	1,70,91,82,976 (MJ)	1,50,50,16,079 (MJ)	714,220,770 (MJ)	918,764,282 (MJ)
Water consumption	24,67,342 KL	20,82,781 KL	1,440,959 KL	1,401,280 KL

Waste Consumption	6,716.2 MT	5,031.6 MT	3,384.5 MT	2,174.2 MT
Greenhouse gases (Scope 1 Emission(s (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	21,949.0 tCO2e	20,972.0 tCO2e	16,684 tCO2e	16,284 tCO2e
(Scope 2 Emission) (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	73,722.0 tCO2e	1,17,265.0 tCO2e	141,045 tCO2e	193,994 tCO2e
Environmental/Corporate Social Responsibility expenditure	827 Crores	783 Crores	727 Crore	674 Crore

Source: Annual Report of the company

Table 2 Comparison for the year 2020-21 to 2023-24 for TECH MAHINDRA

Environmental Indicators	**2023-24**	**2022-23**	**2021-22**	**2020-21**
Energy consumption	470,08700 (MJ)	411,23980(MJ)	361,01282 (MJ)	390,52080 MWH
Water consumption	673,214 KL	614,956.74 KL	355,445.92 KL	357,865 KL
Waste Consumption	356.22 MT	388.018 MT	184.21 MT	206.81 MT
Greenhouse gases (Scope 1 Emission(s (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	10,574tCO2e	8,612tCO2e	8,995.81 tCO2e	7,930.24tCO2e
(Scope 2 Emission) (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	68,088tCO2e	60,050tCO2e	57,851.87 tCO2e	66,418.66tCO2e
Environmental/Corporate Social Responsibility expenditure	112.4 Crores	118.1 Crores	108.6 Crores	105.00 Crores

Source: Annual Report of the company

FINDINGS AND SUGGESSIONS

After analyzing the data of last four years it was found that both IT companies play most important role for the sustainability development but in a comparison perspective Tata Consultancy has better performance than Tech Mahindra. TCS play a vital role in the development of environment through various parameters such as resource efficiency, green building infrastructure, climate change mitigation, supply chain management, Green IT and employee engagement. All new campus of TCS are designed according to green building standards for energy and resource efficiency. They have roof-top Solar system to reduce the carbon footprint. As per the study in TCS, the energy consumption was increased by 13% in 2024 from 2023 and in Tech Mahindra the energy consumption are increased by 3.2% only.

The water consumption of TCS has also increased in 2024 by 18.4% and in Tech Mahindra it is increased by 9.6% and 291 mnlitres of waste water recycled. To provide the protection to the environment there is need of proper waste management also. So waste management of TCS in 2024 is increased by 33% and in Tech Mahindra it is decreased by 8%. In greenhouse gas emission (Scope 1 and scope 2) 31% reduction in the year 2024 in Tech Mahindra and around 30% reduction in TCS. According to the Company Act, 2013 it is mandatory for all companies to spend some of part of their profit on CSR. The Corporate social responsibility amount spend by the TCS is 827 crores in the year 2024 5.61% more than last year. The CSR amount of Tech Mahindra is 112.4 crore it is 5% less from last year. So after comparison we found that both IT companiesinitiatives towards environmental accounting but Tata consultancy has better performance.

Conclusion

Green accounting practices play an important role for the development of the nation. High cost for maintaining the green accounts in to financial statement and lack of knowledge of the benefits might be the reasons for not following green accounting by other companies in India. So there is need to conduct the awareness program for implementing the green accounting in financial statements. There are no accounting regulations for environmental cost in the balance sheet, most of disclosure reports are unstructured and no set of rules here. So government as well as corporate sector should come along and initiate the combined programs for the protection of environment. In India very few companies follow GRI standard so government make their own standards and make mandatory for all companies. By this we can protect environment and can achieve economic growth.

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