



Research Paper

## ESG Reporting Practices by Indian Corporate Firms: A Comparative Study between Chemical and Pharmaceutical Sector

Dr. Sudipta Ghosh

(Department of Commerce, Maharani Kasiswari College, India. <https://orcid.org/0000-0003-1968-3094>)

**ABSTRACT:** This paper discusses the ESG reporting practices in India in brief and compares two important sectors namely the chemical and pharmaceutical to understand the variations/differences in ESG practices between them. ESG looks beyond the financial performance of a firm. Environmental, social and governance factors are becoming important in the present era of environmental degradation, global warming, complex social eco-system and unethical governance. SEBI notified the preparation of Business Responsibility and Sustainability Reporting in India by a select group of corporate firms to ensure a standardised disclosure on ESG parameters. This study is secondary data based and descriptive in nature focusing on environment, social and governance responsibility of the business in India. This paper concludes that environment, social, governance and overall ESG practices differ significantly in Indian chemical and pharmaceutical sector.

**KEYWORDS:** Environment, Social, Governance, ESG Score, Chemical Sector, Pharmaceutical Sector

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### I. INTRODUCTION

In the present era of environmental degradation, global warming, complex social eco-system, presence of unethical elements in governance; profit is not the sole yardstick to measure the success of business firms. Rather their actions and responses towards the environment and society and the way they led and managed (i.e. governance) are becoming important to judge their sustainability in long run. So besides the financial reports (like Statement of Profit and Loss, Balance Sheet and Cash Flow Statement), non-financial reporting (like Sustainability Reporting) is getting a place in companies' disclosure policy. Companies are considering environmental, social and governance (ESG) factors in the recent time as it helps the stakeholders to understand how an organization deals with the opportunities and threats associated with these three factors. There are several frameworks of sustainability reporting like Global Reporting Initiative (GRI), the Principles for Responsible Investment (PRI), the Sustainability Accounting Standards Board (SASB). In India, Business Responsibility and Sustainability Reporting (BRSR) is a standardised disclosure on ESG parameters. It provides a holistic view. Energy efficiency, water management, greenhouse gas emissions, waste and pollution, climate change are the factors considered under 'E' (Environment). Working conditions, diversity, equity, employee safety and health, customer and vendor engagement, communities and societies are the factors considered under 'S' (Social). Ownership concentration, board performance and independence, shareholders relation, executive compensation, preventing bribery and corruption, disclosure practices are the factors considered under 'G' (Governance). The COVID-19 pandemic has reinforced the importance of ESG factors.

In this backdrop, the present paper makes a modest attempt to discuss on the ESG reporting practices in India in brief and compare two important sectors namely the chemical and pharmaceutical sector to understand the variations/differences in ESG practices between them. Rest of the paper is organised as below: Part II reviews some recent available literature on ESG reporting practices. Part III states the objectives of the study. Part IV describes the methodology of the study. Part V provides a bird's eye view on ESG reporting practices in India. Part VI makes a comparative analysis of ESG practices in Indian chemical and pharmaceutical sector. Finally last part concludes the paper.

## II. LITERATURE REVIEW

This section makes a brief review of some recent available literature on ESG reporting practices. Pareek and Pasumarti (2021) made an international comparison on thirty biggest companies of India, UK and USA and observed the fast growth of interests in sustainability reporting. Adhikari and Ghosh (2022) studied on ESG ratings for Indian companies of cement, financial and metal sectors and found significant variations among the sectors regarding ESG initiatives. Saxena (2022) portrayed an overall landscape of sustainability reporting practices of Indian companies. Dhameja *et al.* (2022) in their study highlighted the need to develop ESG metrics for infrastructure projects and several service areas like education, health care, postal and communication, transport, irrigation and water works. Sekar and Krishnan (2022) analysed ESG as a means to achieve the sustainable development goals and discussed the global scenario of ESG as well as India's effort towards ESG issues. Majumdar (2022) made a comparative study on ESG reporting and disclosure practices in the Indian banking sector considering State Bank of India and ICICI Bank. He analysed the study both in qualitative and quantitative way and found the quality of disclosure is not same among the banks. The paper also got a wide gap of ESG scores reported by two different rating agencies (Bloomberg and CRISIL).

## III. OBJECTIVES OF THE STUDY

The present paper aims to discuss the ESG reporting practices in India. Accordingly, the paper has the following two objectives:

1. To discuss the ESG reporting practices by Indian corporate firms in general, and
2. To make a comparative study in between chemical and pharmaceutical sector to understand the variations/differences in ESG practices by them, in particular.

## IV. METHODOLOGY OF THE STUDY

This study is descriptive in nature covering the issues of sustainability and thus focuses on three important parameters viz. environment, social and governance responsibility of the business in India. It is purely based on secondary data collected from different web-sources. ESG scores have been obtained from CRISIL ESG Report, 2022. For analysis purpose, statistical measures like mean, variance and t-statistics have been calculated with the help of MS Excel. To make a comparison between chemical and pharmaceutical sector regarding their ESG practices, following four hypotheses have been framed to understand whether the E, S, G and ESG scores in between two select sectors are statistically significant or not.

H-1: Environmental scores do not differ significantly between chemical and pharmaceutical sector.

$$H_{0(E)}: \mu_C = \mu_P \quad H_{1(E)}: \mu_C \neq \mu_P$$

H-2: Social scores do not differ significantly between chemical and pharmaceutical sector.

$$H_{0(S)}: \mu_C = \mu_P \quad H_{1(S)}: \mu_C \neq \mu_P$$

H-3: Governance scores do not differ significantly between chemical and pharmaceutical sector.

$$H_{0(G)}: \mu_C = \mu_P \quad H_{1(G)}: \mu_C \neq \mu_P$$

H-4: ESG scores do not differ significantly between chemical and pharmaceutical sector.

$$H_{0(ESG)}: \mu_C = \mu_P \quad H_{1(ESG)}: \mu_C \neq \mu_P$$

## V. ESG REPORTING PRACTICES IN INDIA

The root of current sustainability reporting through ESG parameters in India can be traced when the Ministry of Corporate Affairs (MCA) released the National Voluntary Guidelines (NVGs) on social, environmental, and economic responsibilities of business in 2011. After that in 2012, the Securities and Exchange Board of India (SEBI) introduced the Business Responsibility Report (BRR). In 2019, the NVGs were revised and released as the National Guidelines on Responsible Business Conduct (NGRBCs). In 2020, MCA proposed a format for Business Responsibility and Sustainability Reporting (BRSR). This BRSR is framed on environmental, social and governance parameters. The spirit of these reports (i.e. BRR and BRSR) is to go beyond the financials and to understand the environmental and social impacts of business and the way businesses are directed and governed. According to the SEBI Circular, 2021 the BRSR is applied to the largest (by market capitalization) 1000 listed companies voluntarily for financial year 2021 – 22 and mandatorily from financial year 2022 – 23. This mandatory disclosure will definitely improve the ESG based sustainability reporting scenario in India.

BRSR is an overall format, which incorporates key performance indicators (KPIs) from all the three parameters of ESG. BRSR framework has three sections viz. (i) General Disclosures, (ii) Management and Process Disclosures and (iii) Principle-wise Performance Disclosures. General Disclosures include details of listed entity, products/services, list of operations, market served by the entity, details about employees, holding, subsidiary and associate companies, corporate social responsibility (CSR) and transparency and disclosure compliances. Management and Process disclosures include questions related to business structures, governance,

leadership and oversight. It also includes the policies and processes to adopt NGRBC Principles. Principle - wise Performance Disclosures provide information across the nine principles of NGRBC by categorising information into ‘Essential’ and ‘Leadership’ indicators.

According to the CareEdge Research, ESG reporting by Indian corporates has improved significantly since 2020 as a result of SEBI’s initiatives for ESG disclosures. Different industries like steel, cement, mining, utilities and energy are notably improving towards adopting green initiatives to achieve ESG goals.

As per the NSE India Reporting, 185 companies are publishing Business Responsibility and Sustainability Report for the financial year 2021-22.

**VI. ESG PRACTICES IN INDIAN CHEMICAL AND PHARMACEUTICAL SECTOR**

Chemical and pharmaceutical are two important sectors in Indian economy. Chemical is a major industry and contributes 7% of India's gross domestic product in 2022. On the other hand, India provides the world's largest quantity of generic medicines which accounts for 20% share of total global pharmaceutical exports (Wikipedia).

For this study, thirty companies (mentioned in the Annexure) each from chemical sector and pharmaceutical sector have been considered for data analysis on selected parameters from the CRISIL ESG Report, 2022. From the Table 1, it is evident that, the mean score is higher in pharmaceutical sector for all the four parameters. So on an average, E, S, G practices are more in pharmaceutical sector than the chemical sector. The variances are lower in pharmaceutical sector in all parameters except the governance. The mean score is highest in governance practice by both the sectors whereas environment parameter has the lowest mean score among the E, S and G.

Parameters	No. of observations (N)	Chemical Sector	Pharmaceutical Sector
Environment (E)	Mean	30	30
	Variance	32.73	43.40
	Max	100.41	85.97
	Min	53	61
Social (S)	Mean	22	32
	Variance	46.30	56.43
	Max	51.80	29.77
	Min	61	68
Governance (G)	Mean	27	44
	Variance	64.13	69.43
	Max	19.016	31.56
	Min	70	79
ESG	Mean	53	50
	Variance	48.70	57.07
	Max	32.49	22.62
	Min	61	68
		38	49

**Table1:** Descriptive Statistics of E, S, G and ESG

The next table shows the highest and lowest scoring company in each sector with their respective score. This description is useful to identify the companies. Now a days, people are considering the ESG score of the companies also before investing to judge the sustainability of the companies.

Parameters		Chemical Sector	Pharmaceutical Sector
Environment (E)	Highest scoring company	Pidilite Industries Limited (53)	Dr. Reddy’S Laboratories Limited (61)
	Lowest scoring company	Sharda Cropchem Limited (22), Deepak Nitrite Limited (22)	Advanced Enzyme Technologies Limited (32)
Social (S)	Highest scoring company	Rallis India Limited (61)	Natco Pharma Limited (68)
	Lowest scoring company	Clean Science and Technology Limited (27)	IPCA Laboratories Limited (44)
Governance (G)	Highest scoring company	Bayer Cropscience Limited (70), Tata Chemicals Limited (70)	Syngene International Limited (79)
	Lowest scoring company	Chemplast Sanmar Limited (53)	Sun Pharmaceutical Industries Limited (50)
ESG	Highest scoring company	Pidilite Industries Limited (61)	Cipla Limited (68)
	Lowest scoring company	Clean Science and Technology Limited (38)	IPCA Laboratories Limited (49)

**Table 2:** Highest and lowest scoring company

To understand the variations/differences in ESG practices by the selected sectors, t-test (two-tailed) for equality of mean has been applied against each hypothesis. Hypotheses are (H-1) Environment/ (H-2) Social/

(H-3) Governance/ (H-4) ESG scores do not differ significantly between the chemical and pharmaceutical sector. In each case, the null hypothesis ( $H_0$ ) is to be rejected as t-statistics is less than the critical value.

t-Test: Two-Sample assuming unequal variances					
Parameters	No. of Observations	DF	t-stat	Critical Value	Remarks
Environment (E)	30	58	-4.279448678	2.001717468	Reject $H_0$
Social (S)	30	54	-6.145188087	2.004879275	Reject $H_0$
Governance (G)	30	55	-4.081737868	2.004044769	Reject $H_0$
ESG	30	56	-6.173067971	2.003240704	Reject $H_0$

**Table 3: t-Test**

From the above table it is evident that, the initiatives taken by the companies on environment, social and governance vary across the chemical and pharmaceutical sector in a significant manner. So, we can conclude that E, S, G and overall ESG practices differ significantly in between the above two sectors.

## VII. CONCLUSION

ESG disclosure practice is now growing in India, particularly after SEBI notification. Indian corporate firms ultimately have to embrace this type of disclosure due to pressures from different corners of the society. Firms under different industries in India like steel, cement, chemical, pharmaceuticals, mining, utilities and energy have already taken green initiatives to achieve ESG goals. Business Responsibility and Sustainability Reporting framework is a milestone in ESG landscape in India. As per the result of this paper, environment, social, governance and overall ESG practices differ significantly in Indian chemical and pharmaceutical sector.

However this study suffers from some limitations. This study is confined to only two sectors which can be extended to other sectors to reach at the conclusive result. Apart from using CRISIL score on ESG, one can use the score generated by other rating agencies. Again, the study can be extended to more than one year to understand the year-wise change/development on ESG initiatives taken by the selected companies/sectors. However these limitations lead to the scope of further research. More research, analysis and discussions are required on ESG as it will be crucial for the long term development of people and planet.

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## ANNEXURE: SAMPLE COMPANIES

Sl. No.	Chemical Sector	Pharmaceutical Sector
1	Aarti Industries Limited	Abbott India Limited
2	Atul Limited	Advanced Enzyme Technologies Limited
3	BASF India Limited	Ajanta Pharma Limited
4	Bayer Cropscience Limited	Alembic Pharmaceuticals Limited
5	Camlin Fine Sciences Limited	Alkem Laboratories Limited
6	Chambal Fertilisers and Chemicals Limited	Astrazeneca Pharma India Limited.

7	Chemplast Sanmar Limited	Aurobindo Pharma Limited
8	Clean Science and Technology Limited	Biocon Limited
9	Coromandel International Limited	Cipla Limited
10	Deepak Nitrite Limited	Divis Laboratories Limited
11	Dhanuka Agritech Limited	Dr. ReddyS Laboratories Limited
12	Fine Organic Industries Limited	ERIS Lifesciences Limited
13	Galaxy Surfactants Limited	Gland Pharma Limited
14	GHCL Limited	Glaxo Smithkline Pharmaceuticals Limited
15	Gujarat Narmada Valley Fertilizers and Chemicals Limited	Glenmark Pharmaceuticals Limited
16	Gujarat State Fertilizers and Chemicals Limited	Granules India Limited
17	Insecticides (India) Limited	Indoco Remedies Limited
18	Laxmi Organic Industries Limited	IPCA Laboratories Limited
19	Navin Fluorine International Limited	J B Chemicals and Pharmaceuticals Limited
20	Neogen Chemicals Limited	Jubilant Pharmova Limited
21	Oriental Carbon and Chemicals Limited	Laurus Labs Limited
22	PCBL Limited	Lupin Limited
23	PI Industries Limited	Natco Pharma Limited
24	Pidilite Industries Limited	Pfizer Limited
25	Rallis India Limited	Sanofi India Limited
26	Rossari Biotech Limited	Solara Active Pharma Sciences Limited
27	Sharda Cropchem Limited	Strides Pharma Science Limited
28	Sudarshan Chemical Industries Limited	Sun Pharmaceutical Industries Limited
29	Sumitomo Chemical India Limited	Suven Pharmaceuticals Limited
30	Tata Chemicals Limited	Syngene International Limited