

# Chapter 1 One Planet One Compliance: Stakeholder Perception Analysis on the Efficacy of the IR Framework of ESG Disclosure

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Abstract The objective of conducting this research is to investigate the efficacy of <IR> Framework in ESG disclosure with the help of supporting literature as well as by conducting stakeholder perception on the Integrated Reporting framework through the questionnaire method. For this, an initial attempt has been made to reveal whether there is One Planet One Compliance. And then we have discussed the perception of stakeholders on the efficacy of <IR> in ESG disclosure. The study reveals that though there are diverse reporting frameworks prevailing, each has its own efficiency like CDP aligned with TCFD and CDSB possesses its own uniqueness and is highly efficient for disclosing climate-related issues. While, GRI and SASB provides standard & metrics across all the three pillars of ESG for diverse industries. Besides, <IR> is efficient in providing guidance and principles on 'what to be reported and to what extent'. Additionally, from the stakeholder perception analysis, it was concluded that <IR> is an 'umbrella' for corporate reporting and capable of replacing other reporting approaches as it is 'Extremely Effective' in disclosing the Business model, its value creation process, Risk and Opportunities, Management dialogue on emerging environmental and social risk/opportunities (e.g. climate change, HSE, Human rights, etc.). Thus, a collaboration of these organisations under one umbrella of Value Reporting Foundation and subsequently merging with IFRS Foundation is a pathway towards One Planet One compliance.

**Keywords** Integrated reporting framework  $\cdot$  ESG  $\cdot$  Stakeholder perception  $\cdot$  Reporting sustainability

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#### 1.1 Introduction

#### 1.1.1 Theoretical Background

Corporate sectors are continuously looked at as agents of revolution in an economy facing intensifying environmental in addition to social issues. Companies are incorporating these issues in their strategy and due to the consequence of internal as well as external stakeholder pressure (Haruna and Mkhize 2020; Martínez-Ferrero et al. 2016), they are going beyond the stringent compliance, adhering to environmental, social and other local regulations (Baron 2014). Thus, the companies want to inform their stakeholders about their responsible business processes, practices, strategy, commitment and the initiatives taken to manage those issues (Hoang 2018). Consequently, the corporate disclosure of ESG has emerged over the past few decades in a variety of directions.

The ESG disclosure is the reflection of the internal process of a company, its strategy, its durability, performance and its impact, emphasising non-financial metrics (Park and Oh 2022), but has financial consequences too, like: capital access, productivity and cost savings, risk management, human capital, revenue growth, etc. (UNSSE 2015). As ESG factors are continuously evolving, companies are practicing different varieties of reporting methods as per the industry and the country they belong to or have their operating segments. As a result, adopt the existing reporting practices that meet the expectations of stakeholders or follow national securities listing obligations for disclosing material information or the framework that has an international appearance (UNSSE 2015); accordingly, stakeholders are bound to refer to multiple annual reports in their decision-making process.

Therefore, in this research, we intend to discover the answer to '**One Planet One Compliance?**' for ESG discourses, by studying the multiple reporting frameworks, guidelines and supporting research literature. And so, we will be firstly discussing multiple reporting frameworks prevailing, globally; secondly, we will discuss the endeavour of the Value Reporting Foundation for one compliance and last we will be presenting the results of stakeholder perception analysis conducted on the efficacy of <IR> framework (which is assumed to be most effective and innovative framework).

#### 1.1.2 One Planet One Compliance? ESG and Multiple Reporting Framework

While ESG disclosure is a matter of materiality and bringing transparency to the stakeholder to achieve legitimacy and stewardship (Ara et al. 2020; Haruna and Mkhize 2020), however, there still remains a disparity between what is to be reported and which information will satisfy the stakeholder needs (Singaraju et al. 2016). Thus, international organisations, e.g. GRI, IIRC, CDSB, TCFD, SASB, etc. are coming up with multiple innovative frameworks as well as guidelines for the disclosure of

ESG data. The Expert Group of UNCTAD mentioned that the stock exchange can play an influential role in promoting diverse and high-quality disclosure of voluntary sustainability disclosures (UNCTAD 2012). For instance, the stock exchanges of South Africa and Brazil created a leading example that the stock exchanges of more developed countries from China to India and even France have learned lessons and subsequently started acquainting new sustainability reporting guidelines (UNCTAD 2012).

Consequently, in 2009 SSE (at present its UN-Sustainable Stock Exchange initiative) was propelled in collaboration with UNCTAD, UNGC, UNEP and PRI to volunteer foremost stock exchanges with the public commitment to stimulate corporate reporting and ultimately on ESG issues (UNCTAD 2012). As per the database of UNSSE, sixty-seven stock exchanges have ESG reporting instruments (level of reference for each guideline/framework has been shown in chart-1 below), which has been discussed briefly in this section.

Global Reporting Initiative (GRI): The Topper of ESG Reporting: Following public uproar over the environmental destruction caused by Exxon Valdez: the oil spill disaster, GRI was established in collaboration with Tellus Institute, UNEP and the CERES (GRI 2023) with the first aim of crafting a safeguard mechanism and to make companies abide by responsible environmental conduct and follow responsible business principles, later these principles extended to cover governance and social issues for sustainable economic development to attain UN-SDGs. From the first version, G1 (2000), GRI has evolved in multiple directions and is continuously improving with subsequent releases of G2 (2002), G3 (2006), G4 (2013) and transitioned to The Universal Standard (2021) which includes Tax indicators and comprehensive waste metrics as well as rolled out Sector Standards (GRI 2023). Consequently, GRI became a highly reporting standard, i.e. 4 out of 5 companies adopt this standard for sustainability reporting (KPMG 2022) and 96% of stock exchanges refer to GRI (UNSSE 2023).

SASB: The Investors' choice for financial ESG material information: Developed in 2011, SASB standards are more investor-focused, i.e. it provides guidance for disclosing financial-material ESG information to the investors. The coverage of the SASB standard is broad and industry-based for seventy-seven industries that identify the material sustainability impact on the financial performance of each industry (SASB 2023). As per (UNSSE 2023), 79% of stock exchange referred to SASB, and is popularly reporting standard in the US, Brazil and Canada (KPMG 2022).

The <IR> Framework: for Value Creation through Integrated Thinking: Since the establishment of IIRC, the adoption of <IR> Framework and the presentation of integrated reports have gained considerable fame around the world (IIRC 2019a, 2020). The primary objective of the framework is to promote stewardship, accountability, interconnection and interdependencies for various capitals (Natural, Social&Relationship, Manufacturing, Human, Intellectual and the financial capitals) (IIRC 2021) and how the organisation implement integrated thinking using these six capitals to create value over time, which makes this framework different from other sustainability reporting standard.

CDP: A Carbon Disclosure Project for environmental impact: CDP with an outreach of 18,700+ companies in 1100+ cities runs the global environmental disclosure system to determine and manage companies' risks and opportunities related to climate change, deforestation and water security on the request of city stakeholders, investors and purchasers (CDP 2023a). It consists of a comprehensive dataset on three major environmental issues, viz. climate change, water and forest, that enable companies to uncover environmental risks and opportunities, boost competitive advantage, improve reputation and stand in tracking progress towards a sustainable economy for people and the planet (CDP 2023b). Its participants are not only companies, even sub-national governments of 96 states utilises this global platform to showcase their transition to a resilient and low-carbon economy. Consequently, organisation such as Climate Group, UNFCCC's -Climate Action Portal use this platform and also efficient for major projects e.g. RegionsAdapt, United Nations' Race to Resilience; Race to Zero and EU Climate Pact (CDP 2023c).

TCFD: Climate-related financial disclosure for effective capital allocation: Due to rapidly increasing global warming and subsequently the Paris Agreement, nearly 200 governments decided to discourse on climate change by holding the average global temperature vigorously below 2 °C and pursuing efforts to control the increase of 1.5 °C (UNFCCC 2015). Thus, in 2017, the Financial Stability Board released its final recommendation on climate-related financial disclosure, i.e. TCFD recommendations. These recommendations are designed to obtain forward-looking information around four thematic areas: governance, strategies, risk management, and most importantly, metrics and targets so as to support investment, insurance underwriting decisions, lending and ultimately improving understanding of climate-related physical as well as transitional risk within 2 °C and/or 1.5 °C scenario analysis (TCFD 2022). Due to this efficiency, 63% of stock exchanges recommend this framework for Climate-related disclosures (UNSSE 2023).

CDSB: For Natural, Human and Social Capital disclosures: The framework consists of guiding principles with other reporting requirements in the context of environmental and social disclosures such as E-S-related risk and opportunities, outlook, performance, results and impacts that are required to be presented in mainstream reports, i.e. annual reports. This framework is hosted by CDP and also encompasses the definitions of IIRC's Natural capital, 'provider of financial capitals' and similar to <IR> framework to some extent (CDSB 2023). Hence, its popularity is less, and only 36% stock exchange recommends this for ESG disclosures (UNSSE 2023).

Merger of the Value Reporting Foundation with IFRS: A pathway towards *One Planet One Compliance*: From the above discussion, it was discovered that there are inevitably diverse voluntary frameworks, guidelines and standards among which finding comparability and consistency becomes a major challenge. Hence, in June 2021, the two entities IIRC and SASB laid the foundation of The Value Reporting Foundation (henceforth, The VRF) with the intention to address those challenges and to simplify the system of disclosing ESG information. The VRF offered an ample suite of resources e.g. the <IR> Framework, Integrated Thinking Principles, and the SASB Standards to aid business and the investors to understand how the enterprise value is created, preserved and/or eroded overtime (SASB 2023). However, due to urgent action on climate change and other sustainability issues, the IFRS Foundation publicises three significant developments in COP26: First, reformation of ISSB to construct a comprehensive universal baseline to leverage transparency, high-quality, reliability and comparable reporting mechanism; second, consolidation IFRS foundation with CDSB (hosted by CDP) and The VRF, with a commitment for investor-centric ESG disclosures; third, publication of Prototype developed by TRWG (Technical Readiness Working Group is the joint work of the IASB, CDSB, TCFD, IOSCO, WEF, VRF and the Expert Group of securities regulators (IFRS 2021); for climate-related (CDSB 2023; TCFD 2022) and general disclosure requirements (SASB 2023b).

Inevitably, the new ISSB and the reformed IFRS foundation shall be efficient in reducing the over-burdening of corporate reporting and yield high consistency and better comparability in ESG disclosures in the future and in the long run.

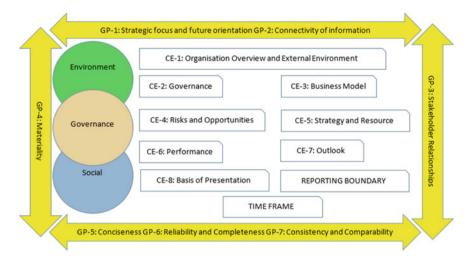
#### 1.1.3 Review of Literature and Hypothesis Development

<IR> Framework Encompassing ESG Disclosure. The transition in corporate reporting is believed to be due to the theory of stakeholder (Hoang 2018); diffusion of innovation (Ara et al. 2020), regulatory pressure, theories of neo-institutionalism (Gelmini and Vola 2021) and ultimately to achieve legitimacy (Haruna and Mkhize 2020) and improve market reputation (Singaraju et al. 2016).

Still, the investment community, i.e. investors are increasingly looking for more transparency and accountability (Setyawan and Kamilla 2015) towards the sustainable development of the whole economy (Cosmulese et al. 2019; IFRS 2021; Sridharan 2018). Obviously, to meet this demand, corporations are looking for an efficient platform and a framework that allows them to provide holistic revelation of their financial and non-financial information. As a result, <IR> has gained the attention of 76% of the stock exchange (UNSSE 2023) with broad coverage of 70+ nations and 2500+ companies of different industries (IIRC 2021). It is considered as an ideal platform for ESG disclosures (Corvino et al. 2020); even 70% (N = 1434) of TCFD recommendations are reported in Integrated Reports (TCFD 2022).

In recent research, the evidence reveals that corporate governance (Hoang 2018; Ofoegbu et al. 2018) is the factor that influences the level of environmental and social disclosures (Bernardi and Stark 2016; Umoren et al. 2015). A significant upsurge was seen in South African companies' corporate governance disclosure after mandating <IR> framework (Ahmed Haji and Anifowose 2017) and the companies that have environmental committee provides more environmental disclosures in their integrated reports (Ofoegbu et al. 2018). Additionally, in another study, it was confirmed that <IR> could be an efficient tool in disclosing human rights issues as well as health and safety by improving the overall corporate governance structure (Corvino et al. 2020).

Although, the ultimate audience of any reporting framework is investors (Mähönen 2020), i.e. the provider of financial capital only (IIRC 2013; Park and



**Fig. 1.1** IR > Framework Encompassing ESG Disclosure (Where GP = Guiding Principle; CE = Content Element. *Source* Own Compilation

Oh 2022). In South Africa, there was a significant association of analyst forecasts with environmental and governance disclosure, viz. post-mandating <IR> regime (Bernardi and Stark 2016). Additionally, the study also provides evidence that the integrated reports are effective in providing useful ESG information that links to financial performance which is useful for the capital market. These findings coincide with the findings of Bartha et al. (2017), Lee and Yeo (2015), Zhou (2017). Furthermore, in the study of integrated reports of Nigerian companies, it was found that the <IR> framework is efficient in governance (81%) and social (66%) disclosure (Umoren et al. 2015). Whereas, there is a positive effect of corporate governance indicators, viz. board gender, board size and CSR committee on the environmental disclosures presented in integrated reports (Raimo et al. 2021).

With the support of the above literature, we propose the following model for <IR> encompassing ESG disclosure (Fig. 1.1) and subsequently state the hypothesis:

 $H_0$ : <IR> is not an umbrella for corporate reporting and could not replace other reporting frameworks in India.

 $H_1$ : <IR> is an umbrella for corporate reporting and could replace other reporting frameworks in India.

#### 1.1.4 Objective of the Study

The primary objective of this research is to reveal the efficiency of <IR> framework in disclosing ESG parameters. Therefore, the following research questions have been articulated:

RQ 1: What are the limitations of today's corporate reporting system?

RQ 2: How effective is the <IR> Framework in ESG disclosure?

RQ 3: Is <IR> framework efficient to replace Sustainability Report, Annual Report and BRR?

#### 1.1.5 Scope of the Study

The study brings awareness about the efficiency of GRI, SASB, CDSB, CDP, TCFD, and more centric to <IR> Framework with empirical evidence that will help regulatory bodies (especially SEBI) to think on mandating the framework for top listed (at least first 1000) companies in India. Additionally, the study will also encourage organisations to adopt <IR> for ESG reporting. Last but not limited, the study would be a major contribution to Indian literature in the research of <IR> framework providing avenues for researchers to conduct further research on this framework.

#### 1.2 Research Methodology

#### 1.2.1 Research Design

With the help of a five-point Likert scaling method, the articulated objectives have been furnished by qualitative analysis based on primary data collected from various stakeholders.

#### 1.2.2 Purposive Sampling and Data Collection Methods

The theoretical background of this research is supported by secondary data, whereas all the research questions were studied with the help of primary data only.

A systematically structured questionnaire with five-point Likert scaling consisting of thirty-two questions was administered to 500+ responders in the selected sample size through mail, out of which 202 responses had been received in 2020–21 and was considered as the final sample for this study. The questionnaire was administered to corporate people working within Integrated Reporting, CSR, Sustainability Reporting, sustainability department, accounts and finance department, ESG Consultant/Specialist and Sustainability Analyst.

#### 1.2.3 Source of Data

In this study, all the research questions defined under objective are studied through primary data, i.e. stakeholder perceptions. However, the theoretical background of this research is supported by secondary data and previous literature.

#### 1.2.4 Data Analysis Plan

Firstly, the Descriptive Method has been used to analyse the response rate for RQ 1, RQ 2 and RQ 3. Additionally, Cross Tabulation with a Chi-Square Test and Cramer's V has been executed to test the hypothesis and understand the strength of the association between two variables (defined below).

 $IR\_Umbrella\_Framework\_Sentiments = Q$ . To what extent do you agree that integrated reporting is an 'umbrella' for corporate reporting, providing the context and linkage for other forms of reporting in India?

 $IR\_Replace\_Sentiments = Q$ . To what extent do you agree that Integrated Reporting promotes a more connected and efficient approach and could replace other forms of reporting approach in India?

#### 1.2.5 Limitations

The study is based on secondary data, available literature and stakeholders' perceptions. As corporate reporting for ESG disclosure is continuously evolving, the period of survey conducted to gather perception on the <IR> framework has become one of the limitations of this study. Secondly, the perception is limited to Indian stakeholders.

#### **1.3 Result Analysis**

## 1.3.1 RQ 1: What Are the Limitations of today's Corporate Reporting System in India?

Before investigating the efficiency of the <IR> framework, it's important to study the limitations of today's corporate reporting system. Hence, in this question, twelve limitations have been provided to the participants with multi-check options.

The results (Fig. 1.2) reveal that 57% of responders agreed that there are 'too many frameworks' in India for corporate reporting that lead to 'too many initiatives' (54%) with 'insufficient focus on medium and long-term' disclosures (50%).

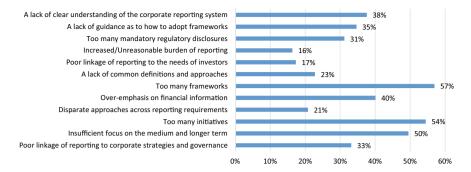


Fig. 1.2 Which of the following concerns do you think apply to today's Corporate reporting system? *Source* Primary Data

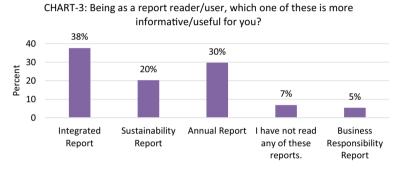


Fig. 1.3 Being a report reader/user, which one of these is more informative/useful for you? *Source* Primary data

# 1.3.2 RQ 2: How Effective is the <IR> Framework in ESG Disclosure?

The efficiency of any reporting framework depends on how it is effective in communicating the value creation process, strategy and holistic materiality elements of an organisation as per the stakeholders' needs. Therefore, the perception of stakeholders has been gathered and analysed to understand the effectiveness of <IR> Framework in meeting those needs.

As there are multiple reporting frameworks prevailing in India, firstly, it is important to understand which one of the reports is more effective and useful. Thus, the findings (Fig. 1.3) reveal that 38% of respondents believed that the integrated report is more informative and useful to them as compared to the sustainability report (which is generally based on GRI); regular Annual Report and BRR.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> BRR now known as BRSR (Business Responsibility and Sustainability Report).

Further our analysis is bifurcated into three main pillars of ESG and interpreted as follows:

- Governance Pillar
- Environmental and Social Pillar
- Other Reporting Requirements

**Governance Pillar** The vital aspects in this pillar are the disclosure about *Business Model* and how *Governance structure* supports its ability to sustainably value creation over short-medium-long-term; secondly the *Materiality Matters* and third is organisations' *Strategic* disclosures that would meet the expectation of *Stakeholders and its Engagement*.

The study reveals (Fig. 1.4) that 56% of respondents believe that <IR> is *'Extremely Effective'* in disclosing organisations' *business model as well as its value creation process*, whereas 34% of respondents believe that it is just effective. However, only 47% of respondents agreed that <IR> is *'Extremely Effective'* in disclosing governance structure ability and the materiality matters to the organisation (46% response).

It is also agreed by 52% of respondents that <IR> is 'Extremely Effective' in disclosing the Risks and Opportunities and how the governance is dealing with them. The efficiency of <IR> in providing insight about the organisation's strategy was 46% 'Extremely Effective' and providing information about the challenges and uncertainties incurred while executing those strategies was found 50% 'Effective'.

Thus, it can be determined from the above results that <IR> is efficient in providing information that would meet the requirements of G-Pillar of ESG to some extent.

**Environmental and Social Pillar**. The disclosure in the environmental and social pillar is the outcome of *Materiality Matters* to the organisation and varies sector by sector. Hence, the level of questions has been kept broad and mainly categorised into five questions as shown in chart-4 below:

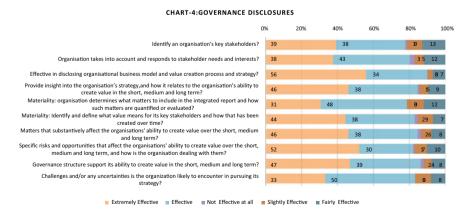
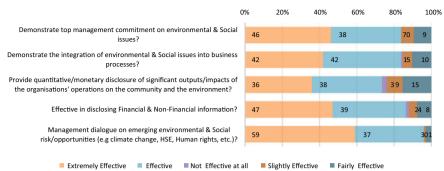


Fig. 1.4 Governance disclosure. Source Primary data



#### **CHART-5:ENVIRONMENTAL & SOCIAL DISCLOSURES**

Fig. 1.5 Environmental and Social disclosures. Source Primary data

It can be observed from Fig. 1.5 that the response rate for '*Extremely Effective' and 'Effective' is quite similar*. The study reveals that for demonstrating the top management commitments on environmental and social issues and disclosing the non-financial and financial information, the response rate is quite similar, i.e. 46–47% agreed that <IR> is '*Extremely Effective'*. Whereas 59% of respondents find <IR> as '*Extremely Effective'* in disclosing management dialogue on emerging environmental and social risks/opportunities. However, only 36% believe that <IR> is '*Extremely Effective'* in providing quantitative/monetary disclosure of significant outputs/impacts of the organisations' operations on the community and the environment.

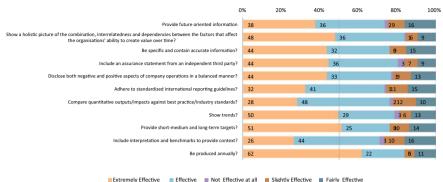
Thus, it can be determined from the above results that as compared to the G pillar, <IR> is more efficient in providing information that would meet the requirements of the E-S Pillar of ESG.

**Other Reporting Requirements.** Besides the material topics in all the three pillars of ESG, there are other reporting requirements that make the ESG reporting more insightful, understandable and holistic in nature such as providing future-oriented information either quantitative/qualitative to the stakeholders with short-medium-long-term targets, showcasing trends, including benchmarking context, etc. and maintaining the decent level of transparency by disclosing both positive/negative aspects in overall value creation process, nonetheless should be accurate, reliable and presented on regular basis.

Hence, the above mentioned requirements have been administered to the participants and the responses are summarised in Fig. 1.6.

The analysis reveals that 62% agreed that the reporting should be done annually, 50% and 51% agreed that <IR> is '*Extremely Effective*' in disclosing short-medium-long-term targets and showcasing trends, respectively. While 48% agreed that <IR> is '*Extremely Effective*' in showing a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organisations' ability to

#### CHART-6:OTHER REPORTING REQUIREMENTS



Extremely Enective Enective Not Enective at all Signity Enective Fairly Ene

Fig. 1.6 Other reporting requirements Source Primary data

create value over time. Despite that fact, 44% found <IR> to be '*Extremely Effective*' in maintaining transparency by disclosing both positive/negative aspects, and providing third-party independent assurance statements to uphold the reliability and accuracy of the information.

Thus, it can be determined from the above results that <IR> is effective in meeting the other requirements of ESG disclosures.

### 1.3.3 Is <IR> framework Efficient to Replace the Sustainability Report, Annual Report and BRR?

We collected participants' sentiments to study the capability of <IR> framework in replacing other reporting approaches. The results revealed that 64% of respondents (the companies who have adopted <IR>, N = 76) 'Agreed' and 18% 'Strongly Agreed' that <IR> framework is efficient in replacing other reporting approaches. To test the hypothesis, a contingency table was prepared with two variables, viz. IR\_Replace\_Sentiments and IR\_Umbrella\_Framework\_Sentiments in SPSS with Pearson Chi-Square ( $\chi^{2}$ ) and Cramer's V ( $\varphi_c$ ). The results (w.r.t. Table 1.2) reveal that there is association with these two variables significantly at  $\chi^2$  (DF = 4) is 64.777 within p-value (<0.000 <  $\alpha$  = 0.05) and the value of  $\varphi_c$  = 0.653 indicates strong association (w.r.t. Table 1.1). Thus, we accepted H<sub>1</sub>. However, there is a warning of expected cell count as given by Cochran (1954) which seems to be despairing to Agresti (1990) to cover all cases within one rule, and therefore, we extended our analysis with Monte Carlo p-values (Mehta and Patel 2010) though both the methods yielded same p-values. Thus, it is concluded that <IR> is an 'umbrella' for corporate reporting and could replace other forms of reporting approach in India (Table 1.2).

		Value	Approximate	Monte carlo significance		
			Significance	Significance	99% Confiden	ce Interval
					Lower bound	Upper bound
Nominal by	Phi	0.923	0.000	0.000 <sup>c</sup>	0.000	0.000
nominal	Cramer's V	0.653	0.000	0.000 <sup>c</sup>	0.000	0.000
N of valid ca	ses	76				
c. Based on	d on 10,000 sampled tables with starting seed 2,000,000					

Table 1.1 Symmetric measures

*Source* SPSS output (Researche's Compilation)

#### 1.4 Summary and Conclusion

In an endeavour to discover *One Planet One compliance*? It was discovered that there is a diverse reporting framework for one ESG and each has its own efficiency like TCFD and CDSB possess its own uniqueness and is highly efficient for disclosing climate-related issues. While, GRI and SASB provides standard & metrics across all the three pillars of ESG. Besides, <IR> is efficient in providing guidance and principles on 'what to be reported and to what extent'. Additionally, from the stakeholder perception analysis it was revealed that there is scientific evidence [ $\chi^2$  (df = 4) is 64.777 with p-value (< 0.000 <  $\alpha$  = 0.05)] and the value of  $\varphi_c$  = 0.653) that <IR> could replace other reporting approaches such as Sustainability Report, Annual Report and BRR as it is '*Extremely Effective*' in disclosing Business model, its value creation process, Risk and Opportunities, Management dialogue on Management dialogue on emerging environmental & Social risk/opportunities (e.g. climate change, HSE, Human rights, etc.). Thus, a collaboration of these organisations under one umbrella of Value Reporting Foundation and subsequently merging with IFRS Foundation is a pathway towards *One Planet One compliance*.

#### 1.5 Recommendation and Direction for Future Research

The stock exchange board should think about mandating the <IR> framework for the sectors that are highly environmentally sensitive, however, adopting this framework voluntarily by companies will benefit them in demonstrating transparency and accountability towards a sustainable economy.

An in-depth study on the efficiency of the <IR> framework could be conducted by exploring the material topics of ESG, e.g. how efficient is this framework in disclosing Human Rights issues, Occupational Health and Safety, Environmental metrics, Corporate Governance practices required for social benefits and environmental protection. By doing so, it would be supportive of extending our proposed

	Value	df	Asymptotic	Monte Carlo Sig. (2-sided)	(2-sided)		Monte Carlo Sig. (1-sided)	(1-sided)	
			significance (2-sided)	Significance	99% Confidence interval	ence	Significance	99% Confidence interval	ence
					Lower bound	Upper bound		Lower bound	Upper bound
Pearson Chi-Square	64.777 <sup>a</sup>	4	0.000	0.000 <sup>b</sup>	0.000	0.000			
Likelihood ratio	49.815	4	0.000	0.000 <sup>b</sup>	0.000	0.000			
Fisher-Freeman-Halton exact test	43.781			0.000 <sup>b</sup>	0.000	0.000			
Linear-by-linear association	35.020c	1	0.000	0.000 <sup>b</sup>	0.000	0.000	0.000 <sup>b</sup>	0.000	0.000
N of valid cases	76								
a. 5 cells (55.6%) have an expected count of less than 5. The minimum expected count is $0.66$	xpected count	of less tl	aan 5. The minimu	m expected count i	s 0.66				
b. Based on 10,000 sampled tables with starting seed 2,000,000	d tables with st	arting se	ed 2,000,000						
c. The standardised statistic is 5.918	: is 5.918								

 Table 1.2
 Chi-square tests

Source SPSS output (Researcher's Compilation )

model. Another avenue could be exploring the interrelatedness of GRI, SASB, IR, TCFD and CDP with empirical analysis.

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