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GLOBAL REPORTING INITIATIVE: GLOBAL SCENARIO
(A COMPARATIVE STUDY OF DIFFERENT SUSTAINABILITY FRAMEWORKS)

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ABSTRACT

In response to the requirement of environmental Reporting of the stakeholders, most of the organizations take environmental performance disclosure as their socio-economic responsibility. In order to help organizations to report the sustainability information there are several Global Reporting Frameworks available. This paper is aimed to analyze these sustainability frameworks based on their popularity and adaptability. Using available literature The UNEP, Agenda 21, ISO 14000 Series, Triple Bottom Line, AA 1000, DJSI, Carbon Credit, SASB, UN Global Compact and Global Reporting Initiatives frameworks were closely analyzed. It was found that Global Reporting Initiative (GRI) is the only framework with the maximum number of indicators whereas DJSI and UN Global Compact consists only 9 and 10 indicators respectively. Findings conclude GRI and ISO 14000 series to be the most commonly adapted global framework. The outcome of this study are limited to selected data therefore variations may occur.

Keywords: *UNEP, ISO 14000 Series, Triple Bottom Line, AA 1000, DJSI, Carbon Credit, SASB.*

INTRODUCTION

Everything which surrounds us may collectively be termed as the environment the air we breathe, the soil on which we stand, water, living and non-living thing. It is a form of environment that we get food to eat, water to drink, air to breath and all necessities of day to day life. Environment around us constitutes life support systems. A large amount of resources on the planet are vulnerable to depletion, and some of them to the brink of exhaustion. An overriding responsibility of business to make fullest possible use of its resources both human and material led them to neglect their responsibility towards society. Economic development, urbanization, overpopulation, industrialization, mass production of goods and services, intensification of agriculture, pollution, transportation etc are contributing to environmental degradation.

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The impact of environmental degradation can be disturbing on the social, economic and environmental systems of a country as well as region and global ecosystem. It threaten legacy left to future generations of clean and supportive environment. Because of the interdependency of earth ecosystems the government, international organizations, and business man must work together – at all levels to reduce the risk associated with environmental degradation. Global environmental and entire biosphere is changing fast as a result of science and technology. Similarly organizations, companies and individuals must also ensure that their work is environmentally friendly and sustainable.

Various regulation and laws for controlling pollution of environment and public pressure have led the corporate sector to take action. The measures adopted by companies to control environmental degradation should be effectively communicated to interested parties or stakeholder such as government agencies and consumers, shareholder, employee, local community, environmental groups. And thus environmental reporting is considered as most effective mode of environmental communication. The company should report about the environmental risks they had, their key attention over the area, the benefit- achieved etc.

ENVIRONMENTAL REPORTING

"Environmental reporting means incorporation of environmental issue into annual reports of corporate entities. It denotes voluntary and involuntary disclosure of corporate entities of the impact of its activities on environment" (parmanik, 2004, p.4). The main reasons for reporting are Transparency, Accountability, Creation of market opportunities, Increased confidence of investors and other financial institutions, Improvement of relationships with local communities, regulators & NGOs .

The UN Conference on human and environment (Stockholm conference) held in 1972 was considered as the pivotal event in the growth of the global environment. It was the first occasion on which the political, social and economic problem of global environment were discussed at an inter governmental forum with a view to taking corrective actions

Year	Type of Reporting	Description
1930s	Financial Reporting	It discloses about the financial position of companies.
1970s	Social Reporting	It deals with measuring, identifying and communicating social activities carried out by the entity for the benefit of various segment of society.
1980s	Environmental Reporting	It deals with the accounting of environment, ecology preservation, accounting of natural resources, pollution and prevention.
199i0s	Value Reporting, Intangible Reporting, Non Financial Reporting	It inform about factors that have a significant impact on the ability of an organization to create value over time.
2000+	Sustainability Reporting	It give information regarding companies social, environmental, economic and governance performance.
2010	Total Performance Reporting	It reviewing, defining, authoring and publishing financial, management and regulatory report.

REVIEW OF LITERATURE

- **Rodger and housel (2004):** tried to assess the perception of auditors about the environmental risk information and formed that auditor relay more on financial rather than environmental information. The study suggested that the auditor should be trained to handle non tradition environmental performance and environmental information.
- **Clarkson el.al (2006)** Investigates the relation between environmental performance and environmental disclosure of 191 US firms from five most polluting industries. The study reveals positive association between environmental performance and environmental disclosure.
- **Das N and Daisy (2014):** In his study he compare the two well-known sustainability reporting Global Reporting Initiative (GRI) and Dow Jones Sustainability Index (DJSI) should reflect each aspect of Triple Bottom Line. He concludes that GRI is considered as more acceptable framework as compared to DJSI.
- **Raju and Nasiri S. (2014):** In their research study to compare the environmental disclosure practices of Indian and Iranian Companies by using GRI guideline. He concludes that Indian companies are reporting better than Iranian companies as far as policy are concern.
- **Curiac S (2013):** Conclude that European companies have achieved significant enhancement in the sustainability reporting practices as compare to India companies need to improve in their reporting practices

OBJECTIVES OF STUDY

- To study different sustainability initiative related to environmental reporting.
- To analysis understand inter relationship between different initiatives of environmental sustainability.

RESEARCH METHODOLOGY

The study is based on available literature. Different environmental and reporting books, magazines, journals, websites, corporate sustainability reports, annual financial report are considered for collecting guidelines on sustainability as secondary source. There are many global reporting frameworks that help companies measure and report sustainability information to a wide range of stakeholders, from employees, customers and investors to suppliers, regulators and civil society organizations and coupled with a similar increase in their popularity

ENVIRONMENTAL REPORTING GUIDELINES

- **UNEP**

(United Nations Environment Programmed) was founded by Maurice strong established on 5th June 1972 at Nairobi, Kenya, a result from the united nation conference on human environment Stockholm, 1972 which aim to coordinates the organizations environmental activities and assists developing countries in implementing environmentally policies and practices. It covers wide range of issue regarding marine, atmosphere a global ecosystems. UNEP has aided in the formulation of guidelines and treaties on issues such as air pollution and contamination of international waterways, international trade in potentially harmful chemicals, developing international environmental conventions. It plays a significant role in funding and implementing environment related development projects

- **Agenda 21**

It is an action plan of the United Nations with regard to sustainable Development. is a non-binding, voluntarily implemented action plan introduced in the Earth Summit (UN Conference on Environment and Development) held in Rio de Janeiro, Brazil, in 1992. It provides a set of goals of social, environmental and economic areas in detail along with specific guidance for role of different areas in sustainable development and how to implement it...

RIO	Year	Description
Rio 1992	3 to 14 June 1992	The United Nation Conference on Environment &Development (UNCED) also known as Earth Summit, Rio Conference was detained from 3to 14 June 1992 to reduce vehicle emission, to substitute use of fossil fuels with alternative source of energy, systematic scrutiny of production of toxic components and poisonous waste.
Rio+5 (1997)	1997	Rio+5 status of agenda was checked and realized that progress was uneven and with increasing globalization inequality in income is increasing and global environment is deteriorating. A new resolution was passed for action.
Rio+10 (2002)	2002	The World Summit on Sustainable Development (WSSD) or Earth Summit. It was convened and discuss sustainable development. Several international agreements and Johannesburg declaration was conclusion of summit.
Rio+20 J(2012)	2012	The United Nations Conference on Sustainable Development (UNCSD) It was convened to reconciling the economic and environmental goals of the global community.

- **ISO 14000 Series**

The ISO 14000 series has became a cornerstone been developed on 1996 by the ISO environmental management committee. It involves a series of standard that helps companies to establish and maintain a structured and systematic effort to improve their environmental performance. The different series are as follows

Series	Description	Report section
ISO-14001(2004 revised 2015), ISO-14004,(2016) ISO-14006 (2011)	Environmental management system.	General guidelines on principle, System and support techniques, documenting, implementation for incorporating ecodesign. It can be used by any organization regardless of its activity or sector.

ISO-14010 (1996)	Environmental Auditing	It provide general guidelines on environmental auditing, education criteria for environmental auditor and provide audit programmer reviews and assessment material.(now superseded by ISO 19011)
ISO-14015(2001)	Environmental assessment for sites and organization	
ISO-14020(2000) To 14025(1999 amended 2011)	Environmental label and declaration	General principle, self declare environmental claims,(type I & II environmental labelling)
ISO-14030(1999)	Discusses post production environmental assessment.	
ISO-14031(1999)	Environmental Performance evaluation	
ISO-14040 (2006) ISO-14041 (1998) ISO-14042 (2000) ISO-14043 (2000) ISO-14044 (2006) ISO-14047 (2003) ISO-14049 (2000)	Life cycle Assessment	Discusses pre-production planning and environmental goal setting, life cycle assessment, interpretation requirement guidelines and inventory analysis

Series	Proto	
ISO-14046 (2014)	Environmental Management	It provides guidelines for water footprint assessments of process, products & organization and includes only air, soil and water quality assessment.
ISO-14050 (2009)	Terms and definitions	Environmental management vocabulary
ISO-14062 (2002)	Product design and development	Integrating environmental aspects into product design and development 2002
ISO-14063 (2006)	Environmental communication	Guidelines and examples 2006
ISO-14064 (2006)		Measuring, quantifying and reducing greenhouse gas emissions.

ISO-19011 (2018)	Environmental Audit	Specifies one audit protocol for both 14000 and 9000 series (quality management) standards together.
ISO-26000 (2010)	Social Responsibility	Published on 1st November 2010 contribute to global sustainable development. Encouraging organization and business to practice social responsibility for improve their image on workers, natural environment and stakeholder.

There are more than 300,000 certifications to ISO 14001 in 171 countries around the world.

- **AA1000 Series**

It is launched in 1999 by the UK institute of social and ethical Accountability. It guide, contribute, encourage social and ethical accounting, reporting and auditing practices that are complete, material, inclusive and regular. A non regulatory, complimentary that originated as part of the social accounting and auditing. The UK institute of social and ethical accounting AA 1000 standard is generally acknowledged as a most developed tool to be used by corporation in their stakeholder engagement. It is lithe to be used by different type of organization, private and public companies, non government organization (NGO), government and civil societies, global businesses etc. it integrates and supports other tools such as the Global Reporting initiative guidelines, SA SIGMA and the ISO Series. Standard for sustainability and stakeholders engagement is provides by AA 1000.

- **Carbon Credit**

A carbon credit enforced from February 2005, it came into existence as a result of increase awareness and a need of pollution control. The environment protection authority of Victoria defines a carbon credits as "a generic term to assign a value to a reduction or offset of greenhouse gas emissions, usually equivalent to one tone of carbon dioxide. A permit that allows the holder to emit one ton of carbon dioxide; Credits are awarded to countries or groups that have reduced their green house gases (GHG) below their emission quota. The Kyoto Protocol presents nations with the challenge of reducing greenhouse gases and storing more carbon. For example, if an environmentalist group plants enough trees to reduce emissions by one ton, the group will be awarded a credit. If a fertilizer producer has an emissions quota of 10 tons, but is expecting to produce 11 tons, it could purchase this carbon credit from the environmental group. The carbon credit system looks to reduce emissions by having countries honour their emission quotas and offer incentives for being below them. Carbon credits are "Entitlement Certificates" issued by the United Nations Framework Convention on Climate Change (UNFCCC) to the implementers of the approved Clean Development Mechanism (CDM) projects.

- **Triple Bottom Line**

The triple bottom line was uttered by john Elkington in his 1997 book Cannibals with forks: the Triple bottom line of 21st century Business. Three P's stand for Planet-Environmental protection, people – corporate social responsibility, and profit Business earning. "The term triple bottom line is used as a framework for measuring and reporting corporate performance against economic, social and environmental parameters" (John Elkington). It is one of the most effective frameworks for helping companies achieve sustainability. (Environics Globe Scan 2001). It provides additional information than the financial information on economic sustainability (competitiveness, jobs, profitability and market creation). Environmental sustainability is (proficient environmental management and protection, effective use of natural resources), Social sustainability (well being of society as whole). It contain both quantitative and qualitative information such as full disclosure, reliability, reproducibility, uniformity of production and audit ability featuring as annual reports to bring objective, balanced and creditable information of the reporting companies

International organization such as the world resource institute (WRI), Coalition for Environmentally Responsible Economics (CERES), United Nations Environment Program (UNEP), International Chamber of Commerce (ICC), Global Reporting initiative (GRI) and World Business Council for Sustainable Development (WBCSD) are also actively contributing to the development of standards and processes within the triple bottom line framework. These initiatives have established an important baseline of information regarding what works and what does not.

- **Global Reporting Initiative**

An international, permanent, independent organization which helps governments, businesses and other organizations to communicate and understand the impact of business on critical sustainability issues such as environment, climate change, corruption, human right and many more. It is also known as environmental social governance (ESG) reporting, ecological footprint reporting, triple bottom line (TBL) reporting, and corporate social responsibility (CSR) reporting. It includes distinguish board of directors and global headquarters in Amsterdam, Netherlands with Regional hubs in china, Latin America, North America, Africa, Oceania, South East Asia and South Asia the board has fiduciary, financial, legal and overall strategic responsibility regarding GRI The Global Reporting Initiative (GRI) is currently widespread framework for developing Sustainability reporting among companies worldwide. (Brown 2009), it an everlasting and independent organization. The GRI is autonomous; it remains a collaborating centre of united nation Environmental programmed (UNEP) and work with corporation with the united nation global compact.

A large number of institutions and researchers that consider GRI is the most commonly used standard at global level in corporate non financial reporting (Garcia Sanchez, 2009). It enables organization to understand and calculate their most significant impacts on the society, economy and environment. Over 90 countries thousand of reporters use GRI's standards. According to statistics source in the year 2015 more than 7500 organization for sustainability follow this guidelines which apply to small and medium enterprises, Multinational organizations, governments, market regulator NGOs, industry groups and stock exchange. GRI have strategic partnerships with global organization including the OECD, the UN Global Compact, UNEP and ISO, which help to innovate new solution and technologies with overall aim of decision making process of organizations and sustainability reporting around the world.

Gri guideline Version for Sustainability Reporting	Year of Launch	Place
First Version [G1]	2000	Boston
Second Version[G2]	2002	Johannesburg
Third version [G3]	2006	Amsterdam
Fourth Version [G3.1]	2011	USA
Fifth version [G4]	2013	South Africa

- **UN Global Compact**

It is supported by the Global Compact a U.S. based non profit that exists exclusively to provide vital programmatic and operational, financial assistance to the work of the UN Global Compact. The United Nations encourage business organisation worldwide to adopt socially responsive and sustainable policies and report on their implementation. It is a world's largest corporate sustainability initiative with 13000 corporate participants and former stakeholders having their existence in 170 countries. Its goals are purposely flexible and indistinguishable. By incorporating the ten universally accepted principles in the areas of labour, environment, human rights and anti-corruption in to strategies, procedures and policies, and establishing traditions of reliability, companies are not upholding their basic responsibilities to people and planet, but also setting the stage for long term success. The UN global compact had a reporting partnership with GRI which help businesses share information and take action to accelerate tangible progress toward a more sustainable world.

- **Sustainability Accounting Standard Board (SASB)**

It is a non-profit, independent, founded in the year 2011 in San Francisco USA by Jean Rogers develop reporting standard that facilitate businesses around the world to manage, identify and communicate sustainability information , governance, social ,financial material ,reporting, education to different stakeholders. It helps in better risk management, greater business transparency, and enhanced long term business performance; furthermore it seeks to provide investor with Sustainable data comparable, financially material, consistent empowering them to make better decision. It seeks to produce industry sustainability standards for the disclosure and acknowledgment of financially material social, environmental and governance impacts of publicly traded US companies.

- **Dow Jones Sustainability Index (DJSI)**

It was launches in September 1999 with Sustainable Asset Management SAM and the Dow Jones Indexes. SAM is a international investment company focused entirely on sustainability investing. It is the first global benchmark, determined financial achievement according to market capitalization of companies. The indexes are created to pathway financial triumph of leading sustainability companies. in terms of corporate sustainability, industry are selected for inclusion as per top ranked companies i.e. top ten percent of the largest 2500 companied listed on Dow Jones are included. It grades and identifies companies according to their corporate sustainability performance. During the year the companies are continuously monitored and if necessary downgraded or expelled from the index. A range of source is used for the measurement and for cross checking of information company interviews, document, questionnaires, stakeholder relations, publicly available information, media broadcast etc. Selection criteria develop each year and companies must continue to make improvement to their long term sustainability plans in order to remain on the index.

COMPARATIVE ANALYSIS SUMMARY

- **UNEP -Date of Existence-June 1972**

This aims to coordinate the organizations environmental activities and assists developing countries in implementing environmentally policies and practice. Significant Role in funding and implementing environment related development projects.

- **AGENDA 21- Date of Existence-Since 1992**

This is a non-binding, voluntarily implemented action plan introduced in the Earth Summit (UN Conference on Environment and Development) Brazil, in 1992. It provides a set of goals of social, environmental and economic areas in detail along with specific guidance for role of different areas in sustainable development and their implementation.

- **DJSI**

Top ten percent of 2500 DJ global index member organization can be a member of DJSI. It is flexible but every organization is not entitled for DJSI membership.

- **ISO 14000-SERIES- Date of Existence-Since 1996 ISO-14001 (2004 revised 2015)**

It has been developed by the ISO environmental management committee. It involve a series of standards that assist companies to recognized and maintain an organized and systematic attempt to improve their environmental performance. ISO 14001 can be used by any organization regardless of its activity or sector. There are more than 300,000 certifications to ISO 14001 in 171 countries around the world.]

- **CARBON CREDIT- Date of Existence-Since February 2005**

This came into existence as a result of increase awareness and a need of pollution control. These are the certificates issued for certifying emission reduction by the United Nations Framework Convention on Climate Change (UNFCCC) to the implementers of the approved Clean Development Mechanism (CDM) projects. These certificates are traded in the market and purchased by the companies of developed countries which are signatory Kyoto protocol in order to cut down GHGs emission.

- **Tripple Bottom Line**

This is an accounting framework that incorporates three magnitude of performance Environmental, Financial and Social. It contain both quantitative and qualitative information such as full disclosure, reliability, reproducibility, uniformity of production and audit ability featuring as annual reports to bring objective, balanced and creditable information of the reporting companies. United Nations Environment Program (UNEP) and Global Reporting initiative (GRI) also actively contribute in the development of standards and processes within the triple bottom line.

- **A1000 SERIES- Date of Existence-Since 1999**

It is launched by the UK institute of social and ethical Accountability. This is acknowledged as a most developed tool to be used by corporation in their stakeholder engagement. It integrates and supports other tools such as the Global Reporting initiative guidelines, SA SIGMA and the ISO Series. It encourage social accounting, planning, Reporting and auditing that are complete, regular, inclusive and material.

- **Global Reporting Initiative- Existence – 2000**

This is known as ecological footprint reporting, environmental social governance (ESG) reporting, triple bottom line (TBL) reporting, and corporate social responsibility (CSR) reporting. Over 90 countries and thousands of reporters use GRI's standards. According to statistics source in the year 2015 more than 7500 organization for sustainability follow this guidelines. It help an organization to manage its overall impact on the triple bottom line and GRI guidance offer standard disclosure, Transparency, Reporting principles, and execution manual for preparation of quality of sustainability reporting.

- **SASB**

Provides industry-based guidelines and focuses on the needs of communicating with investors. Over 80 industries are being developed.

- **Unglobal Impact**

This is an initiative of United Nations to motivate businesses present worldwide to adopt socially responsive and sustainable policies and report on their implementation. Its goals are intentionally flexible and vague. It is a both practical framework and policy platform for organization that are dedicated to responsible business practices and sustainability There are over 9000 businesses and 3000 non-businesses in over 160 countries who are currently aligning with the 10 Universal Principles of the UN Global Compact.

CONCLUSION

In the nutshell Businessman to be a global player, should subscribe international norms concerning about triple bottom line i.e. people, profit and planet and issue reports that would highlight the efforts to implement these guidelines. Sustainability is a essential for survival of earth. The UNEP, Agenda 21, ISO 14000 Series, Triple Bottom Line, AA 1000, DJSI, Carbon Credit, SASB, UN Global Compact, Global Reporting Initiatives are some of international initiatives are medium which helps and guide different organization for improve the quality and transparency of sustainability reporting.

The entire framework is having different approaches and different disclosure pattern for assessing and reporting. Comparing the entire above framework we scrutinize that the perception is similar but difference in the depth of sustainability indicators and disclosure pattern. DJSI, UN Global Compact has nine and ten indicators respectively where as Carbon credit is not only essential for to solve environmental issues and also acts as a great source of revenue for developing and developed countries. GRI i.e. Global Reporting Initiative have 90 indicators and its have strategic partnership with international organization including the OECD, ISO, UNEP and The UN Global Compact. GRI and ISO 14000 Series is most commonly globally accepted framework as compare to other

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