

**“Re-Thinking About An Importance Of Environmental Accounting As A  
Management Practice Ensuring Industrial Growth with Environmental  
Sustainability.”**

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“Management Practices for Sustainable Development”

**SUBMITTED BY**

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**Abstract:**

Today, All the countries in the world are facing many environmental issues such as green house gas effect, ozone depletion, acid rain, deforestation and pollution. To minimise these effects, every country has to focus on Sustainable Economic development or growth rather than merely economic development or growth. Government of India was started five year plan with a view to develop the country Economically, Socially, and Environmentally. Last five year plan is 12<sup>th</sup> five year plan which is in the last stage of completing in the year 2017. Govt. of India has initiated the 12<sup>th</sup> plan on the theme of Faster, Sustainable and more Inclusive Growth. The Govt. of India has agreed that swelling in Environmental degradation and Ecological imbalance will lead to severe loss of habitat due to fast paced industrialisation and human interventions. It is also in need that corporate enterprises have to act and to be responsible like a citizen of India. As they are earning the profit from manufacturing a product by using natural resources. They have to pay attention toward environment and need to take some serious actions to improve the environmental performance by framing policies, strategies and maintaining and assessing the accounts.

Keywords: Environmental Accounting, Corporate Responsibility, Business Sustainability, Environmental Laws, Environmental Performance Index.

**❖ Introduction :**

In the International arena, Human beings have started to think over Environmental Issues seriously since 1970s. Norway was the first country in the world over who has started collecting the data about the energy resources, forests, minerals, carbon emissions, air pollutions and has prepared the accounts for the environments. After that in June 1972 in Stockholm Conference on Human Environment, United Nations has started the programme for Environmental issues i.e. UNEP (United Nations Environmental Programme). In 1988, the World Meteorological Organisation and UNEP established the Intergovernmental Panel on Climate Change (IPCC) under the auspices of the UN. At present, more than 120 countries involves in participating to do the work of monitoring climate or related phenomena. Another initiative of UN is UNFCCC (United Nations Framework Convention on Climate Change) which was started in June, 1992 during the Earth Summit in Rio de Janeiro. For UNFCCC, there are 165 signatories who have signed to achieve the aim of emissions and removals of Green House Gas.

According to the report of World Economic Forum in Feb. 2017, India hits 62 microgram units of PM 2.5 per cubic meter to maintain Air Quality (WHO standard is 10 Microgram units). In terms of most deaths per capita due to Air Pollution, India stood at 8<sup>th</sup> rank. In 2013 India stood at 7<sup>th</sup> rank as emitter of Green House Gas but according to the latest report released by Netherlands Environmental Assessment Agency, India's GHG emissions rose by an upsetting to 3<sup>rd</sup> rank after China and US.

So it is an alarming stage to rethink about an importance of Environmental Accounting as a Management Practices in India.

### ❖ **Environmental Accounting:**

A Well said by Mahatma Gandhi that Earth provides enough to satisfy every man's needs, but not every man's greed. Due to fast growing industrial and economic development, corporate enterprises and government respectively started using natural resources redundantly since last few decades without thinking of sustainability and hazardous effect. As a result, Now-a-days world ecological balance has been affected seriously. Many countries have already given the priorities to environmental issues in their accounting as best practices. Now it's a high time for India to relook on the standards and policies which have already been framed related to Environmental issues and have to start proper system of Environmental Accounting.

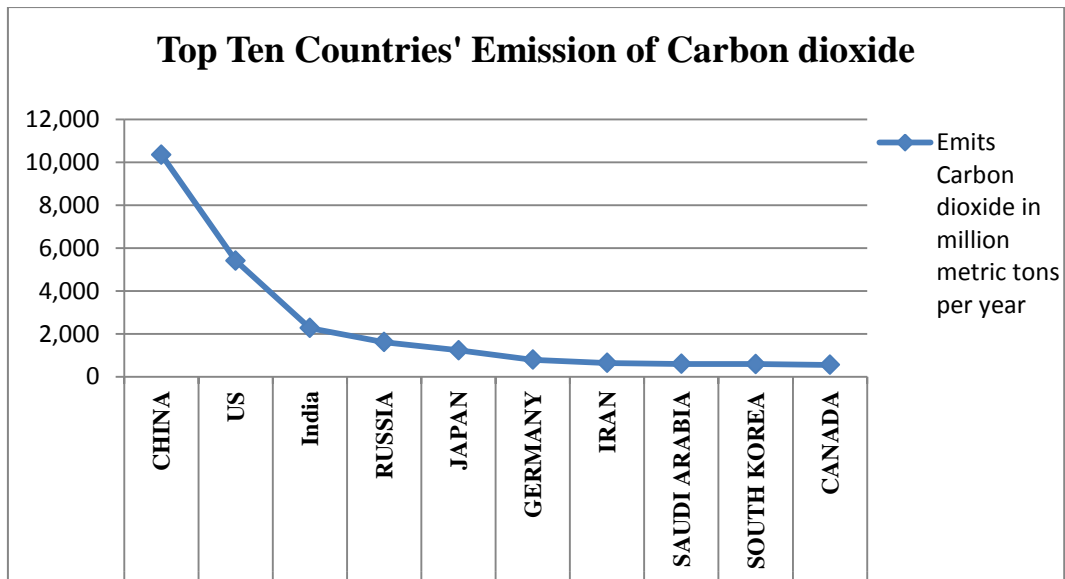
Environmental Accounting refers to an identification, collection, measurement and reporting of the data of costs of environmental impacts. Simply it can be explained as a method of recording environmental elements in the books of accounts.

Emblemsvag and Bras – Environmental accounting, also referred to as life-cycle accounting or green accounting serves primarily to support environmental initiatives and policies by including the costs and benefits that are derived from the effects of the environment on the general ledger.”

### ❖ **Needs and Importance of Environmental Accounting:**

Companies are facing big problems since the Environmental Accounting has been developed as the true and fair value of Environmental Costs and Benefits is hard to determine. United Nations has also undertaken System of National Accounting as regards the accounting of estimates of environmental incomes. The United Nations, International Monetary Fund, World Bank and many other International bodies have stressed towards the need for the proper development of environmental accounting methods.

1. How to measure the effects of Environment on profit earned using natural resources by industrial enterprises.
2. The Companies Act, 2013 has amended to 2% of average net profit is necessary to spend on Corporate Sustainability. But is it enough or a proper towards the usage of natural resources differently by the different companies.
3. It helps to know the environmental costs and benefits.
4. For taking corrective measures to remove the malicious effects of Pollution
5. It is necessary to set the new standard for the improvement of Health and welfare of the society.
6. From the below mentioned chart it can be said that India will be in big danger if paid less attention towards environmental issues now.



(Source: [www.reuters.com](http://www.reuters.com))

❖ **Various Laws related to Environment in India:**

The various laws relevant to environmental protection are as under:

- Directly related to environment protection:
  - Water (Prevention and Control of Pollution) Act, 1974.
  - Water (Prevention and Control of Pollution) Cess Act, 1977.
  - The Air (Prevention and Control of Pollution) Act, 1981.
  - The Forest (Conservation) Act, 1980.
  - The Environment (Protection) Act, 1986.
  
- Indirectly related to environment protection:
  - Constitutional provision (Article 51A).
  - The Factories Act, 1948.
  - Hazardous Waste (Management & Handling) Rules, 1989.
  - Public Liability Insurance Act, 1991.
  - Motor Vehicle Act, 1991.
  - Indian Fisheries Act, 1987.
  - Merchant of shipping Act, 1958.
  - Indian Port Act.
  - Indian Penal Code.
  - The National Environment Tribunal Act, 1995.

❖ **Research Methodology**

➤ **Objectives of the Study:**

1. To know the current situation of India at the world level in terms of Environmental Issues.

2. To study the responsibility of Corporate Enterprises and Government towards the environment.
3. To be acquainted with the present corporate spending to improve the environmental condition at national and organisational level
4. To spread the awareness to the general Public, Corporate Enterprises and even Indian Government that it is high time to rethink about Indian Environmental issues.
5. To contribute small research towards the point of Sustainable Economic Development rather than mere Economic Development.

➤ **Sample Selection**

Top five Indian Companies in 2017 Forbes “Global 2000” list

Reliance Industries Limited	-	106
State Bank of India	-	244
ONGC	-	246
HDFC Bank	-	258
TATA Motors	-	290

(Source : [www.forbesindia.com](http://www.forbesindia.com) )

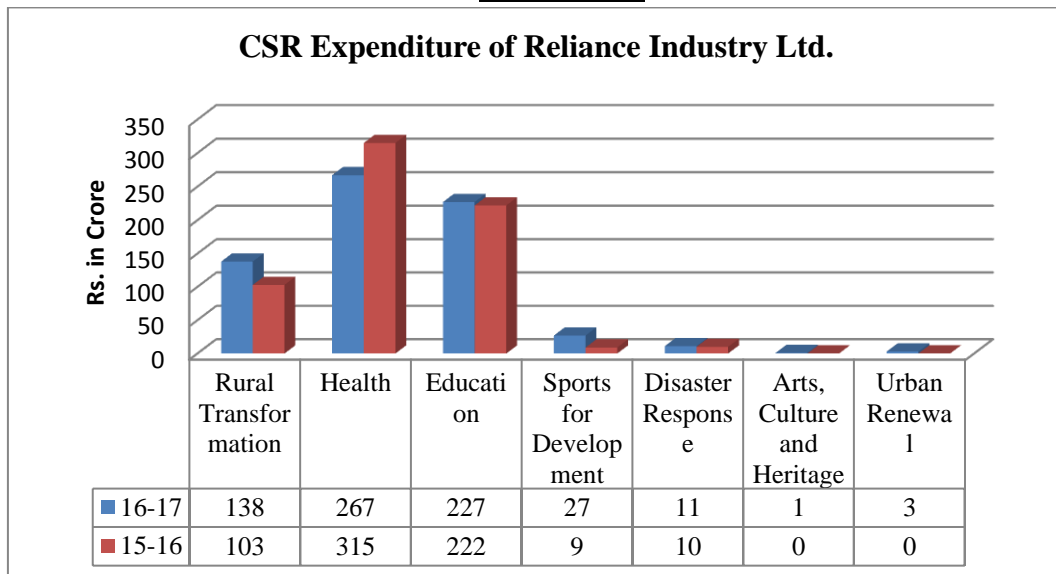
➤ **Data Collection:**

For this study, Secondary data is collected from the authentic data sites such as the data about Corporate spending towards CSR is collected from the annual reports published by the company itself for the year 2015-16 and 2016-17 While the data about EPI of India is collected from the website of Yale University.

➤ **Data Analysis:**

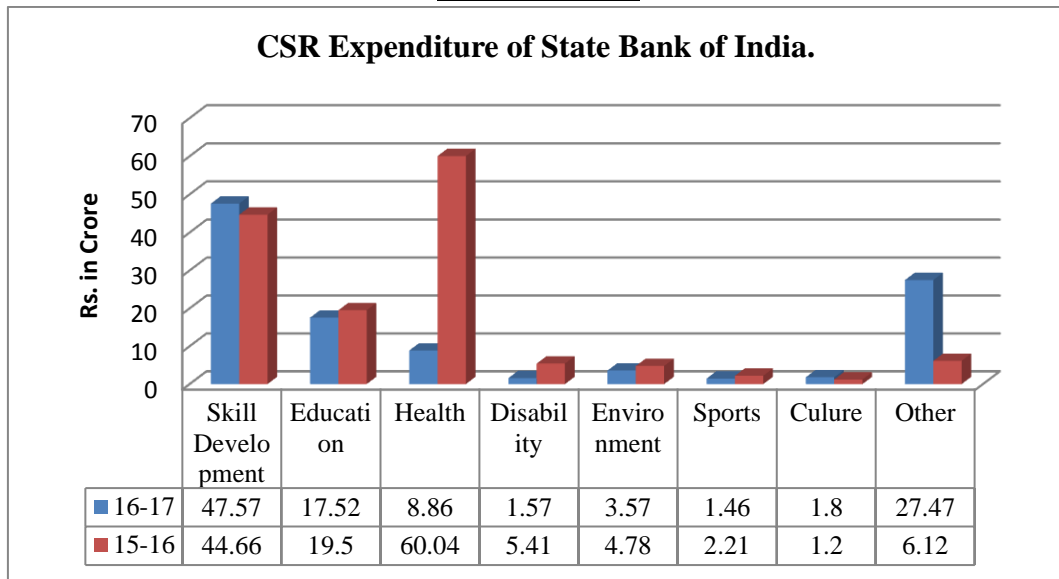
[A] **Comparative Analysis of Selected Companies**

**Chart –A.1**



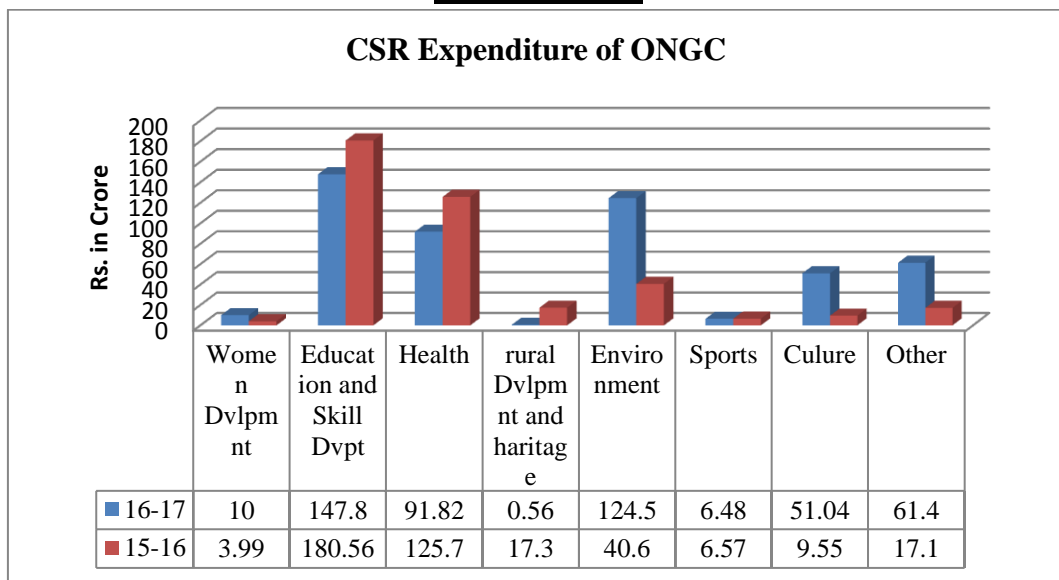
Total Expenditure of Reliance Industry Ltd on CSR activities are increased slightly from Rs. 659 crore in the year 2015-16 to Rs. 674 crore in the year 2016-17.

**Chart no. A.2**



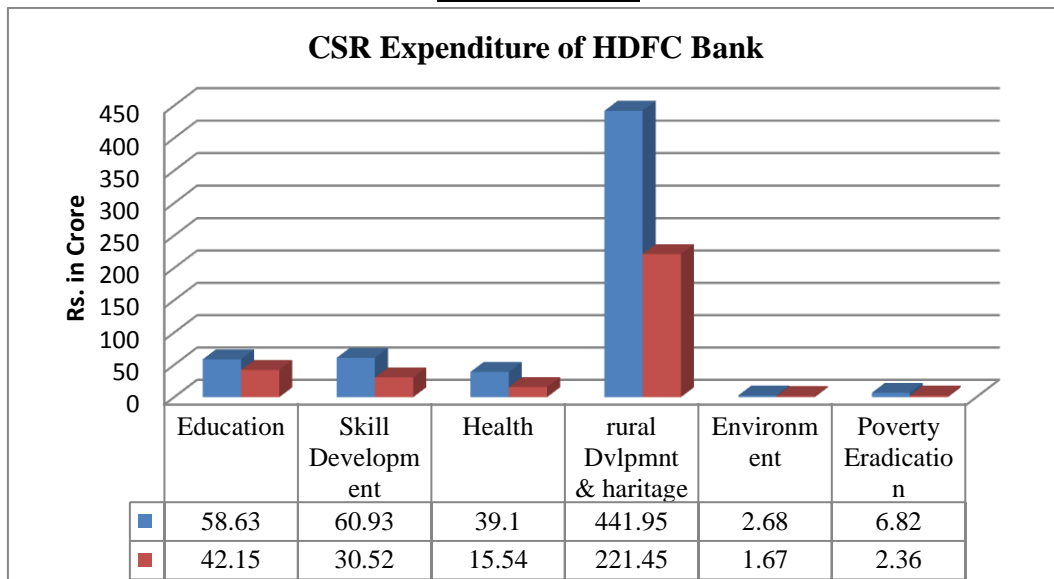
Total Expenditure of State Bank of India on CSR activities are decreased from Rs. 143 crore in the year 2015-16 to Rs. 110 crore in the year 2016-17.

**Chart No. A.3**



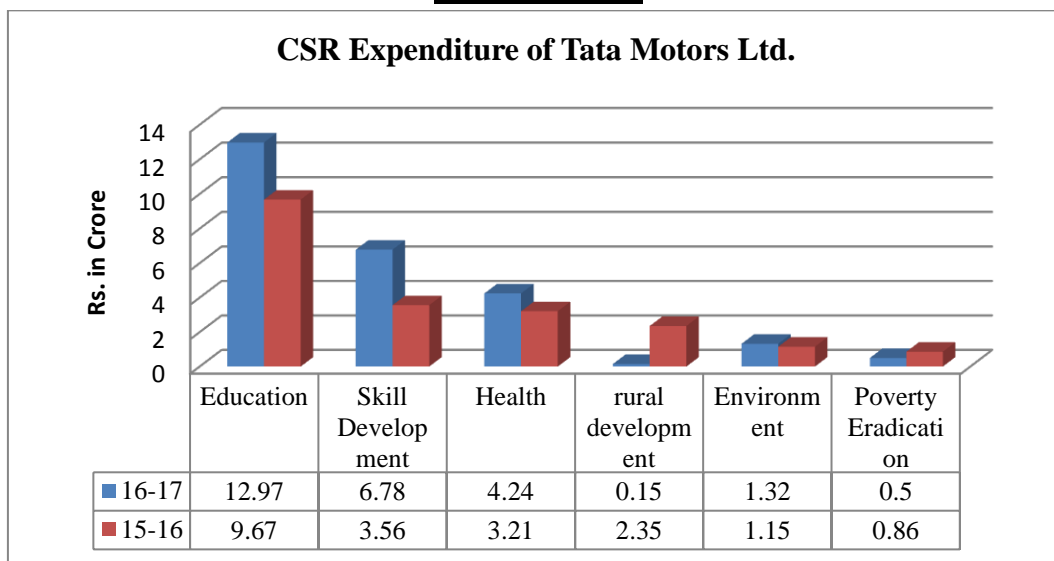
Total Expenditure of ONGC on CSR activities are increased from Rs. 401 crore in the year 2015-16 to Rs. 494 crore in the year 2016-17.

**Chart no. A.4**



Total Expenditure of HDFC Bank on CSR activities are increased almost double from just Rs. 314 crore in the year 2015-16 to Rs. 610 crore in the year 2016-17.

**Chart No. A.5**



Total Expenditure of Tata Motors on CSR activities are very less because the company's average 3 years' profit is resulted into loss but it is increased from Rs 20 crore in the year 2015-16 to Rs. 25 crore in the year 2016-17.

**[B] Comparative Analysis of EPI of India**

EPI (Environmental Performance Index) is based on the 20 indicators reflecting national-level environmental data. Theses 20 sub indicators are comprised into 09 heads analysed in the below mentioned charts. This nine heads are set for the accomplishment to achieve the two objectives i.e. Environmental Health measures and Ecosystem Vitality in the following measures:

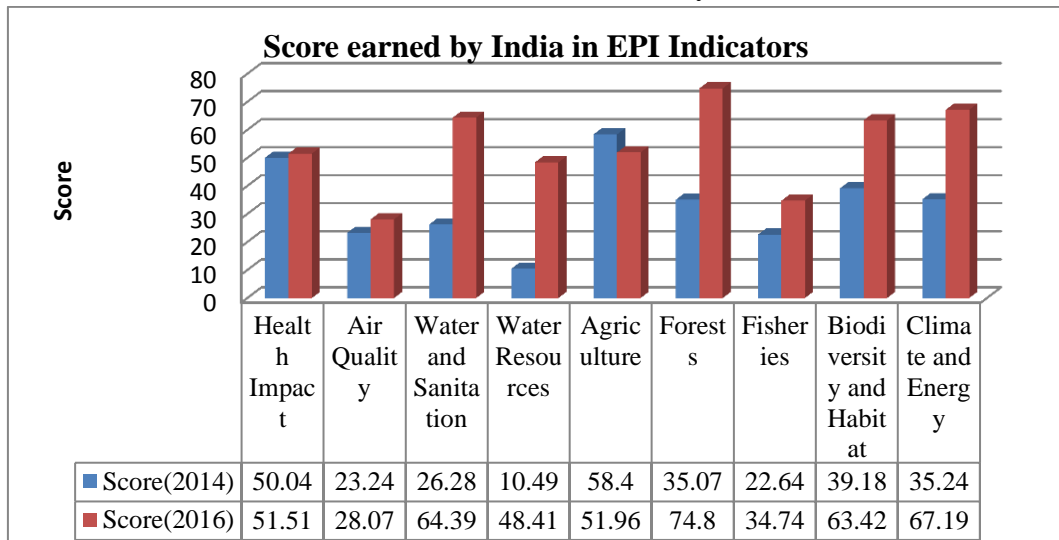
### (A) Environmental Health

- Health Impacts
- Air Quality
- Water & Sanitation

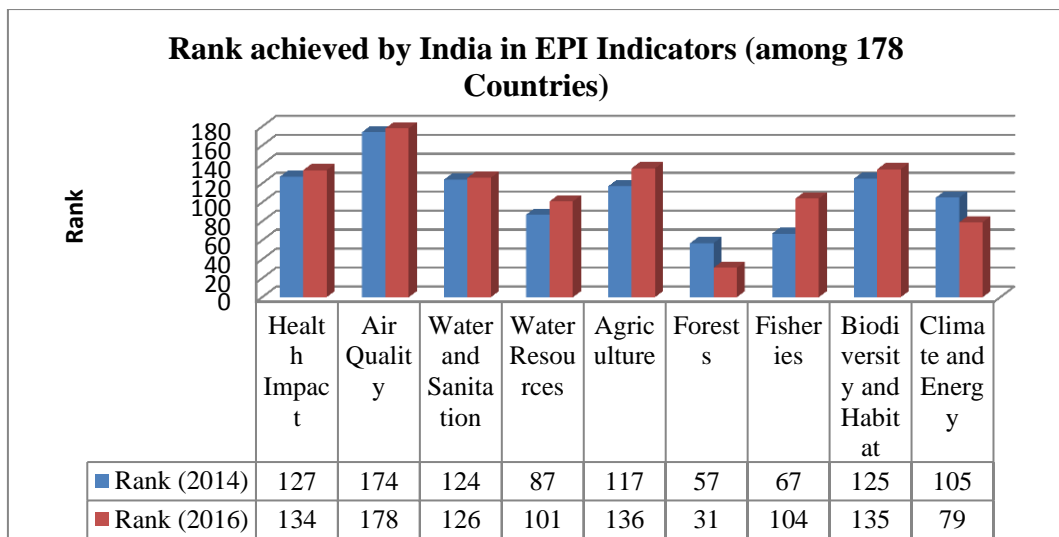
### (B) Ecosystem vitality

- Water Resources
- Agriculture
- Forests
- Fisheries
- Biodiversity & Habitat
- Climate & Energy

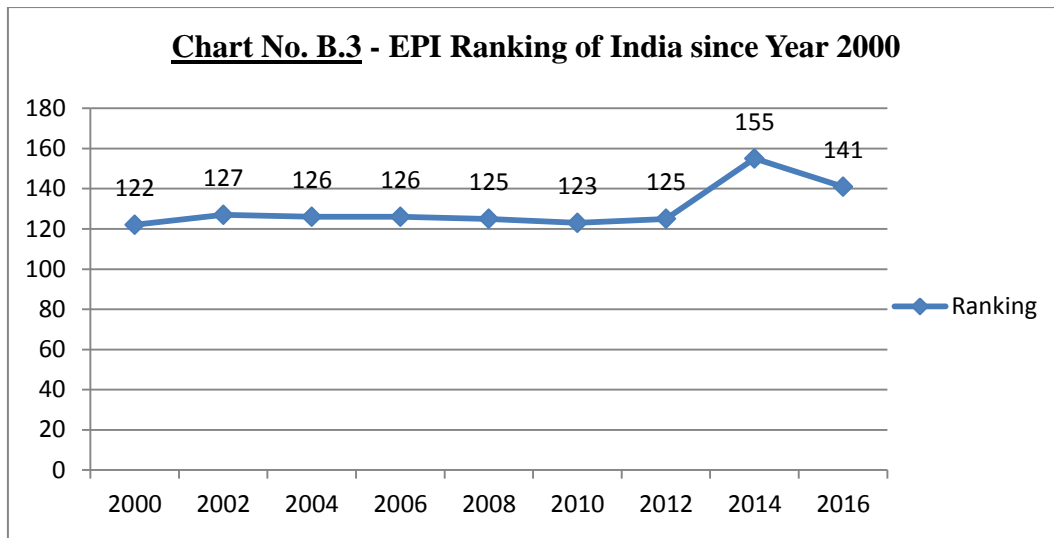
For calculating EPI, A proximity-to-target methodology is used as a benchmark to measure the country's performance on the basis of international treaties, scientific thresholds and analysis of best performers to determine the score on a scale of 0 to 100. The following **Chart no. B.1** shows the comparative score earned by India for each indicator from nine indicators between the year 2014 and 2016.



On the basis of Score earned, Highest Rank is given to the country that scored highest. Here the **Chart No. B.2** prepared to compare the Rank achieved by India for each Indicator among the 178 countries surveyed by Yale University.







❖ **Findings of the Study:**

Very few corporations give adequate information regarding environmental issue. But from the above data analysis of largest five companies and government following findings have been derived:

1. In the year 2015-16, Reliance Industries Ltd. has spent largest amount in India i.e. 674 crore on CSR activities followed by HDFC Bank of Rs. 610 crore.
2. In the year 2014-15, total amount spent on CSR activities is 6337.36 crore by the 460 listing companies while in the year 2015-16, it was rose to Rs. 8,300 crore.
3. Tata Motors Ltd. is spent lowest amount towards CSR activities because of loss making average of last three years
4. ONGC is the second largest company who spent good amount on CSR activities in the year 2015-16.
5. RIL and ONGC have spent good amount on Education and Awareness.
6. As the score in Forest and Climate & Energy conversation has been increase the rank for these indicators shows in terms of achiever. Except these two, India is not performed at all in terms of other indicators.
7. In some cases, the score is improved, though the rank is not improved may be because of other countries are done the work in a more faster manner than the India is.
8. Chart no. B.3 shows that India's overall EPI rank from the year 2000 to 2012 is not improved but steadily managed. But from the year 2012 to 2014 it goes up by 30. It means that other 30 countries are worked very well than India.
9. Somehow it will be managed to 141 ranks in the year 2016 but it is still shown higher than the average of last 16 years.

## ❖ **Latest Practices or Amendments regarding Environment in India**

1. In the Fifth Amendment of the Environment (Protection) Rules, 1986. – New emission standards have been set for Cement Plant, Standalone Clinker Grinding Plant or Blending Plant. Another newly proposed amendments to the EPA aim to manage defaulters by levying monetary penalties for violations or environmental damages.
2. MoEF&CC (Ministry of Environment, Forests and Climate Change) has notified on dated 20<sup>th</sup> July, 2015 for the first time that motor vehicles in all the three fuel modes have required mandatory certification for Gensets in terms of ‘Type approval’ and ‘Conformity of Production’ for air emission as well as noise emission. It has also notified new standards for Thermal Power Plants and Common Effluent Treatment Plants and Sugar Industries.
3. Narendra Modi Government has formed a High level Committee to review all the laws related to environment and has proposed new Environment Law & Management Act (ELMA) which are to be constituted at the National Level as (NEMA) and State Level as (SEMA). The Govt. has also started a small but awakening project of “Swachh Bharat” on 2<sup>nd</sup> Oct. 2014.
4. SEBI board has passed a new resolution to ask for preparing ESG (Environmental, Social and Governance) disclosure from the 100 largest companies in the form of measures taken by the companies’ responsibilities under the rules framed by MCA (Ministry of Corporate Affairs).
5. According to SEBI (Listing Obligations and Disclosure Requirements) Regulations 2015, under the regulation of 34, all the listed companies have to publish the Business Sustainability Report by mentioning the amount spent for Environmental Sustainability.
6. Ministry of Corporate Affairs has released the new guideline of (NVG-SEE) National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business.
7. Section 135 of the Companies Act, 2013 shows the accounting for expenditure on Corporate Social Responsibility activities. As per this section every year the companies which come within the ambit of section 135 are required to spend at least 2% of the average three years’ net profit every financial year for CSR activities.
8. There is Provisions of the companies (CSR Policy) Rules, 2014.
9. According to Sec 35AC of Income-tax Act 1961, expenditure incurred on project or scheme for promoting the social and economics welfare can be claimed.
10. In the New Indirect Tax system of GST (Goods and Services Tax) of section 2(108), 7 and 17 (2), the government didn’t give any relaxation from the tax levy of GST on Expenditure incurred on CSR. More disappointment is that it is placed in the 18% category.

### ❖ Suggestions of the Study:

Many companies believe that they do not have an impact on the environment as they are not aware about the environmental issues will occur in a long run. Though the Corporate Social Responsibility and Business Sustainability Report are mandatory to publish, it is found that seriousness regarding environmental responsibilities is still not in a frame of mindset of the companies. There are few reasons for that such as lack of awareness, failure of environmental accounting system, inability to visualize the long run environmental glitches etc.

The following steps are suggested to rethink about proper environmental accounting at the corporate level as well as national level:

1. Since last four decades, Environmental Accounting is known for relatively a new branch of accounting. The government and corporate enterprises have to change this mentality and need to take some serious action towards Environmental Accounting as the four decades in not the less time to develop proper mechanism.
2. The Supreme Court has directed to teach the subject of Environmental Studies to graduate and undergraduate students in 1991. For this concern, the reality is very different and regrettable that it hasn't been implemented by the university or the board as main subject course. This mindset has to be changed by the university or board and even by the teachers or professors that this is now an international issue for the India.
3. Very few educational institutes are found that offers a degree or master degree in the subject of Environment. It may because the less job opportunities and lack of awareness about Environmental issues at corporate level.
4. Since last five years, Air Quality Index is publically shown by putting a LCD screen in more polluted cities is a good initiate by the new governmental. More such steps have to be taken by the Government of India to spread the Environmental Awareness.
5. Timely publishing of data by the Government will definitely help to create the awareness in educated people.
6. The Government or the Accounting bodies have to work on the simple computation method of environmental costs and benefits. They should start some training programs on how to write Environmental Accounting at corporate level or may place compulsion if necessary.
7. There must be one post of an Environmental Executives or officer as an internal employee at least in Listed companies.
8. India is in need to develop a formal system of Environmental Assessment like globally accepted SEA (Strategic Environment Assessment) method.

## **Conclusion:**

To achieve the sustainability with the development is the most thoughtful subject in today's attitude of mere industrialization. The data analysis of top five companies at global level and data analysis of India about Environment needs to be rethink seriously on the matter of Environmental issues. If it is not started yet, the country or the corporate will bound to reach one day at no point of time. There are lots of videos about Environment issues on you tubes and social media. Out of that one video named 'Time Bomb: A scenario of 2030' was published by Rajasthan Patrika by Hawa Badlo campaign with support of Gas Authority of India Ltd. (GAIL). It is such a nice initiative taken by the GAIL but this is not enough as compared to rapidly growing Environmental issues. The government and the corporate enterprises have to work seriously in upcoming days or months or years. If this speed of using the natural resources is going on, as a researcher, it seems to prove the above video about a scenario of 2030 may come true.

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