THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

An Overview of Impacting Factors on Environment Cost in the Area of Environment Accounting

Angshuman Dutta
Assistant Professor, Department of Business Administration,
School of Business Science, University of Science and Technology, Meghalaya, India

Abstract:
This study aims to understand the relation between financial data and environmental performance can be ascertained by the amount of achieved Environmental Performance Index. At present the amount of production and consumption is too much high as one of the cause for environmental degradation. The Environmental degradation makes Environmental Cost also high as rectifications to the degradation. India can be identified as 155th position in the world ranking with 32.1 points in terms of Environmental Performance Index. The financial data ensures the Environmental Cost of organizations. By the facts and figure a few amount is invested in Environmental Cost. The accountably of Environmental Cost is recorded and monitored by Environmental Accounting. The absence of predicting technique for future Environmental Cost and effect on the activity is not discussed. The prediction is guided by the activity, Research and Development Policy, sharing in Environmental Performances.

Keywords: *Environmental Accounting, Environmental Cost, Environmental Performance Index, Sustainability Report*

1. Introduction

The Accounting is responsible to provide information for its internal and external stack-holders from the available financial information. Cost Accounting and Management Accounting generates different decision support systems but not efficient enough for environmental performance (Nicolae Todea, Ionela Cornelia Stanciu, Ana Maria Joldoş). To serve this purpose Environmental accounting is appointed from the last of two decade as an inclusive field of accounting. Environmental Accounting is measurement of environmental responsibility Cost. It was first adopted by Norway in 1970s. India practised only in cements, petroleum, power, steel, engineering and textile industries. Sustainable growth achieved in environment performances throughout the environmental protection plans are presented by Environmental Reporting in quantities and qualities (Dr. Nasir Zameer Qureshi; Dr. Dhiresh Kulshrestha; Surya Bhushan Tiwari). The environmental accounting as a system composed of three parts: the reporting, the management and the environmental audit (Lungu, 2008). Environmental Management Accounting experiences with the study of Environmental Costs as inclusion of product life cycle cost (Dumitrana, 2005) and environmental performance and its implications on the financial performance of the entity (Caraiani, 2007).

2. Development in Environmental Accounting

According to Ienciu A., 2009 the development of Environmental Accounting during the last twentieth century can be identified as below.

The Period of 1971-1987, Social Accounting and Environmental Accounting considered in one phase of concern. But the Researches of early 80s create the separation between Environmental Accounting and Social Accounting through environmental reporting but still Environmental Auditing and Environmental Management Accounting are treated as similarly.

The Period 1988-199, interest of managers and accountants were drawn for Sustainability Report and Environmental audit. The state of knowledge was covered by the Universities and Practical Accountant had attention to the problems of Environmental Accounting. But environmental accounting regulations process is slow, but much faster than social accounting. Examining the integration of environmental policy with business policy is the focus of this research. The business firm's strategy includes responding to capital and operating costs of pollution control equipment.

The Period 1995-2001, the study suggested as "cornerstone" and Different sub domains of Environmental Accounting namely environmental costs, environmental management accounting and environmental auditing were introduced. In this period the Ecological Performances is introduced applied in chemical industries. Buyers systematically proceeded to consumption of products where implemented environmental protection policies to avoid the cost of pollution (Betianu Leontina, 2008). But Developing and Under Developed countries shows less impact due to low awareness to Environmental Performance Index and diversified income slopes.

The Period 2002 up to present, major impact drawn to issue guidelines for Environmental Reporting. Regulations supports for corporate reporting with social and environmental information. Romania's government incredibly laid in force on January 1, 2010 by the Order 3055/2009 for approving the Accounting Regulations in context to Expenditure on environmental protection expenditure going to be recorded in the relevant period only. Now at present information regarding Environmental Reporting

including production cost, capital expenditure, cost of reducing toxicity and waste, future environmental benefit and cost are included by the Annual Reports.

3. Legal Complexity

In 1989, Sweden announced to all operational sites to submit an annual environmental report subjected special permits for environmental hazards implementations. By the year, 1996 Denmark govt introducing to publish a green account for consumption of energy, water, and raw materials. The Netherlands Govt. in 1999, make compulsory for environmental reports for both the government and public on identified operating sites. It seems environmental disclosure is necessary by other than voluntary ER (Gray and Milne, 2004) and the second issue is also argue for the disclosing of potential liabilities associated with environmental clean ups. IFRS show that "the objective of financial statements is to provide information about the financial position, financial performance and changes of the financial position of an entity; this information is useful to a broader sphere of users in making economic decisions" (IFRS, 2007).

3.1. Environmental Management Accounting

Environmental management accounting (EMA) is a subset of environmental accounting and able to analysis monetary and physical information in order to improve organisational environmental performance. EMA can be reflected in capital investment decisions, costing, process/ product design, performance evaluation in terms of financial impacts on environmental performance (UNDSD: New York, 2000). Environmental costs are not significant to the operation but can be identified in production cost and other Research & Development Cost towards the environmental degradation. Here EMA systems can help to justify projects with new dimension of saving money forcing improvement in environmental performance.

3.2. Advantages of Environmental Management Accounting

Financial accounting includes Environmental Costs under different Accounting heads without considering impact of Environmental effect (United Nations for Sustainable Development Division, 2003). IFAC defines Environmental Management Accounting as economic and environmental performance management by developing and implementing appropriate systems and practices on the environment management planning. The advantages of Environmental Management Accounting are to:

- Provides useful information regarding production level and structure of production, investment on environmental costs, etc.
- Indentifies and analyzes the environmental the ratio between the environmental expenses and its afferent debt.
- Analyzes the environmental impact on the business for informed decision-making.
- Manages the problem of material, waste, energy, water, and soil.
- Provides tools for Environmental transparency in Reporting.
- Provides different decision support systems like Product Design, capital Investment, Process Design, Cost Control, Waste Management, Product Retention/Mix, Risk/Liability Management, Performance Evaluations, Plant Expansion

4. Classifications

Environmental Management Accounting divides into two categories as Monetary Environmental Management Accounting - MEMA and Physical Environmental Management Accounting – PEMA based on dealt up data. MEMA is basically used for internal management decisions (Schaltegger and Wagner, 2005). Here the level of Implementations of EMA can be plotted as

Conventional Accounting	Environmental Management Accounting		Other Assessment Tools
	MENA	PEMA	
DATA ON THE CORPORATE LEVEL			
Conventional bookkeeping	Transition of environmental part from bookkeeping and cost accounting	Material flow balances on the corporate level for mass, energy and water flows	Production planning systems, stock accounting systems
DATA ON THE PROCESS/COST CENTRE AND PRODUCT/COST CARRIER LEVELS			
Cost accounting	Activity based material flow cost accounting	Material flow balances on the process and product levels	Other environmental assessments, measures and evaluation tools
BUSINESS APPLICATION			
Internal use for statistics, indicators, calculating savings, budgeting and investment appraisal	Internal use for statistics, indicators, calculating savings, budgeting and investment appraisal of environmental costs	Internal use for environmental management systems and performance evaluation, benchmarking	Other internal use for cleaner production projects and condensing
External financial reporting	External disclosure of environmental expenditures, investments and liabilities	External reporting (EMA statement, corporate environmental report, sustainability report)	Other external reporting to statistical agencies, local governments, etc.
NATIONAL APPLICATION			
National income accounting by statistical agency	National accounting on investments and annual environmental costs of industry, externalities costing	National resource accounting (material flow balances for countries, regions and sectors)	

Source: United Nations Division for Sustainable Development, Environmental Management Accounting, New York, 2001, http://www.un.org/esa/sustdev/publications/procedureandprinciples.pdf, p.19

Figure 1

5. Environmental Cost

Environmental costs are the cost of degrading environmental quality for the different acts done by society, organization. These costs are significant component to cost structure and cannot be hidden overhead like traditional management accounting systems (Robert G. Graff, Edward D. Reiskin, Allen L. White, Ph.D. Katherine Bidwell, 2009). But in Under Developed and Developing countries the Environmental Cost inclusion in Annual Report is in doubt due to the non availability structured economic growth, diversified market expansion, low informational infrastructure and lack of awareness to the environment.

Corporate Financing System presently seeking for financial disclosure of environmental performances for their stakeholders, capital budgeting, and stock prices (Feldman, Stanley J., Peter A. Soyka, & Paul Ameer, 1996). Even though the industries from under developed and developing countries does not has external regulatory pressure for environmental reporting still they have the pressure of waste management and liability of diminished image proving that the amount of effort is required to minimize these type low graded environmental effective cost.

Canadian Institute of Chartered Accountants (CICA, 1998) present environmental costs as environmental costs which generate, directly or indirectly benefits of the current period, the period in which they occur, providing a series of details in this regard. Thus we have:

- Direct Environmental Cost is like expenditure on waste treatment and monitoring, recovery or cleanup costs etc.
- Indirect Environmental Cost is like administrative cost, compliance cost, environmental audit cost, and other cost on environmental protection.
- Capitalized Environmental Cost are incurred in Research performed for environmental protection or some type of expenses which benefited in avoidance of some impose fines, penalties on failure to comply environmental regulations.

Recommendation of CE, 453/2001, defines environmental costs as "those costs to prevent, reduce or recover damages that the entity has caused or is likely to cause on the environment as a result of its activities. These include prevention, elimination or reduction of waste and wastewater, air emissions, treatment of contaminated soil, groundwater, noise and vibration levels, the landscape changes, research and innovation of products and cleaner production processes, control of environmental quality".

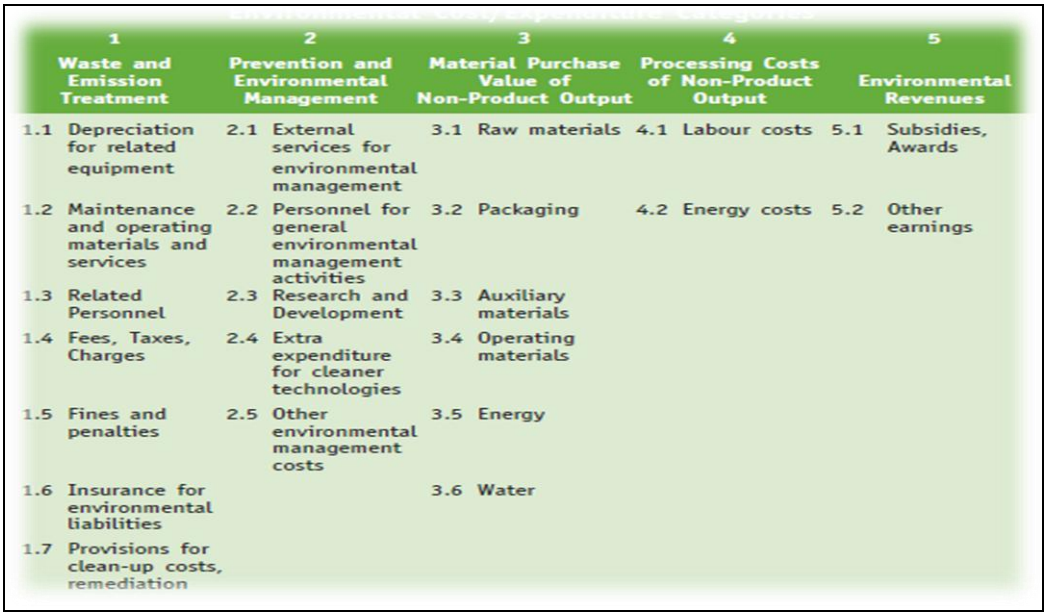
Business uses of Environmental Accounting data became helpful in costs savings, avoiding regulatory processes, and finding new business opportunities (Gallhofer and Haslam, 1997).Organizations are habituated to use the information in target base on following segments(M. Yakhou And V.P. Dorweiler, 2004):

Program	**Target**
Government directed	
Common sense initiatives	Pollution control
Transportation partners	Use of vehicles
Energy efficiency	Green Lights Program
Waste Wise	Program Recycling
Climate Wise Program	Emissions control
Corporate sponsored	
Proactive environmental policies	EMS, ISO 14001
Environmental accounting and auditing	Performance
Environmental life-cycle and supply chain management	Products and suppliers
Integrated environmental program	EMS and full-cost accounting

Table 1

From this definition our initiative environmental domains can be classified as Air Protection , Water Protection , Management Waste, Soil and Groundwater , Fighting noise and Vibration, Protection natural resources and conservation biodiversity, Other areas and in specific terms the table can be shown as Figure 2.

In short Costs for Controlling Cost is the cost for prevent the noise, vibrations, costs to prevent landslides or other costs to prevent pollution in respect to air, water and soil. Environmental Management Activity Costs are development and application of an environmental management system. Environmental Development costs are designing new products, ideology with respect to the environment. Social Environmental Costs are for the protection of nature, reforesting, of improving the ecological landscapes, supporting several local activities, organizing seminars and other social activities. Environmental Damage Costs representing costs for soil remediation, sanctions, penalties, litigations etc.



1		2		3		4		5	
Waste and Emission Treatment		Prevention and Environmental Management		Material Purchase Value of Non-Product Output		Processing Costs of Non-Product Output		Environmental Revenues	
1.1	Depreciation for related equipment	2.1	External services for environmental management	3.1	Raw materials	4.1	Labour costs	5.1	Subsidies, Awards
1.2	Maintenance and operating materials and services	2.2	Personnel for general environmental management activities	3.2	Packaging	4.2	Energy costs	5.2	Other earnings
1.3	Related Personnel	2.3	Research and Development	3.3	Auxiliary materials				
1.4	Fees, Taxes, Charges	2.4	Extra expenditure for cleaner technologies	3.4	Operating materials				
1.5	Fines and penalties	2.5	Other environmental management costs	3.5	Energy				
1.6	Insurance for environmental liabilities			3.6	Water				
1.7	Provisions for clean-up costs, remediation								

Figure 2

Source: UNDSD: "Environmental Management Accounting, Procedures and Principles", United Nations, New York, 2001, p. 19

6. Environmental Indicators

The Environmental Indicator is the rationalization of economic growth and environmental sustainability with the facts of population, natural recourses, livelihood, Industrialization/urbanization, considering statues of air, soil and water pollution as a element of environmental degradation (Indrani Chandrasekharan, et. al,). The available indicators are:

- The OECD is a set of environmental indicators for OECD countries started in 1989. The international use of OECD includes five sets of categories of indicators, each corresponding to a specific purpose and framework:
  - Core environmental indicators (CEI) – tracking environmental programme and performance.
  - Key environmental indicators (KEI) – informing the public.
  - Sectored environmental indicators (SEI) – promoting integration.
  - Indicators derived from environmental accounting – promoting integration.
  - Decoupling environmental indicators – monitoring progress towards sustainable development.
- EPI : The Environmental Performance Index (EPI) was careful considerations of all variables and categories including 5 categories and 16 indicators. In methodology the normal deviation and distance travelled method was used for indications for notified standards. The selected 16 indicators combined to form EPI ranking of the states. We can present the Environmental Performance Index (EPI) according to states belonging India as bellow (Dr. Nasir Zameer Qureshi; Dr. Dhiresh Kulshrestha; Surya Bhushan Tiwari)

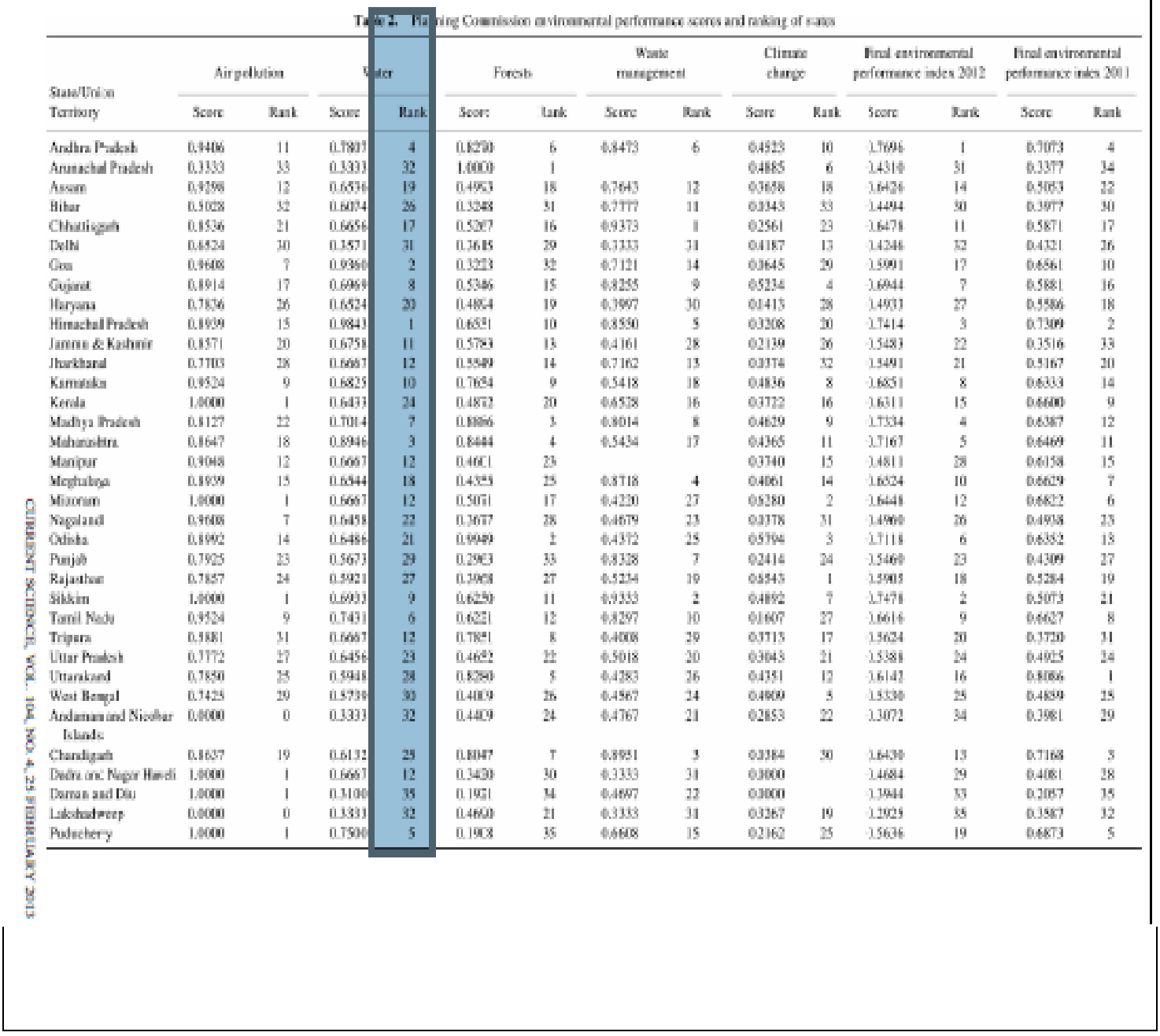


Table 2. Planning Commission environmental performance scores and ranking of states

State/Union Territory	Air pollution		Water		Forests		Waste management		Climate change		Final environmental performance index 2012		Final environmental performance index 2011	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Andhra Pradesh	0.8406	11	0.7805	4	0.8290	6	0.8473	6	0.4523	10	1.7696	1	0.7073	4
Arunachal Pradesh	0.3333	33	0.3333	32	1.0000	1			0.4885	6	1.4310	31	0.3377	34
Assam	0.9298	12	0.6536	19	0.4963	18	0.7643	12	0.3658	18	1.6426	14	0.5053	22
Bihar	0.5028	32	0.6074	26	0.3248	31	0.7777	11	0.3343	33	1.4494	30	0.3977	30
Chhattisgarh	0.8536	21	0.6656	17	0.5207	16	0.9373	1	0.2561	23	1.6478	11	0.5871	17
Delhi	0.6824	30	0.3571	31	0.3648	29	0.3333	34	0.4187	13	1.4246	32	0.4321	26
Goa	0.9608	7	0.9360	2	0.3223	32	0.7121	14	0.3645	20	1.5991	17	0.6561	10
Gujarat	0.8914	17	0.6969	8	0.5346	15	0.8255	9	0.5234	4	1.6944	7	0.5881	16
Haryana	0.7836	26	0.6524	20	0.4864	19	0.3997	30	0.1413	28	1.4933	27	0.5586	18
Himachal Pradesh	0.8939	15	0.9843	1	0.6551	10	0.8550	5	0.3208	20	1.7414	3	0.7309	2
Jammu & Kashmir	0.8571	20	0.6758	11	0.5783	13	0.4161	28	0.2139	26	1.5483	22	0.3516	33
Jharkhand	0.7703	28	0.6667	12	0.3549	14	0.7162	13	0.3374	32	1.5491	21	0.5167	20
Karnataka	0.9524	9	0.6825	10	0.7654	9	0.5418	18	0.4836	8	1.6851	8	0.6333	14
Kerala	1.0000	1	0.6433	24	0.4852	20	0.6528	16	0.3722	16	1.6311	15	0.6600	9
Madhya Pradesh	0.8127	22	0.7014	7	0.8886	3	0.8014	8	0.4629	9	1.7334	4	0.6387	12
Maharashtra	0.8647	18	0.8946	3	0.8444	4	0.5434	17	0.4365	11	1.7167	5	0.6469	11
Manipur	0.9048	12	0.6667	12	0.4601	23			0.3740	15	1.4811	28	0.6158	15
Meghalaya	0.8939	15	0.6544	18	0.4353	25	0.8718	4	0.4061	14	1.6524	10	0.6629	7
Mizoram	1.0000	1	0.6667	12	0.5071	17	0.4220	27	0.8280	2	1.6448	12	0.6822	6
Nagaland	0.9608	7	0.6458	22	0.3677	28	0.4679	23	0.3378	31	1.4900	26	0.4938	23
Odisha	0.8992	14	0.6486	21	0.9049	2	0.4372	25	0.5704	3	1.7118	6	0.6552	13
Punjab	0.7925	23	0.5673	29	0.2983	33	0.8328	7	0.2414	24	1.5469	23	0.4309	27
Rajasthan	0.7857	24	0.5921	27	0.3908	27	0.5234	19	0.8543	1	1.5905	18	0.5284	19
Sikkim	1.0000	1	0.6933	9	0.6250	11	0.9333	2	0.4892	7	1.7478	2	0.5072	21
Tamil Nadu	0.9524	9	0.7431	6	0.6221	12	0.8297	10	0.1607	27	1.6616	9	0.6627	8
Tripura	0.8881	31	0.6667	12	0.7851	8	0.4008	29	0.3713	17	1.5624	20	0.3720	31
Uttar Pradesh	0.7772	27	0.6456	23	0.4652	22	0.5018	20	0.3043	21	1.5388	24	0.4925	24
Uttarakand	0.7850	25	0.5948	28	0.8290	5	0.4283	26	0.4351	12	1.6142	16	0.8066	1
West Bengal	0.7425	29	0.5739	30	0.4809	26	0.4567	24	0.4800	5	1.5330	25	0.4859	25
Andaman and Nicobar Islands	0.8000	0	0.3333	32	0.4409	24	0.4767	21	0.2853	22	1.3072	34	0.3981	29
Chandigarh	0.8627	19	0.6132	25	0.8047	7	0.8951	3	0.3384	30	1.6430	13	0.7168	3
Dadra and Nagar Haveli	1.0000	1	0.6667	12	0.3420	30	0.3333	34	0.0000		1.4684	29	0.4081	28
Daman and Diu	1.0000	1	0.3100	35	0.1921	34	0.4697	22	0.0000		1.3944	33	0.2057	35
Lakshadweep	0.0000	0	0.3333	32	0.4600	21	0.3333	34	0.3267	19	1.2925	35	0.3587	32
Puducherry	1.0000	1	0.7500	5	0.1908	35	0.6608	15	0.2162	25	1.5636	19	0.6873	5

CURRENT SCIENCE, VOL. 104, NO. 4, 25 FEBRUARY 2013

Figure 3

7. Environmental Accounting / Environmental Reporting

There are policies for the implementation of environmental reporting but not in strict nature in many countries. Therefore; Organizations practised with stand-alone Environmental Performance Reporting. The reports are a influenced by zonal, regional and global communal interfaces (Y. M. Abdel-Rahim, Yousef M. Abdel-Rahim,2010). But the implementation of EA/ER shows diversified result due to two causes from not understanding environmental impact and next is for shortage of necessary accounting and auditing tools (Liu, 2009). Adaptation EA/ER in accounting profession is caused by lack of maximum potentiality for leadership due to environmental partnerships remains undeveloped and the environmental reporting standard is not fixed (Dimitar J. 2009). In present days the importance of business reporting on environmental matters has increased dramatically. Governmental regulations for environmental accounting standards are formulated by Pollution Release and Transfer Registers (PRTR) as component of Traditional financial Reporting (Chertow and Lombardi, 2005).

In 1987, the International Organization for Standardization (IOS) issued ISO 9000, a standard primarily concerned with quality management. ISO 14000 is primarily concerned with environmental management, with ISO 14001 specifically addressing environment management systems (Heba Y. M. Abdel-Rahim, Yousef M. Abdel-Rahim,2010).
Working Group of Experts on ISAR and the relevant paper at the 15th Session of ISAR held in Geneva in the West, different Accounting Statutory Bodies also recommended some GAAP- based solutions to relevant environmental accounting issues. And from these GAAP provides some solutions for the Environmental Accounting and Reporting (The cost and management (Bangladesh), May- June, 1998)

Problem on Environmental Accounting	Solution offered by GAAP and ISAR
Definition of Environmental costs and expenses	Environment costs that do not lead to future expected benefits
Environmental costs recognition and measurement issues	Materiality, measurability and certainty
Capital or revenue allocation problem	Capitalize if it is intended to prevent or reduce future environmental damage or to conserve resources
Capitalization of environmental costs incurred subsequent to the acquisition of a capital asset	Capitalize either (i) if the costs results in an increase in expected future economic benefits or (ii) if the costs are considered to be a cost of expected future benefits
Accounting for future environmental expenditure	Where an entity has a legal obligation to incur future costs, the costs involved represent an environmental liability
Accounting for the impairment disclosures	Reduce the carrying amount of the assets rather than introduce a liability
Environmental accounting policy discloser	All significant accounting policies relating to financial

Table 2: The Cost and Management, Bangladesh, May- June, 1998

8. Conclusion

To understand the implementation of smooth environmental reporting by advance assessment of the environmental cost and environmental issues requires more complicated understanding of the expenses in terms of effects. For example in Financial Reporting the waste management costing, environmental prevention costing, environmental processing cost and reward for the Environmental cleanness are not visible in the supporting heads. The amount of depreciation, maintenance, clean up, different fees and Taxes, and insurances are under the Environmental head of Waste Management Cost. In prevention section the amount can be identified by the external bodies and policies implemented for environmental services and Research and development sectors. This environmental cost and reporting capabilities are can be extracted from the financial statements but for prediction the clear understanding of following facts are required

- Level of Production: The environmental cost is not sufficient enough fixed for a desired level of production. It is vary according to the processes of activity. The activity of production is true amount material used in production.
- Level of Environmental Privileged: The environmental cost is determined by the level of externalities sectors. The level is determined by the pure production process and the amount of environmental degradation. Suppose in auto mobile industry the risk waste percentage is Used Oil (Primarily Automobile) 50%, Batteries (Primarily Automobile) 15%, Antifreeze (Primarily Automobile) 7%, Cleaners, Paints, Adhesives 21%, Pesticides, Other 7% (Transportation Cost and Benefit Analysis II). Research and Development works and other preventive measures can change the scenario. For example the SO_2 and NO_x and SP_M level of Ashok Leylend Group is maintained by them 50% bellow then the permissible limit due to the prevention measures taken by them.
- Level of capitalization of environmental cost: The prediction of environmental cost is depends on available benefits from past capitalized expenditures in preventions. For example in Mahindra group of companies; Initiatives in packaging improvement are taken under the scope of policy targets each year and these are directed towards improvement in the quality of material, reducing the cost of logistics operations, improving the efficiency of logistics to thereby reduce the number of trips and in turn the fuel consumed. It also focussed on the reduction in use of wood, corrugated packaging etc. Conservation is seeded in the packing design itself to accommodate more materials within the same space (Sustainability Report 2012-13 Mahindra & Mahindra Lid.). This cost incurred by the Mahindra will be valuable after the period over and need to determine this.
- Level of impact on the set Environmental Indicators: At present performance level the organization is contributing some amount to Environmental Indicators. But whenever the prediction of indicator are changed or the amount of activity level is changed or activity pattern is changed automatically the amount of contribution is changed. Assumed to change the amount of Environmental cost also. For example Oil India Ltd setting 1157 km long cross country crude oil pipeline is operated in an environmental friendly manner that impacting on the Environmental Indicators but they go for more or change route then what are the effect on Environmental Indicators and cost to that organizations (Annual Report Oil India Ltd 2012-13)

9. References

1. Annual Report 2007-2008 Ashok Leylend Group
2. Annual Report Oil India Ltd 2012-13

3. Betianu, L., 2009. Calitate totală în contabilitatea mediului, Universităţii, Alexandru Ioan Cuza" Publishing House, Iaşi.
4. Canadian Institute of Chartered Accountants, 1998. Examination of national standards and regulations for environmental financial accounting
5. Caraiani, C., Jianu, I., 2007. Contabilitatea verde; o perspectivă a schimbării în contabilitate, Revista CECCAR, Partea I ; a, nr. 4/2007
6. Chertow, M., and Lombardi, D. (2005). Quantifying economic and environmental benefits of co-located firms. Environmental Science & Technology, 39(17), 6535-6541.
7. Dimitar, J., 2009. Contabilitatea poate şi trebuie să fie implicată în protecţia mediului, Revista Audit Financiar nr.12/2009; pp. 50-55
8. Dr. Nasir Zameer Qureshi; Dr. Dhiresh Kulshrestha; Surya Bhushan Tiwari; Environmenal Accounting And Reporting ; An Essential Component of Business Strategy; Asian Journal of Research in Banking and Finance; Vol.2 Issue 4, April 2012, ISSN 2249 7323
9. Dumitrana, M., 2005. Contabilitate şi Informatică de Gestiune Journal, nr. 13-15/2005
10. Feldman, Stanley J., Peter A. Soyka, & Paul Ameer. Does Improving A Firm's Environmental Management System and Environmental Performance Result in a Higher Stock Price? ICF Kaiser Working Paper, 1996
11. Gray, R. and Milne, M. (2004). Towards reporting on the triple bottom line: mirages, methods and myths. In: A. Henriques and J. Richardson, Editors, The triple bottom line: Does it all add up, Earthscan, Sterling, VA, 70–80.
12. Gallhofer S, Haslam J. 1997. The direction of green accounting policy: critical reflections. Accounting, Auditing, and Accountability Journal 10(2): 148–174.
13. Heba Y. M. Abdel-Rahim, Yousef M. Abdel-Rahim ; Green accounting – a proposition for EA/ER conceptual implementation methodology, Journal of Sustainability and Green Business, 2010.
14. Ienciu, A., 2009; Implicaţiile problemelor de mediu în contabilitatea şi auditul situaţiilor financiare, Risoprint Publishing House, Cluj Napoca.
15. IFRS; 2007
16. Indrani Chandrasekharan, R. Sendhil Kumar, Seena Raghunathan and Shweta Chandrasekaran ; Construction of environmental performance index and ranking of states
17. Liu, Zhi-bin. (2009). Research on environmental accounting information disclosure for thermal power enterprises in China. Journal of Modern Accounting and Auditing, Jan. Vol. 5(1), 27-33.
18. Lungu et al, 2008
19. M. Yakhou And V.P. Dorweiler; Environmental Accounting: An Essential Component of Business Strategy; Business Strategy and the Environment Bus. Start. Env. 13, 65–77 (2004); www.interscience.wiley.com ; DOI: 10.1002/bse.395
20. Nicolae Todea, Ionela Cornelia Stanciu, Ana Maria Joldoş (Udrea) ; Environmental Accounting; A Tool Used by the Entity for Determining Environmental Costs; Annales Universitatis Apulensis Series Oeconomica
21. Robert G. Graff, Edward D. Reiskin, Allen L. White, Ph.D. Katherine Bidwell Snapshots of Environmental Cost Accounting, May 2009
22. Schaltegger, S. Wagne, M., 2005. Current Trends in Environmental Cost Accounting – and its interaction with eco-efficiency performance measurement and indicators, Eco-efficiency in industry a science, vol.18.
23. Sustainability Report 2012-13 Mahindra & Mahindra Ltd.
24. The cost and management (Bangladesh), May- June , 1998
25. Transportation Cost and Benefit Analysis II – Waste Disposal Victoria Transport Policy Institute (www.vtpi.org)
26. UNDSD: "Environmental Management Accounting, Procedures and Principles", United Nations, New York, 2001, p. 19.
27. UNDSD: Improving Government's Role in the Promotion of Environmental Managerial Accounting, United Nations, New York, 2000, p. 39.
28. United Nations Division for Sustainable Development, Environmental Management Accounting, New York, 2001, http://www.un.org/esa/sustdev/publications/proceduresandprinciples.pdf
29. Working Group of Experts on ISAR and the relevant paper at the 15th Session of ISAR