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**REVIEW OF LITERATURE** 

**NEED/IMPORTANCE OF THE STUD** 

STATEMENT OF THE PROBLEM

OBJECTIVES

**HYPOTHESES** 

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

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#### CONTRIBUTIONS TO BOOK

Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

#### RNAL AND OTHER ARTICLES

Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

#### **CONFERENCE PAPERS**

Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

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#### COMPLIANCE OF POLLUTION CONTROL MEASURES AMONG INDUSTRIAL UNITS OF PUDUCHERRY

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### DR. P. NATARAJAN PROFESSOR DEPARTMENT OF COMMERCE PONDICHERRY UNIVERSITY PUDUCHERRY

#### ABSTRACT

India is one of the fast growing countries in terms of its balanced growth. The increasing inflow of FDI's and FII's has paved the way for industrialization of our economy. Employment opportunities are created and revenue is generated from the upcoming industries. Hence industries play a vital role in the development of the country. Even though all the industrial projects are evaluated, the full impact of the industries has not been revealed till recently. The Copenhagen summit has stressed on the need for curbing industrial wastages and protecting the environment from further damage. This study focused on the execution perspectives of industrial pollution control measures. It is an exploratory nature of study based upon empirical evidences collected as primary data. The primary data has been collected through a well structured interview schedule from the industries located in Puducherry region. The findings of low level environmental proactiveness of many sample industries suggest that there exists scope for expansion of the extent of environmental performance in different areas of corporate practices, particularly where low level of environmental performance was observed.

#### **KEYWORDS**

Industrial pollution, control measures, Environmental performance.

#### INTRODUCTION

In the recent past corporate world had witnessed many – fold increase in the requirement of the environmental regulations in the business practice. Such requirements are likely to be further strengthened in the future. This warrants businesses to take more responsibility for the environmental damages that they create and to approach corporate environmental management in a more proactive way. Accordingly, at the beginning of 21<sup>st</sup> century, the biggest challenge to the interests of global business is the task of reconciling the demands of sustainable development and corporate strategy. In this context, it was interesting to study the position of industries in an emerging market economy like India. As environmental considerations are likely to be a source of quite profound changes in business practice, the increasing awareness and pressure from stakeholders concerned about the impact of corporate activities on the environmental issues.

Environmental Management System facilitates this engagement by connecting responsible parties with environmental impacts. Stakeholders may be individuals or groups who may be benefited or may be exposed to risk by the corporation's activities of economical, social and environmental. Privatization, liberalization and globalization, which had increased the competition between companies, have made the companies to produce and supply goods in an efficient manner to suit the needs of stakeholders. Maintaining eco-efficiency and accountability for environmental impacts provides an additional incentive for companies in global competition. The present study is based on the industrial pollution control measures and the industrial execution perspectives towards the implementation of these measures.

#### NEED OF INTEGRATION OF ENVIRONMENTAL ISSUES IN BUSINESS PRACTICES

As environmental considerations are likely to be a source of quite profound changes in business practice, it was attempted to provide executives the strategic plan for the environmental management. Given the internal and external demands to improve the environmental performance of a company, those companies that achieve high standards of environmental performance are reaping benefits in the form of better productivity, reduced waste generation, energy conservation, regulatory compliance and a better image among their customers and in the market place. Moreover, a realization has dawned that improving environmental performance can lead to cost savings and better efficiency which will in the long term enable companies in the global marketplace. In the quest to generate dynamic competitive advantages, many firms in fact are looking for innovative ways and means to re-conceptualize their products and services

#### LITERATURE REVIEW

Several studies have been conducted on corporate environmental management. Such studies include Madsen and Ulhoi (1996, 1997, 1999, and 2001) and Madsen (2003) in the context of Danish industry; linitch, Soderstrom and Thomas (1998) in the contest of United States; Wehrmeyer et al. (2002) in the context of United Kingdom and Germany; OECD (2004) in the context of Europe, North America and Asia\_Pacific region; The Northern Ireland Eight Environmental Management Survey (2006) in the contest of Northern Ireland. Now the question is what should executives do to promote corporate greening? Academic literature concerning corporate environmental management provides valuable insights into this question, but relatively few studies have been published on sufficiently concrete ideas based on which firms can formulate their action plan

#### SIGNIFICANCE OF THE STUDY

India is one of the fast growing countries in terms of its balanced growth. The increasing inflow of FDI's and FII's has paved the way for industrialization of our economy. Employment opportunities are created and revenue is generated from the upcoming industries. Hence industries play a vital role in the development of the country. Even though all the industrial projects are evaluated, the full impact of the industries has not been revealed till recently. Puducherry is a developing city with a cultural diversity facing the problem of environmental degradation, relatively in a larger scale when compared to other states, because there are 8533 companies functioning in this small union territory of Puducherry. Hence, the researcher selected this location for the study.

#### **OBJECTIVES OF THE STUDY**

- 1. To analyze the implementation of Environmental policy and control measures in the industries.
- 2. To evaluate the effectiveness of implementation of the environmental control measures in the industries.

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#### HYPOTHESES OF THE STUDY

- 1. There is a significant difference between size of the industrial units in implementing environmental policy
- 2. There is a significant difference between various segments of industrial units in implementing environmental control measure

#### METHODOLOGY AND TOOLS EMPLOYED

The study is based on empirical evidences by conducting survey among industries located in Puducherry region, India. Out of the 82 visited polluting companies, 54 samples were received. The research is mainly focused on highly polluting companies. They are Cotton, Rubber, Plastic, Chemical and Metal industries. Percentage, Mean and Standard deviation tests were used for the analysis.

#### ANALYSIS AND FINDINGS

Out of the surveyed industries, the ones that have environmental policies is reported in the table 1. It reveals that 68.52 percent of the surveyed units had environmental policies, whereas the rest of the 31.48 percent of the industries did not have any environmental policy. The study found that most of the small scale industries are not having environmental policy, whereas the percentage of the medium and large scale industries having environmental policy is mostly higher than the small industries. Hence, there is a significant difference between sizes of the industrial units

TABLE 1: INDUSTRIES HAVING ENVIRONMENTAL POLICY BY SIZE									
Sl. No.	Having Environmental policy	Size of Surveyed Units							
		Smal		Medium		Large		Total	
		No.	%	No.	%	No.	%	No.	%
1	Yes	3	05.56	13	24.07	21	38.89	37	68.52
2	No	11	20.37	3	05.56	3	05.55	17	31.48
Total		14	25.93	16	29.63	24	44.44	54	100.00

#### TABLE 1: INDUSTRIES HAVING ENVIRONMENTAL POLICY BY SIZE

#### Source: Result computed

Table 2 shows the distribution of Surveyed Units that has an Environmental Department. It was noted that 44.57 percent of the surveyed units did not have any environmental department. Only 55.43 percent of the surveyed units had environmental departments. The analysis also revealed that most of the chemical units had environmental department. Results were poor in case of rubber and plastic units.

Table 2 also shows the distribution of Surveyed Units that have Separate Financial Allocation for Environmental Management. It was found that out of 54 surveyed units 29 units had separate financial allocations in the annual budget for fulfilling the objectives of the environmental policies. It was observed that most of the Chemical, Rubber, and Metal sectors had separate financial allocation. Whereas the percentage of leather and plastic sectors were poor and also cotton sector was very poor in separate financial allocation.

#### TABLE 2: DISTRIBUTION OF SURVEYED INDUSTRIES HAVING ENVIRONMENTAL DEPARTMENT AND SEPARATE FINANCIAL ALLOCATION FOR ENVIRONMENTAL MANAGEMENT

Industrial Segments	No.	%	Having Environmental Department				Having Separate Financial Allocation				
			Yes		No		Yes		No		
			No.	%	No.	%	No.	%	No.	%	
Cotton	6	11.11	2	03.70	4	07.41	1	01.85	5	09.26	
Leather	5	09.26	3	05.55	2	03.71	3	05.55	2	03.71	
Rubber	5	09.26	3	05.55	2	03.71	3	05.55	2	03.71	
Plastic	12	22.22	5	09.25	7	12.97	5	09.26	7	12.96	
Chemical	19	35.19	14	25.93	5	09.26	14	25.93	5	09.26	
Metal	7	12.96	3	05.55	4	07.41	4	07.41	3	05.55	
Total	54	100.00	30	55.43	24	44.57	29	55.55	25	44.45	
Sources Deput computed											

Source: Result computed

Table 3 shows the effective implementation of environmental control measures in the surveyed industries under different segments. It was found that the environmental control measures had been implemented moderately effective by chemical industry followed by leather and rubber industries. Whereas the metal and plastic industries implemented the environmental control measures were low moderately effective. In the case of cotton industry the environmental control measures were implemented poorly. It was observed that the recycling process and emission control in the chemical industry was very poor though it implemented the other environmental control measures effectively. It also observed that noise pollution was mostly created by metal industry followed by plastic and rubber industry. Hence, there is a significant difference between various segments of the industrial units

#### TABLE 3: EFFECTIVE IMPLEMENTATION OF ENVIRONMENTAL CONTROL MEASURES IN THE SURVEYED INDUSTRIES UNDER DIFFERENT SEGMENTS IN PUDUCHERRY

Environmer	ntal Control Measures	Industry Segments							
		Cotton	Rubber	Leather	Plastic	Chemical	Metal		
EATP	Mean %	38.56	58.42	64.74	47.76	71.24	56.53		
	SD	11.71	16.89	05.63	15.23	19.23	07.32		
ESWM	Mean%	40.23	60.35	70.67	57.89	84.65	60.18		
	SD	09.36	13.43	05.92	20.86	09.34	11.13		
RP	Mean %	56.74	74.67	76.89	89.47	40.78	65.32		
	SD	12.56	08.36	11.37	11.79	12.63	18.89		
AEEE	Mean %	46.45	52.67	72.49	49.41	76.65	68.48		
	SD	04.65	08.63	13.85	11.86	17.18	14.27		
WM	Mean %	58.70	74.54	67.92	69.72	74.58	66.69		
	SD	05.82	09.56	14.62	17.37	09.69	05.36		
EC	Mean %	4777	58.77	55.89	57.26	56.71	48.99		
	SD	08.96	06.98	11.95	16.62	13.89	06.32		
NC	Mean %	76.73	62.75	66.90	59.88	60.34	52.91		
	SD	04.94	18.94	15.34	11.56	09.91	12.61		

Source: Results computed

The following are the abbreviations of the environmental control measures variable listed in the above table. EATP – Employees Environmental Awareness and Training Program, ESWM – Employee Safety and Welfare Measures, RP – Recycling Process, AEEE – Adoption of Energy Efficiency Equipment, WM - Waste Management, EC – Emission Control, NC – Noise Control.

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#### SUGGESTIONS

- 1. There is a need to incorporate provisions to force the corporate sector to disclose the facts about environmental activities and to provide for verification of the facts disclosed.
- 2. Every industry must educate, train and motivate employees to conduct their activities in an environmentally responsible manner.
- 3. There must be an integrated legislation framework at the central level and substantive laws at the state levels to address the specific needs of different ecosystems.
- 4. It is required to impose high tax to the companies that are exceeding regulatory compliance.
- 5. If the industry has lack of adequate fund to implement the environmental management system, proper grant may be allocated from the side of regulatory agency.
- 6. Involvement of various stakeholders and creating appropriate environmental awareness among them are necessary to tackle the environmental issues effectively.

#### CONCLUSION

The findings of low level environmental proactiveness of many sample industries suggest that there exists scope for expansion of the extent of environmental performance in different areas of corporate practices, particularly where low level of environmental performance was observed. The regulators should design appropriate and effective enforcement mechanisms and properly activate them to ensure a higher level of environment performance in corporate practices, so that unit level management can make informed judgments on the basis of such business practice, since the present enforcement mechanism in India is viewed as unsatisfactory. A formal body may be set up with adequate administration or quasi-judicial power to monitor and enforce environmental compliance in corporate practices.

#### REFERENCES

- 1. Ilinitch, Anne Y., Soderstorm, Naomi S. and Thomas, Tom E. (1998), "Measuring Corporate Environmental Performance", Journal of Accounting and Public Policy, vol. 17, Issue 4/5, p. 383.
- Madsen, Henning and Ulhoi, John P. (1996, 1997, 1999, 2001)," Analyses of Corporate Environmental Management: Methodological Aspects" [http://isi.cbs.nl/iama member/ CD2/pdf/574.pdf, visited on 24<sup>th</sup> February 2011].
- 3. Madsen, Henning (2003), "Have Trends in Corporate Environmental Management Influenced Companies' Competitiveness?" Green Management International [http://goliath.ecnext.com/coms2/summery\_01993498784\_ITM, visited on 24<sup>th</sup> February 2011].
- 4. Mohanty S, K. (1997), Universal's Environmental and Pollution Law Manual, Universal Law Publishing Co. Pvt. Ltd., Delhi.
- 5. Sohal, Amrik and Zutshi (2006), "EMS Adoption in the Public Sector: Experiences from Austrialia", in Sahay, B, S., Stough R. R., Sohal A. and Goyal S. (2006) (ed.), Green Business, Allied Publishers Pvt. Ltd., New Delhi, p 253-267.
- Wehrmeyer W., Wagner M., Pacheco C. and Schaltegger S. (2002), Environmental Management Strategies: Britain and Germany Compared, Anglo-German Foundation for the Study of Industrial Society London", [http://WWW.agf.org.uk/pubs/pdfs/1336web.pdf, visited on 24<sup>th</sup> February 2011].
- 7. Zhu, Quinghua and Sarkis, Joseph (2004), "Relationship Between Operational Practices and Performance among Early Adopters of Green Supply Chain Management Practices in Chinese Manufacturing Enterprises", Journal of Operations Management, vol. 22, Issue 3, P. 265-289.



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