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Remarking An Analisation

Environmental Management System (A Study of Jaipur and Alwar Districts of Rajasthan State)

Abstract

An organization's Environmental Management System (EMS) is one part of a larger management system. The EMS part of this larger management system is used to establish an environmental policy and manage the environmental aspects of an organization's activities, products, and services. Techniques of Environment Management include Environment Impact Assessment, Positional Analysis, Strategic Environmental Assessment, Environmental Auditing, Total Quality Environmental Management and SWOT Analysis. Lack of co-ordination among different agencies, lack of volunteerism at grass root level machinery, increase in corruption in implementation machinery and lack of awareness among people are main reasons of poor implementation of environment policy. Study of Jaipur and Alwar districts of Rajasthan concludes that role of social organisations, involvement of general public and youth and role of NGO's are beneficial for effective implementation of environmental policy. Develop environmental information system at local level, establishment of public grievance committee at local level, establish public private partnership forum at local level, and encourage role of NGO's at local level are needed for successful results.

Keywords: Environmental Policy, EMS, SWOT Analysis, Positional Analysis, Total Quality Environment Management, Environmental Auditing, Volunteerism, Strategic Environmental Assessment.

Introduction

"Environmental Management System (EMS) refers to the management of an organisation's environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organisational structure, planning and resources for developing, implementing and maintaining policy for environmental protection." An organization's Environmental Management System (EMS) is one part of a larger management system. The EMS part of this larger management system is used to establish an environmental policy and manage the environmental aspects of an organization's activities, products, and services. An Environmental Management System (EMS) has the objectives to:

- 1. Serve as a tool to improve environmental performance.
- Provide a systematic way of managing an organization's environmental affairs.
- Address the immediate and long-term impacts of its products, services and processes on the environment;
- Give orders and maintain consistency for organizations to address environmental concerns through the allocation of resources, assignment of responsibility and ongoing evaluation of practices, procedures and processes; and
- 5. To focus on the continual improvement of the system

According to the International Standard, ISO 14001, an Environmental Management System (EMS) is "the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy."²



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Aim of the Study

Environmental Management System is the important part for better implementation of environment policy and laws. The main objectives of the study are to analyse the reasons of poor implementation of environment policy and laws. The objectives of the study includes effective implementation strategy, develop environmental information system, establish public grievances at grass root level, role of NGO's and role of general public.

Techniques of Environment Management Environment Impact Assessment

"EIA has been defined broadly as an investigation of impacts on environment and human wellbeing resulting from policies and legislative proposals and more narrow as a means of assessing environmental effects of a project. Environment Impact Assessment is an assessment of a planned activity on the environment."

Environment Impact Assessment is "the study undertaken in order to assess the effect on a specified environment of the introduction of any new fact. The purpose of EIA is to increase the citizens' opportunities of participation and obtaining information at an early stage of the project, and to reveal the environmental impact so that it may be considered in the planning stage or, which may upset the current ecological balance."

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment⁵ is the extension of EIA. SEA is the environmental assessment of strategic actions and strategic actions are defined as Policies, Plans and Programmes (PPP).

Positional Analysis (PA)

"The positional analysis aims to clarify the decision making process, to make visible conflicts of different interests and to openly discuss different valuational standpoints. Aspects considered in the positional analysis are the view of the problem, alternative course of the actions and their impacts, activities and interest affected and possible solutions."

Positional analysis is helpful for the decisionmakers to apply their own ideologies and valuations. It is helpful to know the views of conflicting interest groups. It is useful in all types of problems in which qualitative as well as quantitative data and monitory and non-monitory data are used.

Environmental Auditing

"Audits may be designed to: verify or otherwise comply with environmental requirements;

evaluate the effectiveness of existing environmental management systems; or assist in planning for future improvements in environment protection and pollution control."⁷

Total Quality Environmental Management

"Total Quality Environmental Management (TQM) is a participative, systematic approach to implementing а continuous planning and organizational improvement process. Its approach is focused on satisfying customers' expectations, identifying problems, building commitment, and promoting open decision-making among workers. TQM applies analytical tools, such as flow and statistical charts and check sheets, to gather data about activities within an organization. TQM uses process techniques, such as nominal groups, brainstorming, and consensus forming to facilitate communication and decision making."

SWOT Analysis

SWOT (Strengths and Weaknesses, and Opportunities and Threats) is a basic analytical tool in management that has become popular in recent years. SWOT analysis is often used by strategic planners and top management in developing competitive strategies. It is typically used to decide corporate strategies and make the product or market level analyses. Now it is an important technique for environment management. "SWOT is a widely used thinking framework for identifying Strengths, Weaknesses, Opportunities and Threats. It enables key factors to be visibly recorded as a high-level summary of a system."

Opinion of Jaipur and Alwar Districts regarding Environment Management Environmental Management for Effective Implementation

Scientific environment management is better implementation of environmental policy and laws. Opinion has been taken regarding reasons for poor performance of the implementation. As per table no. 1, 38.50% aggregate weightage has been assigned to lack of awareness among people and 29.11% aggregate weightage has been assigned to lack of volunteerism at grass root level. Administration should be aware about these two important factors. Environmental awareness programmes with certain incentives should be organized in remote and rural areas. Active involvement of educated youth will be required for the success of these programmes. Active participation of political and social organizations will be helpful for the improvement in awareness among people.

Table No. 1
Opinion Regarding Reasons for Increasing Environmental Pollution

	Information		Saara Ashiayad C			lassification	
District		Total Score	Score Achieved		AGE WISE		
			Acilieveu	iii Fercentage	<25	26-60	>60
Jaipur	Lack of co-ordination among different agencies	1280	507	20.69	204	187	116
	Lack of volunteerism at grass root level machinery	1280	710	28.97	298	285	127

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Increase in corruption in implementation machinery 1280 290 11.83 108 101 81 81 81 81 81					_			
Total 2451 100 997 941 513		implementation	1280	290	11.83	108	101	81
Lack of co-ordination among different agencies 1120 492 20.83 203 193 96			1280	944	38.51	387	368	189
Lack of volunteerism at grass root level machinery Lack of awareness Alwar Lack of co-ordination among different agencies Lack of volunteerism at grass root level machinery Lack of awareness among people Lack of co-ordination among different agencies Lack of volunteerism at grass root level machinery Lack of ordination among different agencies Lack of co-ordination among different agencies Lack of volunteerism at grass root level machinery Lack of awareness among people Lack of co-ordination among different agencies Lack of volunteerism at grass root level machinery Lack of awareness among people Lack of awareness among pe		Total		2451	100	997	941	513
grass root level machinery 1120 691 29.25 265 219 207	Alwar		1120	492	20.83	203	193	96
Implementation machinery 1120 270 11.43 105 100 65		grass root level	1120	691	29.25	265	219	207
Total 2362 100 934 869 559		implementation	1120	270	11.43	105	100	65
Lack of co-ordination among different agencies 2400 999 20.76 407 380 212			1120	909	38.48	361	357	191
Jaipur & Alwar among different agencies 2400 999 20.76 407 380 212 Lack of volunteerism at grass root level machinery 2400 1401 29.11 563 504 334 Increase in corruption in implementation machinery 2400 560 11.64 213 201 146 Lack of awareness among people 2400 1853 38.50 748 725 380		Total		2362	100	934	869	559
Aiwar Lack of volunteerism at grass root level machinery 2400 1401 29.11 563 504 334 Increase in corruption in implementation machinery 2400 560 11.64 213 201 146 Lack of awareness among people 2400 1853 38.50 748 725 380	lainur &		2400	999	20.76	407	380	212
implementation machinery 2400 560 11.64 213 201 146 Lack of awareness among people 2400 1853 38.50 748 725 380		grass root level	2400	1401	29.11	563	504	334
among people 2400 1853 38.50 748 725 380		implementation	2400	560	11.64	213	201	146
Grand Total 4813 100 1931 1810 1072			2400	1853	38.50	748	725	380
		Grand Total		4813	100	1931	1810	1072

21.08% aggregate weightage has been assigned to lack of co-ordination among different agencies. Work should be divided among different agencies to discourage negative competition. 12.06% weightage has been given to update environmental laws. Views of the general public, environmentalists and social groups should be considered in updating laws.

Implementation Strategy

Effective implementation strategy should be developed for the better results. Opinion has been taken regarding the effective implementation of the environmental policy and laws as shown in Table No.2. 37.15% aggregate weightage has been assigned to develop the environmental information system at local level. This system will be helpful to improve people's participation at local level.

Development of environment information system at local level will be helpful in environmental education and awareness. 31.27% aggregate weightage has been assigned to establish a public grievance committee at local level including local persons, environmentalists and representation of funding agencies. This committee will be helpful to solve problems of local people and upgrade quality of work. 19.89% aggregate weightage has been assigned to encourage the role of NGO's at local level. Priority should be given to the NGO's who have the spirit of volunteering in their workings and maintaining the quality of work. 11.70% aggregate weightage has bee assigned to establish public private partnership forum at local level. The partnership will be beneficial for cost effectiveness, work efficiency and economy of

Table No. 2
Opinion Regarding Requirements for Effective Implementation of Environmental Policy and Laws

Classification **Score Achieved** Score **District** Information **Total Score AGE WISE Achieved** in % Age <25 26-60 >60 Develop environmental Jaipur 1280 973 37.57 394 384 195 information system at local level Establish public 1280 802 30.97 302 289 211 grievance committee at local level Establish public private partnership forum 1280 302 11.66 105 99 98 at local level Encourage role of 1280 513 19.81 189 165 159 NGO's at local level

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	Total		2590	100.00	990	937	663
Alwar	Develop environmental information system at local level	1120	923	36.71	316	315	292
	Establish public grievance committee at local level	1120	794	31.58	302	288	204
	Establish public private partnership forum at local level	1120	295	11.73	103	101	91
	Encourage role of NGO's at local level	1120	502	19.97	195	179	128
	Total		2514	100.00	916	883	715
Jaipur & Alwar	Develop environmental information system at local level	2400	1896	37.15	710	699	487
Alwai	Establish public grievance committee at local level	2400	1596	31.27	604	577	415
	Establish public private partnership forum at local level	2400	597	11.70	208	200	189
	Encourage role of NGO's at local level	2400	1015	19.89	384	344	287
	Grand Total		5104	100.00	1906	1820	1378

To test the similarity opinion of Jaipur and Alwar districts analysis of variance (ANOVA) technique is applied as under.

Null Hypothesis

There are no significant differences in the opinion of Jaipur and Alwar districts regarding requirements for effective implementation of environmental policy and laws.

Alternative Hypothesis

There are significant differences in the opinion of Jaipur and Alwar districts regarding the requirement for effective implementation of environmental policy and levels.

Anova Table

Source	Sum of Squares	DF	Variance	F Rates
Between samples	722	1	722	.0085<1
With in samples	508626	6	84771	
Total	509348	7		

Calculated value of F is less than 1; hence, differences between samples are not significant. Null hypothesis is accepted and alternative hypothesis is rejected. Opinion of Jaipur and Alwar districts regarding requirement for implementation of environmental policy and laws is similar. General observation indicates that publicity of environmental policy and law, programmes and projects are necessary for better implementation of the policy. Opinion has been taken the regarding the requirement of publicity of environmental policy and laws. As per table no. 6.7, 76.07% aggregate opinion shows the need of publicity for better implementation. 11.17% aggregate opinion indicates that there is no need of publicity.

Conclusion

Environment management involves the wise use of activity and resources to have an impact on the

world. Use of the environmental management system approach will be helpful to control environmental degradation. The opinion of the public should be considered while using environmental management techniques. Environmental management policy formulation, implementation and evaluation should be finalized after taking views of the general public, social organizations and NGO's.

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