



## ROLE EFFICACY OF GOVERNMENT AND NON-GOVERNMENT ORGANIZATIONS IN ENVIRONMENTAL MANAGEMENT

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### **Abstract**

*The growing consciousness of human exploitation of environment has elicited several responses. In the last three decades there has been a plethora of governmental and non-governmental conventions hosted, a myriad of books published, extensive media coverage, and countless speeches delivered concerning environmental issues and how they might be addressed. An integral part of helping people to understand the importance of their actions on the health of their surrounding environment is through the best practices of governmental and non-governmental organizations involved therein. Furthermore, an effective implementation of any environmental management programme depends on the full support of local actors, which depends on a certain level of education, community participation, public private partnerships, raising awareness and training in the relevant areas. Environmental management involves the practices that increases people's knowledge and awareness about the environment and associated challenges as well as develops the necessary skills and expertise to address the challenges. The present paper attempts to identify various socio-economic factors as well as functioning of various organizations associated with preservation and restoration of environment in the selected research area. The data for the study were collected from secondary sources. The data so collected has been analyzed through secondary review. The study concludes that socio-economic factors have a positive impact on environmental management. The basic factors identified were: Demographic change, Social change, Gender and divisions of labor, Health, Education, knowledge and information, Poverty, Economic change, Technological change, Research and the development of new technologies etc.*

**Keywords:** *Community Participation, Environmental Management, Governmental and Non-Governmental Organizations, Public-Private Partnership.*

### **INTRODUCTION**

Environment commonly implies surroundings invested with physical, chemical and biological factors exercising a decisive influence on all living organisms including humans and the stability and well-being of life and living on this planet. The present day era of post modernist reflexivity has projected an intimate and close link between man and the nature. Diverse interacting and often competing interests of different stakeholders also determines the environmental matrix. Managing and balancing environment in a healthy and productive manner, hinges to a larger extent upon a proper understanding and judicious use of natural resources in order to combat eroding factors that cause irreversible damages to the eco-system. Environmental discipline these days has acquired global attention not merely to

redress ecological ravages but to help evolve a proactive response from the business and civil society, keeping in view challenges and task of restoration of healthy ecological frame on this earth. In no conceivable manner should management of environment impede or come in conflict with economic growth as it impinges upon the development of technology and participation of common masses to formulate a collective and effective response mechanism to meet material needs of the people across the planet. Conserving scarce natural resources and protecting both the external and internal environments in recent times has acquired phenomenal priority of different nations which can be clearly understood from declarations of world body like United Nations. Policies for environment protection has to be planned on regional, national and international levels enabling people to take harness advantage of modern science and technology and enjoy the benefits of natural resources available, while at the same time estimating the social costs which are likely to occur through shortages, pollution, and social conflicts. To the industrialists environmental management means ensuring that business decisions are taken which give due cognizance to the environmental issues keeping in view the fact that now Corporate Social Responsibility (CSR) has become the magna-carta for adhering to the green business practices<sup>[9]</sup>. This means that individual business entities have to understand the consequences of decisions that impact environment and are ready adopt eco-friendly business strategies<sup>[13] [19] [20] [21]</sup>.

Environmental management is a mixture of science, policy, and socioeconomic applications. It focuses on the solution of the practical problems that humans encounter in cohabitation with nature, exploitation of resources, and production of waste. In a purely anthropocentric sense, the central problem is how to permit technology to evolve continuously while limiting the degree to which this process alters natural ecosystems. Environmental management is thus intimately intertwined with questions regarding limiting economic growth, ensuring an equitable distribution of consumable goods, and conserving resources for future generations. Environmental management is a response to the increasing seriousness of the human impact on natural ecosystems<sup>[7] [11] [22] [23] [24]</sup>. With a smaller global population base and a less pervasive use of technology, the environment might be able to recuperate on its own from human misuse, but it is now widely recognized that in many cases positive intervention is necessary if the environment is to recover.

### **Government and Non-Government organizations in Environmental Management**

In most of the countries now both national and state governments along-with non-governmental organizations are now actively getting participation in promoting public

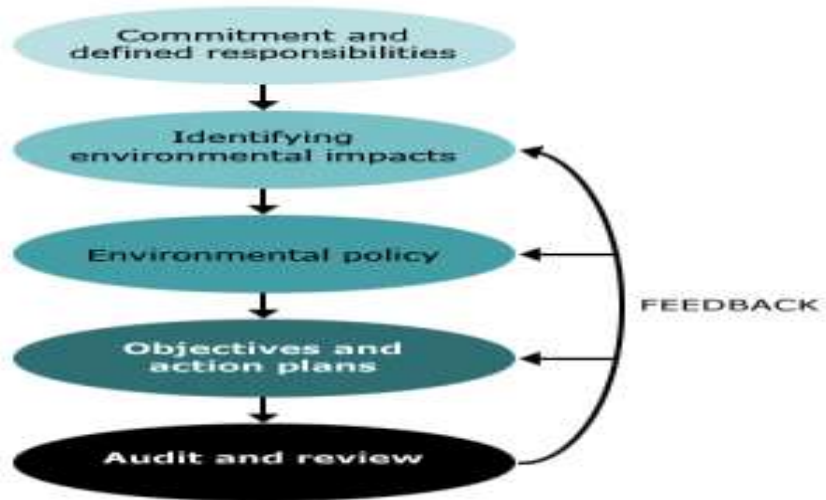
awareness and share the burden of restoration of the ecological balance for the posterity. Conservation and protection of environment has become mandatory for good governance so as to avoid growing public opposition because healthy life practices are gaining priority over the materialistic benefits and pleasures<sup>[5] [17] [18]</sup>. Environmental management, therefore, has become a challenging task demanding public participation and active involvement of voluntary organizations for evolving a collective and an integrative approaches to restore and prevent ecological degradation by identifying following critical issues :-

- To assess and predict future trends in environmental managements.
- To promote case studies with regard to the environmental problems arising from different sources within the state.
- To encourage and organize public participation in planning new projects.
- To formulate area specific strategies for promoting public support for balancing developmental schemes with ecological requirement agencies in different regions of the state.
- To evaluate and study role of various non-governmental and voluntary organizations involved with the environmental management.

**Core elements of Environmental Management**

- Commitment of top management and defined responsibilities;
- Identifying environmental impacts;
- Communicating an environmental policy;
- Setting environmental objectives and programmes/plans; and
- Regular audit and review cycle.

**FIGURE 1.**



**Fig. 1. Source: Environmental Management System. Pearson Publications. P.2.**

## **REVIEW OF LITERATURE**

*Felix Iyalomhe, (2008)<sup>[14]</sup>*, in his paper titled “*Environmental Management System and ISO 14001 for Nigeria Higher Education: A Case Study of Auchi Polytechnic*” suggest that the new management of Environmental Management System (EMS) certified by ISO 14001 has achieved positive results in the developed part of the world and if introduced in the developing countries, like Nigeria, could help to reduce the impacts on the environment. It further suggests that the new system can provide results, such as possible success factors, like top management commitment in all aspect, strict legislations on punishment for non-compliances and incentives for compliances etc, recommendations to Auchi Polytechnic, possible drivers, like Government directives, strict regulatory legislative laws on EMS implementation etc, barriers to EMS implementation like lack of commitment from government and stakeholders, lack of funds etc and suggestions for further studies.

*Mark S. Reed (2007)<sup>[27]</sup>* in his paper titled “*Stakeholder participation for Environmental management*” highlights the complex and dynamic nature of environmental problems and suggests flexible and transparent decision-making that embraces a diversity of knowledge and values. For this reason, stakeholder participation in environmental decision-making has been increasingly sought and embedded into national and international policy. It draws together the typologies that have been developed to understand the basis for stakeholder participation. It is argued that to be successful, such a process needs to be underpinned by an appropriate philosophy, and to consider how to engage relevant stakeholders at the

appropriate time and in a manner that will enable them to fairly and effectively shape environmental decisions.

**De Moore, P. & De Beelde, I. (2006)** in their paper titled “*Environmental Auditing and the Role of the Accountancy Profession*” emphasizes on environmental auditing and the potential role of accountants distinguishing between compliance audits and audits of the environmental management system. This review focuses on the similarities and differences between an environmental audit and a financial statement audit. Except that environmental audits are largely unregulated, the general approach to both types of audits is similar. Both audits place an emphasis on the evaluation of control systems, which is an argument in favor of external auditors playing a role in environmental audits. Another argument for including external accountants, is their code of ethics. It is argued that this reluctance is because of a lack of generally accepted principles for conducting environmental audits. Rather than treating these audits as totally different, it is proposed that there be a move towards integrated, or even universal, audits.

**Jean-Laurent Pfund, Trudy O’Connor, Piia Koponen & Jean-Marc Boffa, (2006)<sup>[12]</sup>**, in their paper titled “*Transdisciplinary Research to Promote Biodiversity Conservation and Enhanced Management of Tropical Landscape Mosaics*” suggests that by developing methods and instruments that help to inform and facilitate coherent landscape planning across various spatial scales, research institutions can support decisions by communities, conservation agencies and policy-makers. Ideally, these would help to define management options that integrate biodiversity and livelihoods and promote equitable participation in planning processes. Within a joint ‘Biodiversity Platform’, the CGIAR (Consultative Group on International Agricultural Research) centers CIFOR and ICRAF aim to better understand biodiversity conservation and sustainable use in mosaic landscapes with intermediate land uses such as utilized forests and agroforests. It further reviews historical trends of research on conservation and development and identifies lessons from past attempts to combine biodiversity and livelihood aims in tropical landscapes.

**Tzuchau Chang (2004)<sup>[6]</sup>** in his paper titled “*Constructing national environmental education indicators for Governmental sectors of TAIWAN*” gives inputs on developing a set of Environmental Education Indicators to assess the government sectors’ achievement on implementing EE in Taiwan. Content analysis of national reports, interviews with

coordinators of EE in governmental sectors, and surveys on EE researchers and educators were conducted to select and determine 11 EE indicators. The result suggests the national EE indicator system could consist of three categories: input, process, and output categories. The input indicators include human resources, material resources, and EE offices. The process category has the indicators of governmental operation, education and training, media & teaching materials, propaganda, research and international cooperation, and awards for EE. The output category contains the indicators of environmental literacy and environmental actions<sup>[30] [31] [32]</sup>.

**Chitra, A. (2003)<sup>[81]</sup>** in her paper titled “*Role of NGO’S in Protecting Environment and Health*” suggests following for the protection of environment :

- Educate the students about the pollution problem and the harmful effects of pollution.
- We should minimize the use plastic cover for different purposes.
- Buy only environment friendly products i.e. the products which are not reducing the natural resources.
- Not to waste water for various purposes.
- To plant and grow trees in the house garden.
- To Support the NGO’s financially which are rendering service to the Health and Environment sector.
- To motivate research on different measures to be taken to solve environmental problems

**Skanavis, Constantina and Sarri, Evalina (2002)<sup>[28]</sup>** in their paper titled “*The Role of Environment Education as a Tool for Environment Management in Cyprus: Strategies and Activities*” examines the way in which Cyprus (pursuing membership into the European Union) has to adapt to and implement certain directives, where environmental awareness should be intensely promoted. The authors present the links between each enforced European directive and the relation to the Cypriot way of life and the need of European aid to implement such policies and how the recommended environmental education program will contribute to a higher quality of life.

**Ms Dao Mai Anh (2002)<sup>[2]</sup>** in her paper titled “***Environmental Management and ISO 14001 Certification in Vietnam through a case study of Jebsen and Jessen***” examines the issues related to ISO 14001/Environmental Management System (EMS) implementation in Vietnam. Its objectives are to explore the current trend of ISO 14000 certification and implementation in Vietnam, and its possible benefits and problems encountered by firms in implementing this standard. From the survey of the experiences of the ISO 14000-certified companies in Vietnam, this research was able to derive some recommendations in order to promote the implementation of ISO 14000 certification in Vietnam. It urges more Vietnamese government’s efforts to increase awareness of the benefits of ISO 14000 certification and better coordination of ISO 14000 certification and implementation<sup>[4] [29]</sup>.

**Eva Heiskanen (2002)<sup>[12]</sup>**, in his paper titled “***The Environmental Agenda in Organization and Management Research***”, explores the evolution of the environmental agenda in organization and management research. This is done by studying how the research community responded to calls for interdisciplinary voiced in key journals in the mid-1990s. It finds that some aspects of the interdisciplinary agenda have not been taken up; in particular the study of the biophysical environment has been difficult to integrate into organization and management studies. The study considers the reasons for these difficulties especially from a sociological and cultural perspective on academic work, and explores the viability of different scenarios for future development<sup>[16]</sup>.

**Allen, W.J. (2001)<sup>[11]</sup>** in his paper titled “***Sustainable Development as a Policy Concept***” emphasis on the need for new approaches to environmental policy and ecosystem management which has emerged in line with the evolving concept of 'sustainable development'. Over the past three decades, 'development theorizing has progressed beyond economic parameters based on gross domestic product (GDP) per capita growth, and even the conventional social indicators of literacy, life expectancy and caloric intake. While conventional approaches to agriculture have in the past tended to employ narrow economic or productivity criteria to measure their success, today the questions have been broadened to simultaneously evaluate the health of relevant systems in terms of ecology, ethics and equity. These major changes in the way the issues of economic growth, human development and environmental protection are approached can be highlighted through the outcomes of two major United Nations conferences. In response the World Commission on Environment and Development was established during the 1980s by the United Nations to examine strategies

and means by which the world community could deal more effectively with environmental concerns.

*Desirée Cullen (2001)<sup>[10]</sup>* in his paper titled “*Environmental Management Accounting: A State of Play*” provides a framework of the existing EMA perspectives. Accounting, economics, science, and philosophy may need to come together to debate the decision making framework and changes to the role of business, government, and social agendas that will be required to ensure the achievement of sustainability in our current economic environment. The authors also question the value of the burgeoning body of literature on environmental external reporting if no attempt is made to integrate this with EMA. A targeted study of the EMA practices of firms currently engaged in external financial reporting might add depth to the triple bottom line agenda and further legitimize the importance of the EMA agenda. It is also of paramount importance that research focus on further developing an EMA framework through a comprehensive investigation of its applicability and relevance as a business tool in a wide range of decision making contexts and environments.

*Ramin Maysami, Lei Yalin and Zhang Long (1999)<sup>[26]</sup>* in their paper titled “*Research trends in resource and Environmental management*” examines that the Environmental and resource management have often been at odds with industrialisation and rapid economic growth and this is apparent when reviewing the cases of growing economies of China and India. This article reviews the literature and concludes that not only promoting effective natural resource management contributes to price stability, availability of products and long-term employment, but also that it is socially desirable in terms of poverty reduction and reducing the burden on public health systems. The article further proposes that a key step in alleviating the clash between the national desire to grow and its potential adverse effects on the environment and natural resources is the enhancement of academic research on sustainable resource and environmental management among the intellectual community.

*Jesús Ángel del Brío and Beatriz Junquera (1998)<sup>[15]</sup>* in their paper titled “*Environmental innovation management in SMEs: Implications for Public Policies*” gives inputs to collect and make up the most important contributions in the economic literature in relation to the special characteristics of the management of the environmental innovation in the SMEs. The scarce development in the SMEs in respect to their environmental strategy may be a consequence of the links among some of the following factors: limited financial resources, the type of organizational structure, a little influence of the strategic adaptation competence against the changes in the SMEs, the managers’ scarce environmental training and short term



orientation, the staff's scarce environmental awareness and training, the status of the environmental issues in the company, the SMEs' lower ability to obtain highly radical innovations, the scarce influence of manufacturing process flexibility in the most advanced states of the environmental strategy in the SMEs and their lack of relation ability with external stakeholders—very important in the success of the most advanced environmental approaches. Besides, the lack of regulation neutrality must be added as a key difference among companies of different sizes. So specific actions seem be necessary, such as technological advice and awareness, and training programs in order to cooperate with external stakeholders.

**Raffaele Spinelli and Enrico Marchi (1995)<sup>[25]</sup>** in their paper titled **“Environmental Impacts of Forests Road Construction”** suggest effective forest management and the maintenance of an appropriate forest road network. Road building is essential to the multiple use of forest resources, and to satisfy a whole range of needs. However, careless logging and road building are the main causes for the environmental degradation of most forest regions. In particular, road building can produce severe negative effects on soil stability, water regime, landscape quality and game population. The mechanisms that lead to these unwanted effects have been investigated in a number of studies, and a large corpus of knowledge is now available. Implementing a number of measures during all three stages of the process (planning, construction and maintenance) can reduce the environmental impact of road building. In general, careful route selection, avoidance of unnecessary earthmoving and construction of an effective drainage system yield the best results. Road-bank re-vegetation and regular road maintenance are also crucial to good environmental performance.

### **IMPORTANCE OF THE STUDY**

Environmental management is a purposeful activity with the goal to maintain and improve the state of an environmental resource affected by human activities. It is not, as the phrase suggests, the management of the *environment* as such, but rather the management of the interaction and impact of human societies on the environment<sup>[3]</sup>. The present day era of post modernist reflexivity has projected an intimate and close link between man and the nature. So far as industrialization is concerned, India like other countries also opted for the process of industrial development for attaining over all socio-economic upliftment of its masses in shortest possible time. This urgency apparently made planner to ignore the consequences of such modes of development on the environment at least until late 1970's. Now taking the stock of environmental degradation India is actively involved in restoration strategies which

are not in conflict with the environment. Introduction of National Environment Tribunal (NET) bill was passed in Lok Sabha in August 1992, itself demonstrated the willingness on the part of government to review developmental schemes which cause environmental degradation. Jammu & Kashmir state too embarked upon rapid path of socio- economic development for achieving over all societal upliftment but at the same time could not escape damage caused to be the fragile ecology of this Himalayan region. Pursuance of economic goals often meant sacrificing the environmental considerations which has taken colossal toll. Government has the Department of Environment & Remote Sensing and State Pollution Control Board to review all such developmental schemes which have an adverse impact on the states ecology and environment. Without participation of public through various voluntary and non-governmental organizations it would not be possible to effectively addressing to the issues of proper management of the fragile environment. In this backdrop, the present study is an attempt to address the practices as well as issues of governmental and non-governmental organizations in environmental management.

#### **STATEMENT OF THE PROBLEM**

***“ROLE EFFICACY OF GOVERNMENT AND NON-GOVERNMENT ORGANIZATIONS IN ENVIRONMENTAL MANAGEMENT: A PROSPECTIVE APPROACH”***

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

Keeping in view the issues highlighted in the existing literature, the endeavor of present study would be to examine deeply the nature and causes of environmental degradation witnessed in the state of J&K. This appears to be essential in sense that the ground realities influencing the environment of specific area needs to be identified with a fair amount of realism for identifying legitimate role of the non-governmental agencies in supporting proper management of the environment of different regions of Jammu. Hence the broad objectives of study are:-

- To identify various socio-economic factors as well as functioning of various government and non-government organizations associated with preservation and restoration of environment.
- To provide valuable suggestions to improve the environmental management in Jammu & Kashmir state.

#### **RESEARCH METHODOLOGY**

The present study is theoretical in nature. The study extends to the Jammu & Kashmir state. The data has been collected from secondary and tertiary sources. Various governmental and non-governmental organizations were selected to collect the secondary data which include Directorate of Environment, Ecology and Remote Sensing, J&K State Pollution Control Board, Social Forestry, Participatory Watershed management Project, J&K Confederation of Voluntary Social Charitable Organization, Centre for Environmental Education and Training – University of Jammu, World Wide Fund for Nature India –University of Jammu, Khudai Khidmat Gaar Association etc. other sources of secondary data include journals, books, magazines, various search engines like Wikipedia, Ebsco, Science direct etc. The data so collected were analyzed through secondary review. The scope of present study would be pioneering effort in conceiving an organizational frame work for private-public partnership to provide effective management of the Jammu & Kashmir State.

## **DISCUSSION, SUGGESTIONS AND CONCLUSION**

In recent past concerted efforts have been made by different countries for bringing about a harmonious relationship between the environment and growth processes and modes of economic development. In initial stages more especially in developing economics a keen desire and telling urgency about achieving rapid industrial and economic upliftment of the masses, forced governments to opt for such developmental strategies which often ignored the disastrous environmental consequences as a result there of. Thus by the beginning of 1980's a growing realization by various government and non-governmental agencies about the colossal damages caused to environment by the singular focus on economic benefits came under a serious review. Dangers of environmental degradation to the very existence of human life as of late has triggered massive destruction of life and property due to cyclones, deforestation, earth quakes, forest fires and shrinking space for natural habitat for other animal species. Problem has been further compounded by green house effect, acid rains, air pollution, water pollution, noise pollution effect on the flora and fauna, growing incidence of cancer among the people in the polluted industrial environment, global warming, soil erosion and host of other alike factors.

It is now being acknowledged that government alone can not effectively respond to this crisis, as such public participation through non-governmental organization needs to be promoted. Though social development has emerged as a very important sector in 21<sup>st</sup> century there are no institutionalized mechanisms of collaborations of the Government and NGO's.

The need of the hour is to evolve long term, sustainable and institutionalized collaboration between the Government and NGO's. NGO's in any country all over the world including international development agencies seek collaboration with the government and development organizations for the below mentioned causes:-

- To access technical or managerial resources.
- To gain legitimacy or recognition.
- To gain institutional support.
- To adapt a programme to their areas.
- To acquire appropriate solutions to development problems.
- To promote greater accountability and transparency.
- To promote reforms in public services system.

In initial formation stages NGO's needs governmental resources and linkages for better organizational services for the needy people. In the later stages, when there is relative stability of funds and a sufficient pool of experience to draw upon, the NGO's priorities may change: it may be motivated to make larger scale impacts or inform public policy through its work. Secondly, the ideology and the quality of leadership strongly influence the motivation of the agency in working with the government.

Government agencies on the other hand should work with the NGO's to:-

- Enhance people's participation in their programmes.
- To extend coverage of programmes to areas and groups that are poorly served by government staff.
- To test and replicate innovative approaches.
- To achieve greater cost effectiveness.

Therefore, behind a NGO's interest in working with the government, or conversely, the government extending an invitation to NGO's, lays a certain degree of convergence in their development objectives and certain needs. It is also evident from the study that community participation and public private partnerships can play an effective role in environmental management. The study concludes that socio-economic factors have a positive impact on environmental management. The basic factors identified from the research area were:

- Demographic change: Although still largely rural, the region has been experiencing major transformation in terms of population composition and distribution, with positive and negative implications for the environment and development.
- Social change: Improved human well-being is a crucial objective of sustainable development and is closely linked to environmental goods and services. Human well-being is multidimensional and requires access to resources to live a good life in good health, such as income, food, clean water, and energy; personal security through the absence of conflict, the ability to mitigate environmental disasters, and good governance; good social relations which include all people and promote fairness and equity; and the opportunity to make choices.
- Gender and divisions of labor: Gender relations and the divisions of labor are important factors in the economic development, human well-being and environmental stewardship and therefore need to be part of an integrated environmental management approach.
- Health: Good health is essential for people to maximize the opportunities available and is closely linked to the state of the environment. Poor environmental management exacerbates the incidence and negative health impacts of many "natural occurrences" such as floods, droughts and cyclones.
- Education, knowledge and information: Knowledge and access to information are essential for effective environmental management and have significant impacts on the economy and the livelihood choices people make. Indigenous knowledge systems based on centuries of observation and continually developed in response to changing social and environmental conditions are an important resource for many rural people.
- Poverty: Pervasive poverty and social inequities remain major constraints to sustainable development. Poverty is a cause and an effect of environmental degradation. The equitable, efficient and productive use of natural resources offers important opportunities for sustainable livelihoods which can contribute to reducing poverty.
- Economic change: Equitable and environmentally sustainable growth can improve human well-being and increase the range of opportunities available to people, including those who are most disadvantaged.
- Technological change: Research and the development of new technologies can drive environmental change in positive and negative ways. They may increase the demand

for natural resources, their application may impact on the integrity of ecosystems and they may offer an opportunity for more efficient use of natural resources, cleaner production techniques and improved environmental management.

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