



Chief Editor

Dr. A. Singaraj, M.A., M.Phil., Ph.D.

Editor

Mrs.M.Josephin Immaculate Ruba

Editorial Advisors

1. **Dr.Yi-Lin Yu**, Ph. D
Associate Professor,
Department of Advertising & Public Relations,
Fu Jen Catholic University,
Taipei, Taiwan.
2. **Dr.G. Badri Narayanan**, PhD,
Research Economist,
Center for Global Trade Analysis,
Purdue University,
West Lafayette,
Indiana, USA.
3. **Dr. Gajendra Naidu.J.**, M.Com, LL.M., M.B.A., PhD. MHRM
Professor & Head,
Faculty of Finance, Botho University,
Gaborone Campus, Botho Education Park,
Kgale, Gaborone, Botswana.
4. **Dr. Ahmed Sebihi**
Associate Professor
Islamic Culture and Social Sciences (ICSS),
Department of General Education (DGE),
Gulf Medical University (GMU), UAE.
5. **Dr. Pradeep Kumar Choudhury**,
Assistant Professor,
Institute for Studies in Industrial Development,
An ICSSR Research Institute,
New Delhi- 110070.India.
6. **Dr. Sumita Bharat Goyal**
Assistant Professor,
Department of Commerce,
Central University of Rajasthan,
Bandar Sindri, Dist-Ajmer,
Rajasthan, India
7. **Dr. C. Muniyandi**, M.Sc., M. Phil., Ph. D,
Assistant Professor,
Department of Econometrics,
School of Economics,
Madurai Kamaraj University,
Madurai-625021, Tamil Nadu, India.
8. **Dr. B. Ravi Kumar**,
Assistant Professor
Department of GBEH,
Sree Vidyanikethan Engineering College,
A.Rangampet, Tirupati,
Andhra Pradesh, India
9. **Dr. Gyanendra Awasthi**, M.Sc., Ph.D., NET
Associate Professor & HOD
Department of Biochemistry,
Dolphin (PG) Institute of Biomedical & Natural Sciences,
Dehradun, Uttarakhand, India.
10. **Dr. D.K. Awasthi**, M.SC., Ph.D.
Associate Professor
Department of Chemistry, Sri J.N.P.G. College,
Charbagh, Lucknow,
Uttar Pradesh. India

ISSN (Online) : 2455 - 3662
SJIF Impact Factor :3.967

EPRA International Journal of
**Multidisciplinary
Research**

Monthly Peer Reviewed & Indexed
International Online Journal

Volume: 3 Issue: 8 August 2017



Published By :
EPRA Journals

CC License





CONSERVATION OF RESOURCE: ISSUES AND CHALLENGES

Dr. Ashok Kumar Kaithal¹

¹Assistant Professor
Department of Economics
University of Lucknow,
Lucknow, Uttar Pradesh, India

ABSTRACT

Human beings are the most intelligent and highly adoptive breed of the nature and they are able to make me of other species of the nature. It is known that since primitive era, our food has come mainly from cultivated plants and animals; this has provoked and promoted the uncontrolled expansion of human being. However with the expansion of population, use of wood for cooking, grass for grazing of livestock, catching fish, procuring meat for consumption and gathering of fruits and seeds were the important tasks for us subsistence living, when we talk about developing economies, wild species of nature still provide essential goods and services that are not available in the form of alternative resources.

KEYWORDS: *Human beings, Resources, livestock, catching fish, Environment*

INTRODUCTION

Resources can be classified in a various ways and out of there classifications two classifications are very distinct and clear viz. renewable and non-renewable. The renewable ones viz. forest, marine life etc. and non-renewable being coal, iron ore, gold etc. But all these classifications are being made and conserved bearing in mind just one thing i.e., the conservation of nature's gifts on for that matter nature's biggest gift to mankind or for that matter to all species in general and that is the "Environment". This factor viz, the environment is sustained on its resources but the human being in his greed for "growth" and "self-Development" have misused and over exploited the environment. In English famous saying is there "Big things come in small packages", but in this case the big thing we have, is being made small with the motive of Development, but as can be seen already this careless and non-concerned use of

nature's resources certainly going to have adverse effects, if not being checked or stopped. And hence the term "Conservation of Resource".

The term conservation may be defined as "a process by which the life of a resource is expanded either by preserving, reusing or be recycling it". Many embark on the field of resource conservation in economics, because they want to make a difference to do something useful.

Invariably any conservation economist who climbs down from academia's I very towers and enters the policy or decision making arena will encounter a sudden block. Economists know what habitat requires, it is also know that scotch broom will degrade remnant Prairies. But because of shortage of money, absence of political power and become the cost is so high in term of jobs and development. It seems that environment economists can only surrender and turn the job over to politicians and activists. Though a rejection to this distinction between "science of conservation" and the

"practice of conservation." Indeed, an argument can be made that awareness of and sensitivity to, economic and political constraints at the onset of environmental research; might better direct that research towards an effective end point.

PRESERVATION AND CONSERVATION OF RESOURCES

The distinction between conservation and preservation includes "Prevention, exploitation, destruction and neglect. However the literal distinction between two, according to which conservation has a connotation to wise use and preservation is to keep intact. These two meaning reflect conflict as, former denotes "use" and the latter "not to use", i.e., keeping something intact. For example in the case of a forest, a conservationist may seek an optimal use of the forest over timely efficient management so that the forest may satisfy the needs of the society, on the other hand, a preservationist may even protest the management of forest for human purposes, and the forest would be maintained as it is with no external interference. In the case of endangered species preservation is surely a precondition to any kind of wise use that a conservationist may promote. As per both these terms resource denotes optimal allocation of resources to make the future generation inherit a rich resource base, besides the present generation may also have some benefits out of these resources.

HUMAN ACTIVITIES AND ADVERSE EFFECTS ON RESOURCES

Human being is the inventor of fire and other useful things, with the expansion of economic activities to fulfill own desires humans have influenced the natural environment. Important and needful resources have taken a great and a grave beating in the hands of man's greed for growth. The impact of economic activities is so vulnerable that excessive and uncontrolled extraction and exploitation of available valuable resources has led to the extinction of various living creatures and available valuable resources. The black sheet of negative thought have covered the future vision that future generation will be able to make use of these resources or not as, deposits of these resources are shrinking day by day.

Human activities have affected quality of land, Air, Water and other important natural resources. Forest covers shrinking day by day and we are stretching the concrete jungle in the form of home and offices for increasing population, development of Bridges, roads, construction of industries and other things have affected the quality of natural and common property resource and depleted the quantity of these resources. The negative impact reflects in this form in the world:-

- i) Depletion of water resources.
- ii) Extinction of mineral and other resources.
- iii) Deterioration of Environmental quality.
- iv) Global warming.
- v) Climate change.

How to Conserve our Resources:- It is duty of world leaders to invoke a feeling of care and to develop a thought in the minds of common people that how rigorously we are exploiting the environment and it is the duty of the present generation with the help of various organizations to preserve the natural resources. The deteriorating condition of environment make us realize that the future of this world lies in the proper and possible maintenance of resources, not with just ourselves being held as priorities, but, for the whole wide world.

Methods of Conservation:-

- i) Material Substitution
- ii) Product life extension
- iii) Recycling
- iv) Recycling and pollution taxes
- v) Waste reduction

i) Material Substitution:-

There are various possibilities of material substitution by means of which, the use of material resource can be regulated and controlled by finding on alternative resource.

- a) We cannot expect a neat "phasing" of scarcity, i.e., as are resource runs out, another becomes available and so on. There is possibility of complete sets of raw materials, substitutable among themselves will be depleted at about the same time.
- b) The substitution may take place with a time lag sufficient to cause disruption in the productive activities of the economy.
- c) Further, the substitute material may cause more pollution than the materials which were in use. For example, aluminum smelters may involve more pollution than their counter part for tin.
- d) The substitute materials may well require higher energy inputs, as is the case with low-grade copper exploitation.

ii) Product Life Extension:- This is a method by which the durability of the product is extended by deliberate design, so that the need for replacement would be postponed. It is a common practice that may modern producers design the goods for early disposal by the consumers to serve twin purpose of :-

- (a) Boosting the sales and profits of the producing firm by encouraging consumers to go in for replacement of their goods those rapidly.

- (b) Reflecting consumer's apparent desire for rapid changes of their goods for the sake of novelty.

By extending the life of the product, the requirement of resource materials can be appreciably brought down.

However, the product life extension method has some disadvantages. It requires the customers to hold on the goods for a longer period. This will be possible only with substantial increase in the quality of the product to extend its durability. Otherwise, the product may become less suitable and the objective will be defeated. Thus, the product life extension has a potential role to play in conservation of resources.

iii) **Recycling:-** Recycling is a popular and widely practice method throughout the world by many industrial units. It is a process by which the life of resource is extended by mean of recycling it or reusing it as an input or output. This is applicable only to on-energy resources, since the use of a material as an energy resource results in its useless dissipation into the atmosphere. Industrial wastes and by products can be profitably recycled.

But, the profit seeking firm will make an attempt to recycle a product only when the cost of recycling is lower than use of "virgin" resource material. Further, the differential cost between recycling and using virgin resource must remain for a fairly long period.

The recycling decision depend on so many factors such as -(i) The value of the resource after recycling, (ii) reduction in pollution due to the reduction in residuals disposed of directly to the environment, and (iii) Reduced demand for land for disposal purposes, releasing it for alternative social uses. On the cost side, the added pollution that may be generated by the process of recycling, particularly when it involves chemical additives to change the product to an acceptable quality for reuse, has to be considered. Thus, the entire decision making process for recycling is a complex one involving costs, not only to the firm, but also some social costs.

On the technological side also, there are limitation in recycling. The recycled product may be lower in quality and may not be reusable for the same manufacture. Energy expenditure may be high for reclaiming the old product. The recycling process itself may generate pollution, for instance, in paper reuse; bleaches are added to bring back the quality of paper to original level, or seen by the consumer.

This may result in additional pollution due to the bleaching plant. Taking all these into consideration, the scope for recycling may be

large in some industries, and in some, it may be much limited. These depend on efficient use of waste and efficient recycling. It has been estimated by Glassy and Gupta (1971) that USA could have reduced the consumption of wood pulp (Virgin) in 1970 from 45 million tons to 28 million tons, had the most efficient use of wastes been made. Since recycling is a costly exercise where costs and benefits have to be assessed, the concept of optimal amount of recycling has to be considered.

iv) **Optimum Recycling:-** The optimum level of Recycling is the point at which the extra cost of recycling does not outweigh the extra benefits. For a private firm, the decision to recycle depends upon the difference between the costs to the firm of using the virgin. Material and the cost of using recycled material. This difference (i.e., the letter should be appreciably low) must be a sustained one, as the firm has to make some investments on the recycling plant and incur some recurring expenditure. If the firm foresees that the cost difference is not very much and situation may reverse in a few years that the cost of virgin material will be less, the firm will not go in for recycling. Further, this depends on whether the firm itself. Undertakes the work of recycling or is done by some specialized agencies to whom. The work can be entrusted for a sum.

Whatever is the modus operandi and the procedure adopted for recycling, the private firm bears the following costs and benefits in recycling. Benefits. (a) The extension brought about in the life of the resource by mean of recycling. (b) Reduction in pollution impact, and (c) The reduced demands for land for dumping and infilling of course; the private decisions ignore social costs and benefits associated with recycling. Regarding the benefit arising out of the extension in the life of resource, the current benefit may tend to be small unless some other imports from "unstable" nations or from nations likely to impose OPEC-style bargains, there gains have to be valued highly.

v) **Recycling and pollution Taxes:-** The above analysis of optimum recycling relates to ratios for a given out-put. It is often said that pollution taxes will be levied to encourage recycling of the resources. We shall make an attempt to integrate the above analysis with pollution taxes.

vi) **Waste Reduction:-** The problem relating to conservation of resources exhibit in two ways, one to consumer or exploit the resources in a minimal way and the other is to avoid or reduce wastage in the process of production. If greater

attention is paid to the latter, i.e., waste reduction, it will automatically ensure lesser exploitation of resources.

Waste reduction can be achieved by appropriately redesigning industrial processes, so that there will be technological efficiency in utilizing the resource and avoidance of waste to the minimum. Further, the waste of one industry can be used as the new raw material of another industry. In such, case, marketability of industrial wastes should be explored in the place of recycling. Sugar industry can be cited as an excellent example of either using its own wastes or marketing the waste materials. The bagasse of the sugar of the sugar mills (which is a by-product) is sold to paper mills where bagasse is the main raw material for manufacture of papers. Similarly, the molasses, a by-product of the sugar mill is used in the distillery of the mill or sold to some other distilleries. The press-mud, another by-product is sold to farmers to be used as manure for their fields. The marketing of wastes offers solution to the problem of externality and at the sometime give scope for earning revenue to the industry.

STEPS TAKEN BY INDIAN GOVERNMENT FOR ENVIRONMENT PLANNING AND MANAGEMENT

- i) 1927 The Indian Forest Act.
- ii) 1972 The wild life (Protection) Act.
- iii) 1974 The Water (Prevention and Control of Pollution) Act
- iv) 1980 The forest (Conservation) Act.
- v) 1981 The Air (Prevention and Control of Pollution) Act.
- vi) 1986 The Environment (Protection) Act
- vii) 1991 The Public liability Insurance Act.
- viii) 1995 The National Environmental Tribunal Act.
- ix) 1997 The National Environment Appellate Authority Act Policies.
- x) 1988 National Forest Policy.
- xi) 1992 National Conservation strategy and Policy statement of Environmental Development.
- xii) 1992 Policy statement on Abatement of Pollution.

Environmental Resource Management:-

The Environmental Resource management is an interdisciplinary. Science-based major, designed for those who want to use problem solving, decision making, and Communication skills to address environmental and resource management issues.

Environmental Resource Management has become an area of national and international Significance. Resource managers, typically in the public and private development sectors, face increasingly complex

technical problems that can cut across several of the more traditional educational disciplines.

The following are the areas which should be given due importance when resource management techniques are implemented:-

- i) Water Quality and Water resource management:- Helping developing countries manage water resources, these tools help decision makers predict the impact of hypothetical changes in policy such as regulation, market-based pollution fines and charges on both water quality and allocation between different end uses.
- ii) Applied Economics:- Applying demand estimation studies to manage environmental resources. e.g., determining a community's willingness to pay for water and sanitation services.
- iii) Comparative Risk assessment:- Identify health risks and developing action plans.
- iv) Strengthening Environmental Management Institutions- Helping developing countries provide basic services.

CONCLUSION

Government of Developing Countries should implement and ascertain the short term and long term objectives for better Environmental Resource Management:-

Necessary Short Term objectives can be-

- a) Evaluate Knowledge about water quality and support for management efforts related to coastal resources.
- b) Identify farmers current use of best management practices and attitudes about public policies.
- c) Predict public acceptance of new food production technologies and develop educational strategies.

Possible long term objects can be:-

- a) Understand public awareness of and attitudes about Environmental management issues.
- b) Evaluate and improve farmers adoption of environmental management practice, including an understanding of the positive and negative influence an adoption.
- c) Anticipate and communicate potential impacts of new technologies and public policies.

The problems encountered in the field of Environment in India arise due to the conditions of poverty and under-development. Development activities lost sight of environmental and ecological imperatives. The damage done to the environment become of the large size of the population and its increase and scale of development activities- is of such magnitude. Those urgent remedial measures are called for

Environmental management is now accepted as a major guiding factor for national development in India. There has been, over the last decade, a progressive strengthening of official involvement in environmental management, with increased scientific, technical administrative and legislative break-up at the Central and State Levels. The three main resources which need to be managed efficiently in India are water, land and forests. As water is the elixir of life and clean drinking water is scarce in India, proper land usage is necessary for optimum productivity and forests provide us timber and provide livelihood and employ most of the rural population in the timber business and most importantly they support the life of various organization.

REFERENCES

1. Gunter, S & Jeremy J. Warford. (1994)- *Environmental Management and Economics Development*, John Itopkins University, Press.
2. David, P. et al. (1990) - *Sustainable Development: Economics and Environment in the Third World*, Edward Elgar.
3. Lam J. (2002)- *Environmental Economics Application: A cost benefit Analysis*, Cambridge University Press.
4. Jeffry, A.F (2000)-*International Political Economy*, Bedford. PP.733-45.
5. John, K. et al. (1995)-*Sustainable Development*, Earthscan.
6. Kula, E. (1994)- *Economics of Natural Resource, The Environment and Politics*, Open University Press.
7. Leontif, Wassily (August 1970) -*Environmental Repercussions and the Economic Structure: An input-output Approach-The Review of Economics and Stastics*, Vol.52, Issue 3, PP.262-271.
8. Marion A.L. (1995) - *The Third World in Global Environmental Politics*, Open University Press.
9. Wick, M. (1999), *The Global Casino: An Introduction to Environmental issues*, Arnold.
10. Paul, S. (1999) *Industrialization and Development*, Oxford University Press.