

Laws and Regulations of Waste Management on Environment Protection and 3R's

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Abstract- India has published its 'National Policy on environment' in 2006 for protecting and conserving critical ecological systems and resources. The State is not an absolute owner, but a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest. There are global challenges effecting Global environment are climate change, stratospheric ozone depletion, and biodiversity loss. To combat the environment challenges all the countries have evolved the 3R's. The 3R's principle are Reduce, Reuse, Recycle. The aim of this paper is to study the laws and regulation of some of the developed countries which follow the 3R's and to know whether the Indian legal framework is at par with the developed countries or is there scope for further improvement for better environment protection.

Index Terms- Environment Protection, 3R's, Reduce, Reuse & Recycle, Laws and regulations on Environment Protection, Global environmental challenges. Pollution prevention, Waste Management.

I. INTRODUCTION

According to United Nations Economic and Social Commission for Asia and Pacific, the population in Asia-Pacific region has crossed 4 billions and that makes more than 60% of the world population (ESCAP 2008). The most populous countries of the world are also in this region as China and India shares the first two places with 1.3 and 1.2 billion people respectively and only these two countries is the home of more than 60% of the population of the region. In these two countries population and economic growth, are the major factors for enormous amounts of waste generation and its rapid growth during the last decade. Wastes can also be classified into different types like the Solid waste and hazardous wastes, non-hazardous industrial waste, construction and demolition, and agricultural waste, plastic-waste, E-waste. Hazardous waste covers all these sectors as well as healthcare sector. The largest contributor for hazardous waste is industrial sector. These wastes pollute the environment leading to climate change, stratospheric ozone depletion, and biodiversity loss. Therefore to combat it human beings all over the world have realised that we must first reduce the waste production, optimise the scarce resources, reduce, recycle and reuse the waste products. This is generally known as the principle of 3R's which is being followed in the most of the developed and developing nations. Many laws and regulations are passed by different countries to make the people realise that if implementation of the steps for

environment protection is not taken then they will be penalised as per the applicable laws. It is mankind's solemn duty that we leave behind a greener and cleaner environment for the future generation.

In India, National Environment Policy 2006 [1] lays stress on adoption of clean technology, encouraging reuse and recycling, strengthening informal sector, establishing system for collection and recycling of materials, environmentally safe disposal.

Charter on Corporate Responsibility for environment Protection (CERP) provides for a commitment for partnership and participation of various stake holders in complying with the regulations and to extend beyond compliance by reducing the pollution in highly polluting sectors.

There is also a Registration scheme for Recyclers/ Re-processors and actual users of hazardous Wastes. Rules are framed to prevent illegal import and dumping of hazardous waste in India as for recycling of E-waste and rules for controlling import of E-waste received in the country in the name of donations or charity.

The laws and regulations for protecting the environment in India are:

- Water (Prevention and Control of Pollution) Act, 1974
- Air (Prevention and Control of Pollution) Act, 1981

- Environment (Protection) Act, 1986
- Hazardous Wastes (Management & Handling) Rules, 1989, 2000, 2003
- Manufacture, Storage, and Import of Hazardous Chemicals, Rules 1989,
- Chemical Accident (Emergency Planning, Preparedness and Response) Rules, 1996
- Bio-medical Wastes (Management & Handling), Rules 1998
- Plastics Manufacture and Usage and Waste Management Rules 1999
- Municipal Solid Wastes (Management & Handling) Rules 2000
- Batteries (M&H) Rules, 2001
- The E-waste (Management and Handling) Rules, 2011, 2012
- The Plastic Waste (Management and Handling) Rules, 2011
- The Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008
- National Green Tribunal Act, 2010.
- The Ozone Depleting Substances (Regulation and Control) Rules, 2000.

Indian waste management rules are founded on the principles of “sustainable development”, “precaution” and “polluter pays” It has been reflected in many decisions given by The Supreme Court of India. The Planning Commission has identified twelve Strategy Challenges for the 12th Plan Approach Paper. “Managing the Environment and Ecology “

Important points mentioned are-Mitigation and Adaption Strategy for Climate change:

The two key challenges that have to be addressed by various stakeholders in the short term on Climate Change are:

- Ensuring, involvement of various stakeholders, including the State Governments, in implementing the National Action Plan for Climate Change (NAPCC), and Achieve a low-emission sustainable development growth model using a voluntary approach.
- The strategy/ guidelines of NDMA be modified to draw up regional disaster preparedness and mitigation plans, which should also address pre and post disasters migrations.
- States need to prepare the State Level Action Plan for Climate Change (SAPCC) within a time frame, which can be dovetailed with the NAPCC.
- The importance given by India to ‘Climate Change ‘ and its effect on environment can be felt when one sees the change in name of the Central Government ministry from MOEF (Ministry of Environment and Forests) to MOEFCC (Ministry of Environment, Forests and Climate Change).

II. WASTE MANAGEMENT AND POLLUTION ABATEMENT WASTE MANAGEMENT

- Encourage 3R’s (Recycle, Reuse, Reduce) and also Remanufacture and co-processing of Hazardous Waste for recovery of energy
- Incentivize public-private partnership for creating the required infrastructure for Setting up of Treatment Storage and Disposal Facilities (TSDF) for hazardous waste management across the country.
- Ensure Segregation of Bio-medical wastes as per existing rules and the infectious and hazardous wastes treated in dedicated facilities. Common facilities be setup.
- Enhance recycling facilities for E-wastes in the country.
- Ensure Municipal Solid Waste segregation, collection and setting up of facilities for complete disposal. Where ever possible recycling and processing has to be ensured during the 12th Plan to protect our people and the environment
- Green belt for dust and Noise abatement and odour mitigation is considered essential.

Water Environment

The key challenges for maintaining acceptable water quality and quantity across the country are:-Water Pollution and overuse; Indiscriminate use of Wetland/lakes, Agricultural run-offs as residual fertilizer, pesticides and feedlot wastes. Following are suggested

- Improve coverage and efficiency of sewage treatment systems, encourage use of low-cost decentralized measures for treatment of wastewater e.g. use of microbes for sewage treatment in open drains.
- Clean critical rivers state wise and all polluted rivers in the country by 2020.
- No Net loss (NNL) of wetlands acres be set as the goal and a system of permits be introduced to provide replacement wetlands.
- A National Action Plan to remediate contaminated sites be drawn up.
- Massive Plantation drives, including other methods for recharging ground water levels be propagated

III. CONCLUSION

After comparing the different laws and regulations followed in some of the countries and the different bilateral agreements, International Agreement, we are of the view there still lot of improvement needed in our laws and regulations. Some new laws should also be enacted

Suggestions for improvement to laws and regulations in India

- Law Commission should recommend to the Government for adoption of the good and suitable provision form laws of other countries like Japan, US or European countries who have well established laws and regulations.
- Further laws should be passed for recycling and also making it compulsory for the producers of the electrical and electronic appliances, vehicles to take back appliances and vehicles after the end of the life of such items. News laws for vehicle/ electronic/electrical appliance use and End of life of vehicle/ electronic /electrical appliances should be passed
- Many of the countries have recycling laws. Under the law many states pay some amount e.g.10 cents for depositing empty beverage bottles. The waste is thus collected and immediate payment is made to the person depositing waste or empty glass bottles, plastic cans etc at the retail shops.
- Recycling can also be promoted by refunding money to persons depositing plastic bottles, cans, glass bottles. New Recycling Laws can be passed making it compulsory to manufactures of the products to collect the waste /empty bottles, cans etc and pay the refund deposit immediately. The system can be made applicable to all retail shops /malls where the products are being sold.
- Incentives should be provide for conduction of research and innovation contributing to pollution free environment and production of reusable, and parts which can be recycled into new products
- Central laws should be enacted for all states to bring uniformity in the definition of offences and fines and penalties clauses
- Local regulations should be enacted for building smart cities with clear national and state level policies on prevention of detrimental effects of construction and production of harmful pollution and all types of waste by future human settlement.
- Use of solar energy for purer and cleaner air should be promoted
- All the State Governments, the Municipal Corporations, Grampanchayats and other local bodies should makes rules and regulations promoting cleanliness drives in the our country of all water bodies like lake, rivers, well seas. And also cleansing land areas by managing all types of wastes to enhance greener and cleaner environment
- Creating awareness and active participation of people is the real challenge to proceed towards goals of achieving greener environment
- Implementation of the laws and regulations should be done in a transparent manner.
- Government should also appreciate the efforts taken by citizens, Non Governmental Organisations, Public or Private enterprises, company by instituting awards, prizes, certificates who contribute to implement the laws and regulations of green environment.
- Land for waste collection NIMBY (Not in My Back Yard) even at local levels at urban cities or villages level is a very difficult and serious problem faced in India hence research and surveys should conducted to study how other countries who also faced such difficulties and have overcome the same.
- In India implementation of all the law should be done rigorously and punishing the offenders should be ensured to further deter any one from committing any offence.

REFERENCES

1. National Environment Policy, 2006
2. Presentation at Asia3 R Conference by Dr.Lakshmi Raghupathy Additional Director, Ministry of Environment & Forests Government of India
3. Waste Management in India: An Overview by Arya Tripathi in PSA issue IV May 2015
4. <http://12thplan.gov.in/index.php>
5. United Nations Economic and Social Commission for Asia And the Pacific –final Draft of the agenda of Regional Implementation Meeting for Asia and the Pacific ahead of the eighteenth session of the Commission on Sustainable Development 30 November – 1 December 2009, Bangkok
6. Website of the Ministry of Environmental Protection of China: <http://www.mep.gov.cn>
7. Website of National Centre of Solid Waste Management of MEP: <http://ncswm.mep.gov.cn>
8. <http://www.raymond.com>
9. Country Analysis Paper –India, in the Fourth Regional 3R Forum in Asia “3Rs in the Context of Rio+20 Outcomes – The Future We Want” Ha Noi, Viet Nam, 18-20 March 2013
10. <http://envfor.nic.in/>
11. Annual Report 2014-15 of Government of India Ministry of Environment forests and Climate Change
12. http://unfccc.int/kyoto_protocol/items/2830.php
13. <https://www.env.go.jp/en/press/2003/1128a.html>
14. <http://www.unep.org/environmentalgovernance/>
15. Brief Report of the 13th Workshop on Greenhouse Gas Inventories in Asia (WGIA13) 7th August 2015
16. <http://www.epa.gov/wastes/laws-regs/index.htm>
17. Report of the Western Ghats Ecology Expert Panel dated 2011submitted to MOEF Govt of India Also known as Madhav Gadgil report on Western Ghat.
18. <http://eur-lex.europa.eu>