

# STUDY ON GLOBAL ENVIRONMENTAL ISSUES: CHALLENGES AHEAD

<sup>1</sup>Dr.Pramod R. Botre

<sup>1</sup>Associate Professor

<sup>1</sup>Department of Commerce,

<sup>1</sup>Mahatma Phule Mahavidyalaya, Pimpri, Pune, India

**Abstract:** Rapid advancements in Science, industry and Technology are leading factors to imbalances in Ecology and environmental degradation. Hence researcher aims to analyze and study the environmental issues causing degradation to our natural resources. Therefore there is an urgent need to take measures to stop degradation of environment. Some action plan is highly recommended for pollution control. We can together take adequate measures today so that our future would remain healthy and hazard free. The citizens of the nation must become fully alert to the menace of air pollution and must join hands with government agencies for controlling pollution.

**Index Terms - Ecology, degradation, pollution Greenhouse gas, emissions.**

## I. INTRODUCTION

In the past two decades, by instituting an open trade policy and improving its financial market development, India has been able to achieve & create phenomenal economic growth (Agrawal, 2015 and Pradhan, Arvin, and Norman, 2015). The country's GDP growth rate in the past 15 years has averaged 7 percent and in some years exceeded 9% (World Bank Statistics, 2015). Even during the global financial crisis of 2008 to 2011, India's economy averaged growth rates of 7 percent (World Bank Statistics, 2015).

India's efforts to regulate air and water pollution have resulted in only marginal improvements in infant mortality rates in the country. The ineffectiveness of the regulations could be traced to poor institutional settings and lack of enforcement of the regulations (2014). The tension between economic development and the imperative to curb greenhouse gas emissions remains the central challenge for India and the rest of the world. India's major challenges are directly attributable to its extremely high population density, especially the rise in urban centers. Urban India is growing rapidly in terms of population size. The increase in number of large cities with a million plus population is adding to the environmental problems faced by the country. In addition, traditional agricultural practices contribute conjointly to the decimation of the subcontinent's environmental system.

## II. RESEARCH BACKGROUND

### 2.1 Objectives

The study centers on the following objectives:

1. To know the environmental issues faced by India.
2. To take corrective measures to control pollution.
3. To understand the environmental regulations enacted to protect our planet-the Earth.

### 2.2 Methodology

The brief research study is based on secondary data and data has been collected from various sources viz. Reference books, websites, research articles.

### 2.3 Need of the study

Environmental degradation has assumed alarming proportions. Pollution of air, food and water has reached dangerous levels. Collectively the individuals as citizens, industrialists and the government should give priorities to eco-friendly and clean environment. Indian environment is vulnerable to serious disaster and there is need to take steps to frame strict laws by the Judiciary and its strict implementation by the government.

We all know that we do not have second Mother Earth to protect. We have only one mother earth for ensuring our survival.

## III. Environmental concerns, an International issue

India is not the only country facing environmental issues. Definitely air and water pollution and climate change are more global issues that require a concerted effort by all nations to solve. A report by the Intergovernmental Panel on Climate Change (IPCC) in "Climate Change Science Compendium 2009", suggests that the world will be experiencing more of ocean acidification, ice-sheet melting, sea-level rise, and so-called tipping points in climate affects much sooner than ever thought off (Parks, 2009). Although environmental issues are global in nature, each country is in control of its own environment with jurisdiction over its territory and, hence, should be controlling, monitoring, and enacting regulations in safeguarding its environment. This is true for India too.

When international organizations and non-governmental organizations (NGOs) try to help individual countries on environmental issues, in some instances it creates problems. In a research paper funded and supported by the World Bank,

researchers found that in India, the role of international institutions and NGO's often have difficulty matching their interest with that of the state, especially, when it comes to human rights standards (Randeria, 2003).

#### IV. Environmental Issues facing India

Some of the major environmental concerns confronting India include:

- \* Air pollution from industrial effluents and vehicle emissions;
- \* Energy-related environmental problems such as, chemical & oil pollution and Greenhouse Gas (GHG) emissions (Greenstone and Hanna, 2014);
- \* Water pollution from raw sewage, the lack of adequate sanitation, and no portable water throughout the country;
- \* Municipal solid waste management (MSWM) remains a challenge for India due to the rising population and the resultant infrastructural needs (Dube, Nandan, and Dua, 2014);
- \* Over-population and its strain on natural resources; and
- \* Agricultural factors such as, runoff of agricultural pesticides, overgrazing, short cultivation cycles, slash and burn practices, destructive logging practices, and deforestation of timber reserves for fuel, all contribute conjointly to the decimation of the subcontinent's environmental system (Greenstone and Hanna, 2014).

In particular, municipal solid waste (MSW) collection and disposal is a major urban environmental problem facing India. India is not the only country with this problem, it appears many of the developing countries and a few of the developed countries are also confronted with MSW as an environmental concern. But, in India the critical concern is in the way MSW is disposed. The waste that is collected by municipalities in India is simply dumped on the outskirts of the urban centers (Reddy, 2014). In addition, the MSW release methane and carbon dioxide that increase the effects of greenhouse gases. On environmental issues and concerns, India carries a heavier burden because it is generally accepted that pollutant concentrations are exceedingly high in many developing countries imposing substantial health costs and shortened lives (Chen, et. al., 2013). Since most of the growth in greenhouse gas (GHG) emissions is projected to occur in developing countries such as China and India, these two countries are probably responsible for the future of this world.

In the most recent data available, ambient particulate matter concentrations in India are five times the level of concentrations in the United States and China's are seven times the U.S. level (Greenstone, 2014). Interestingly, in anticipation of the Paris Conference on climate change that is scheduled to start on November 30th, countries have been issuing pledges about how much emission they are willing to cut in coming decades. India and Brazil, probably the two of the most air polluting countries in the world have yet to make commitments to take to the Paris Conference (Gillis and Sengupta, 2015).

#### V. Environmental Regulations in India

Indian government has shown some foresight in the area of environmental concerns by enacting legislations meant to protect the environment. India has about two hundred laws dealing with environmental protection (www.cpreec.org). India's environmental regulations date back to the 1970s. The first important regulation enacted was the Water Act of 1974 followed by the Air Act of 1981. These acts created the Central Pollution Control Board (CPCB) responsible for data collection and policy enforcement.

It also developed detailed procedures for environmental compliance at the central government level. Simultaneously, a second control board at the state level called State Pollution Control Board (CPCB) was also established to collect data and for policy enforcement at the state level. These were followed by other regulations meant to protect the environment. India's key policies relating to environmental protection are governed by:

- \* The national forest policy, 1988;
- \* Policy statement for abatement of pollution, 1992; and
- \* National conservation strategy and policy statement on environment and development, 1992. Hence, it is clear that the current environmental problems in India are not due to a lack of legislation, but there appears to be other factors that are contributing to the current situation.

#### VI. The effectiveness of the environmental issues in India

According to the Kyoto Protocol of 1997 signed by 37 industrialized countries and the European Union, the goal for 2008-2012 was to reduce the GHGs emissions to 5.2% lower than the 1990 level. India, as the third largest producer of GHGs is facing tremendous pressures from the international community to meet these targets. India's extensive environmental laws seem to have very little effect in reducing the harmful effects of pollution, MSW, and GHG emissions. Researchers have concluded that there are many reasons for this, including:

- \* Government of India is reluctant to enforce its own laws on air and water pollution lest it stop developmental projects that help create jobs and improve the economy (Mejia, 2009);
- \* Although many of the environmental regulations in India on air and water pollution are similar to those of the existing standards of other industrialized countries, the lack of its enforcement has upset the global business community as it seems to provide Indian businesses an important cost advantage (Ord, 2009);
- \* In a similar vein, environmental activist Rama Kumar states that enforcement of current laws is patchy and uneven. Effective control has been inconsistent, especially among smaller companies. For example, in Rajasthan industrial effluent discharge into the Bandi river bed seems to be the main source of contamination of ground water in the area resulting in the degradation of other natural resources such as land, soil and vegetation creating problems of salinity and sodicity in soils that has resulted in declines in herbal biomass (Khan, 2001).

- \* Enrico Polastro, vice president and senior industry specialist at global management consultant Arthur D. Little feels that environmental control standards vary between large companies and the small to medium sized companies (SMEs);
- \* Small businesses are more likely to have out-of-date processes, and curtailing emissions is more costly in comparison with fine-tuning the newer technologies employed by global players. Stringent enforcement of environmental regulations might put these companies out of business creating mass unemployment, something the government of India wants to avoid;
- \* There is also reluctance by the government to come down too hard on SMEs that has lifted so many Indians out of poverty;
- \* Corporations are now in a position to identify and estimate the environmental costs, benefits, investments, assets and liabilities into main stream accounting and reporting practices, for a variety of managerial decisions.

These in return have sharpened and improved the global reporting standards on environmental issues. In India, large companies have yet to incorporate these techniques into mainstream reporting (Malarvizhi and Yaday, 2008/2009). The above discussion sums up the problems faced by the Indian government in enforcing current environmental laws and safeguarding the health of its people.

## VII. CONCLUSION

The rapid economic growth experienced by India is resulting in adverse and harmful environmental conditions that are affecting the people of India as well the wider global population. In the case of India, this is further exacerbated by the high population density and growth rates. The existing environmental laws, although cover a wide spectrum of environmental concerns, they seem to be ineffective due to lack of enforcement, the lack of resources, and technical challenges faced by a large number of Indian companies, especially the SMEs. Under these conditions, India has to adopt some sustainable actions that need to address the myriad issues facing the country including environmental degradation in order to sustain its prospects for continued economic growth (Ranganath, 2015).

Sustainable development, that is, both a prosperous economy and a healthy environment that in many respects is the goal of diverse interest in the area of environmental issues, is the key for the future of India and the world. Sustainable development implies managing the diverse interests of a prosperous economy and simultaneously maintaining a healthy environment. Based on extensive literature search, we recommend that India undertake a new approach in the fight against environmental pollution.

The key element of this new initiative is the shared and cooperative participation of the people, the government, the industrial sector, and NGO's. This type of approach seems to have worked for a few countries and it appears to be a doable solution for India too. A series of steps are recommended that could lead to an improved environment and at the same time prove to be helpful for the Indian population. Furthermore, to reduce the growing MSW problem, it is recommended that India undertake proven waste to energy conversion techniques that have been adopted by the European Union.

## VIII. REFERENCES

- [1] Agrawal, Pravin; Alok, Kumar; S.S. Hooda; N.R. Sudheendra; and A. Santhamani, (2010), "Anthropogenic carbon emissions in India: An econometric analysis," *Vision*, 14, no. 1/2: 79-83.
- [2] Agrawal, Arun, (2005), "Environmentality," *Current Anthropology*, 46, no. 2: 161-190.
- [3] Bordigoni, Mathieu; Alain, Hita; and Gilles, Le Blanc, (2012), "Role of embodied energy in the European manufacturing industry: Application to short-term impacts of a carbon tax," *Energy Policy*, 43, (April): 335-350.
- [4] Chatterjee, DebaPrashad, (2008), "Oriental disadvantage versus Occidental exuberance: Appraising environmental concerns in India - A case study in a local context," *International Sociology*, 23, no. 1: 5-33.
- [5] Chen, Yuyu, Avraham Ebenstein, Michael Green stone, and Hongbin Li, (2013), "Evidence on the Impact of Sustained Exposure to Air Pollution on Life Expectancy from China's Huai River Policy," *Proceedings of the National Academy of Sciences*, 110, no. 32: 12936-12941.
- [6] Coady, David; Ian Parry; Louis Sears; and Baoping Shang, (2015), "How large are global energy subsidies? Act local, solve global: The \$5.3 Trillion energy subsidy problem," *Subsidies? IMF Working Paper Series* (May), <http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf>
- [7] Cotton, Andrew; Jane Olley; and Mansoor, Ali, (1999), "Public sector delivery of waste management services: Cases from the Indian sub-continent," *Habitat International*, 23, no 4: 495.
- [8] Dube, Regina; Vaishali, Nandan; and Shweta, Dua, (2014), "Waste incineration for urban India: Valuable contribution to sustainable MSWM or inappropriate high-tech solution affecting livelihoods and public health?" *International Journal of Environmental Technology & Management*, 17, no. 2-4: 199-214.
- [9] "Environmental laws of India," *C.P.R. Environmental Education Center*, [www.cpreec.org](http://www.cpreec.org) (accessed May, 2015).
- [10] "Environmental Overview: Global Environmental Concepts", *Sweden Review*, 2010. Country Watch.
- [11] Gillis, Justin and SominiSengupta, (2015), "Limited progress seen even as more nations step up on climate" *New York Times*, (September 28, 2015): 1
- [12] Greenstone, Michael and Rema Hanna, (2014), "Environmental regulations, air and water pollution, and infant mortality in India," *American Economic Review*, 104, no. 10: 3038-3072.