

A Study on Industrialisation and Environmental Problems of Industrialisation

Puneet Kumar^{1*} Dr. Rajni²

¹ Research Scholar, OPJS University, Churu, Rajasthan

² Associate Professor, OPJS University, Churu, Rajasthan

Abstract – The process of economic transformation of society from primary activities (e.g. agriculture) to those based on manufacturing or secondary activities has been described as industrialization. Agriculture, livestock rearing, fishing or even forestry may sustain the pre-transformed society. Depending on technological development, an industrialized economy is characterised by high or low processing of raw materials obtained from primary production. The aim is to study the impact of the environment on occupational ailments and human health, pollution and degradation in the environment.

Keywords – Industrialization, Environmental Problems, Human Health, Pollution, Degradation

-----X-----

INTRODUCTION

Man and nature are profoundly related and can't be isolated or distinguished from one another. For this cause, the conservation of the environment and the maintenance of the ecological equilibrium mechanisms that have been built need to be at the forefront. Human beings should be allowed to function in the world that they inhabit. In a baffling scheme of closely managed favorable communication, life only takes place through the planet's climate, water, and soil. In view of man's superiority over nature, damage created by man-made constructs has already started to adversely influence the eco-arrangement of which man is a member.

At the beginning of the twenty-first century, a sharp deterioration in the natural climate of man's air and water raised the average degree of vulnerability to concussion as well as other environmental hazards. The planet and the seas could get ill with our technologies because of the pollution and it could cause collapse. Environmentalists and industrialists have had an annual trade of insults for decades. Light, fluid and high velocity indicated that (Agarwal S. K., 1997). The rapid improvement of industrialization, i.e., as environmental degradation is intensified, often has a darker aspect. "The planet is viewed as a huge dumping site for hazardous waste without worrying for its effects" (Baneiji S., 1973). Edington and Edington argue that apart from esthetic factors, technological creation systematically requires physical degradation of intended destinations for their other values for all the implications of

production, pollution is the most pervasive (Edington and Edington, 1981).

The model's ecological succession comes as the original population collection or pattern of intake is gradually substituted by another. It is evaluated from the viewpoint of the three parameters. It is a generally stable and consistent season for business growth. (2) As the physical setting dictates the path of growth, the direction and intensity of the process are decided by the organization. (3) With each unit of energy supply, the overall biomass and the cooperative work by species are put in a stabilization system (Odum E. P., 1976).

Ozone-depleting compounds possess highly complicated light-waves. They are almost absolutely unnoticeable to incoming solar radiation, which is mirrored and spread by the surface ozone of the earth at longer wavelengths, blocking long-wave radiation, in essence warming the low atmosphere of the earth (Mintzer I. M., 1988).

Carbon dioxide is calculated to blame for nearly half of the global warming impact, with CFC's being responsible for as much as 12 percent, N₂O at 7 percent, and other trace gases for the remainder. Currently, CO₂ is the main source of global warming. If only CO₂ is responsible, other gases will later contribute to global warming's impact.

The movements in average surface temperature & precipitation that can occur at different latitudes when atmospheric carbon dioxide rises from 400

parts/million to 560-580 parts per million (i.e., about twofold the nineteenth century value).

Man and Environmental Pollution

Man is the Beast of Sociality. He has the ability to act in his own special manner in the public domain, which we may also term his advantage, claim, and interest. The advantage cannot happen without the accompanying obligation on any occasion (Five Years Plans). Man is conscious of his activities that annihilate the two his biochemical framework and himself. While analyzing emissions and its actual or indirect environmental impacts, the scale of the population, its overall distribution and the average human future are important factors.

The primary cause of this pollution is industrial facilities, including factories and power plants, that release effluents into the environment without treatment. The balance of these chemicals in the water is influenced by the existence of hazardous elements, such as sewage, waste, and so on, in the water. Today, companies will use the same modular technology used for tracking emissions. As a consequence of the leaching of fertilizer used in crops into water, leakage of water is toxic to human health. Fungicides and insecticides, equivalent to pest exterminators, are the source of illness that disrupts the natural world and damages the climate (Badiger G. S., 1995). The environmental pollution problem is a threat around the globe and still it doesn't stick out sufficiently to be heard as relevant at the end of the day. The mass processing of 15 different synthetic pollutants, chemicals and heavy metals are added into our climate. To the world of knowledge, information about them is dangerous. Items produced from degrading chemicals are more dangerous than the processed chemicals (Sharma, 1986).

Industries & Environmental Pollution

Development and industrialization have been seen as core components of progress for a long time. They are fundamental to democratic power as main producers of capital. They are the means of converting raw materials into finished merchandise and are a center of small business and unfamiliar exchange. At the same period, several doubts regarding the atmosphere have been triggered by (Swarup, Mishra and Jouhari, 1992). These are-the mining and industrial demands for water and energy for the extraction of raw materials, the problem arises from the after-impacts of the industry-especially chemical goods, other kinds of problems and the most familiar ones arise because waste heat, chemical products, waste gases, strong fluids are emitted into the atmosphere and trigger danger to humans, biological structures for animals.

The critical factors of environmental destruction are industrial structures of metropolitan institutions.

There are almost no alternatives to the problems generated, as the advantage gained is the primary target for the creative business, from all sides, directly from man, machinery and waste. Industrialization has actually introduced the term 'Ghetto,' and still today we find that there is juggi society in these places where people reside in extraordinary sub-human conditions, bad for the livestock.

Plants are not harmed, but there is hardly a shady tree or green grass over it (Mohan I., 1988). What we see is a sort of competition that releases tinted or black smoke that destroys the bio-hover in the air between tall stacks. Because residential zones such as Mumbai, Calcutta, Bangalore, Delhi, and so on have overrun these industrial areas, the residents are also not vulnerable to their adverse effects.

For the remainder of the period spent on industrialization, the issue of environmental concern is of significant multifaceted nature and the remedies are troublesome. The Mining and Industrialization measure would possibly introduce environmental destruction problems.

The Impact of Environment on Human Health & Occupational Diseases

Wellbeing is central to the human unforeseen development, it is perceived. The pace of the fiscal, industrial and social change may be enhanced the basis of sound health. "Health is a condition of absolute physical, emotional and social flourishing, not just the absence of ailment or infirmity" (WHO, 1946). The importance of wellbeing has been found in the constitution of the World Health Organisation and in the Draft of the Five Year Plan. People of both backgrounds believe that "health is money."

Human health has an environmental effect because the atmosphere is the social, chemical and biological environment whereby species dwell and the analysis of the relationships among organisms and their chemical and biological physical conditions is called science (Sanjeev Raj P. J., 1992). The two common environmental contaminants are 'natural' and 'cultural'. The cultural pollutants, involved in volcanoes, sandstorms, tornadoes, dust cyclones, deforestation and backwood fires and so on are normal and industrial harvests, urbanization, clamor and automobiles and so on. Soil, water and air are among the vital receptors of pollutants.

Impact on Man:

Industrial discharges have triggered hydrological shifts in the region, which affected the groundwater in the area. In addition to the proximity to various fertilizers and additives, food production often presents a health risk. Wide use of pesticides provides greater dietary freedoms and is increasingly influenced by lung diseases (Badiger G.

S., 1995). The myriad agents, that are ruined by the skin and mucous membranes of the body, nose, and tongue. Inhaled toxins that the lungs are capable of consuming, such as those present in the stomach, bladder, brain and hatchling, find their way into the organs where they have major consequences. They can cause acne, eczema, dermatitis, skin ass, ulcers, eyes, lung, and urine, and so on due to contamination or unnecessary exposure.

Occupational Diseases:

Different items, typically in the type of solids, liquids and gases that are managed in a venture during various cycles and methodology, offer ascent to labor-influencing cleaning, exhaust, vapors, gases or hazardous radiation. On certain workplace diseases, it takes months or years to display beneficial manifestations. Their delicate development continually leads to their deficiency of appreciation in the early stages (Sanjeev Raj P. J., 1992). In the table underneath, the diseases induced by various pollutants as appeared (4.3).

Table - 4.3: Occupational Diseases

S No	Active pollutant	Occupational Disease
1.	Asbestos	Asbestosis
2.	Silica	Silicosis
3.	Iron Oxide	Siderosis
4.	Pollen dust epoxy resins, paints thinner, plastisizer	Occupational Asthama
5.	Tobacco dust	Wheezing and tetanus in chest
6.	Grain dust	Cough, Wheezing and gyspna function.
7.	Sugar cane begasse	Bagassia

Source: Reference No. VIII/21.

For starters, among industrial specialists, diseases like siderosis, asthma and hacking are the most prevalent. Company working in mining regions has a significant impact on asthma.

Disease is the harmful condition of the body set off by the breach of normal guidelines. Health openings are the foundation of regional discipline, readily represented by environmental circumstances (natural and cultural) and environmental and human science.

Geography has since taken up the foundational discipline of the study of environment and diseases under the 'Geography of Health Care' (Medical Geography). The spatial organization of diseases and the variables linked to the incidence and distribution of diseases would usually be regarded.

Environmental Degradation and Pollution

“Environmental deterioration is the degradation of the condition of the environment or the quality of environmental materials, and such degradation of the quality of the atmosphere adversely affects the wellbeing and survival of human beings and other living species” (Badiger G. S., 1995). Therefore, ecological degradation may be defined as the

adverse modification that human actions cause to our setting.

Environmental depletion is one of the enormous recurring pattern issues and has gotten an unfamiliar, financial, regional and local focus of study and concern. The ecologically polluted ecosystem is perceived as a real danger to the wellbeing and lives of humans, domesticated animals and plants, but also how it impacts the environment. In this example, the above statement supported was picked to think about those aspects of the grass root environment, which are at times either disregarded or not gave due consideration.

Suggestions for Environmental Balance

It is claimed from the two accounts that at the degree of infancy, whatever environmental contamination we have in India can also be considered. In any case, on the off chance that it isn't seen, it can catastrophically alter the quintessence of the atmosphere and impact each part of individuals' lives here. Therefore, a couple of plans have been made for maintaining the past biological system and monitoring the environment before long erosion.

Industrial administrators, mechanics, mechanical technicians and labs ought to be interested in legal factory engine repairs and should therefore appropriately meet the essentials of the State Emissions Control Board and agree to environmental legislation. At the same time frame, it is important to guarantee an environmental harmony between water, air and the clamor created by commotion. Sewerage advancement, pond protection, car proprietors ought to be qualified to appropriately manage the engines of the vehicle and also to submit to the principles for traffic frameworks to appropriately monitor the pollution of water, air and commotion. To regulate air emissions and commotion, turbines should be enhanced with suitable technical gadgets. Tree planting along highways, canals, railway lines and open barren ground ought to be elevated to control soil erosion. It is important to assess the unplanned building of homes, the sale of land to private individuals and also the rapid migration in the area. Accordingly, the degradation of the environment can be tracked by both these and certain other required turns of events.

CONCLUSION:

Despite the environmental harm incurred by open cast extraction, accelerated urbanization, haphazard decentralization, inadequate housing for the increasing migrant labor force, and the need for additional drinking water and irrigation plans, the industrialization section's environmental problems remain the largest. The air lungs of residential communities are coughing, along with unsatiable

content properties, feeble waste dumps, lack of municipal bodies, inadequate parking parts and high buildings, and so on, helpless sewerage, congested transport, growing quantities of cars, small roads and increasingly expanding industrial places.

REFERENCES:

- Acharya, Joysri, (2009) FDI, Growth and the Environment: Evidence from India on CO2 emissions during the last two decades, *Journal of Economic Development* vol. 34, Number 1, June, Seoul (Republic of Korea), pp. 43-58.
- Ahluwalia, Isher Judge (1991), Productivity and Growth in Indian Manufacturing, Oxford University Press, Delhi. Quoted in Burange, L. G. and Yamini, Shruti (2011) A review of India's industrial policy and performance, working paper of Department of Economics, University of Mumbai 34/1/2011.
- Anonymous (1988). Floral Wealth and Plant Adaptation of the Indian Desert. Scientific Publishers, Rajasthan.
- Baer, W. and R.A. Sirohi., (2013) The Role of Foreign Direct Investments in the Development of Brazil and India: A Comparative Analysis, KYKLOS, John Wiley & Sons Inc., Massachusetts, (U.S.A), vol. 66 pp. 46-62,
- Beghin, J., Bowland, B., Dessus, S., Roland-Holst, D., Van der Mensbrugge, D., (2002). Trade integration, environmental degradation and public health in Chile: assessing the linkages. *Environment and Development Economics* 7 (2), pp. 241– 267.
- Beghin, J., Dessus S., Roland-Holst, D., Van der Mensbrugge, D.(1996). General Equilibrium Modeling of Trade and the Environment, Technical Paper, N8 116, Paris, OECD Development Center.
- Boulding, E. Kenneth., (1966) The economics of coming spaceship economy in H.Jarrett (ed.) (1966), *Environmental Quality in a Growing Economy*, pp.3-14, John Hopkins University Press for Resources for the Future, Washington (U.S.A)
- Bovebourg A.L. and L.H. Goulder (1996). Optimal Environmental Taxation in the Presence of Other Taxes: General-Equilibrium Analyses, *American Economic Review* 86(4):985-1000.
- Bussolo, M. and O'Connor, D. (2001). —Clearing the Air in India: The Economics of Climate Policy with Ancillary Benefits, Development Centre Working Paper 182, CD/DOC 14, OECD.
- Central Pollution Control Board (2010). National Air Quality Monitoring Program. Available at <http://cpcbenvin.nic.in/airpollution/finding.htm> (last accessed 24 January, 2011).
- Central Pollution Control Board (2011). Air Quality Monitoring, Emission Inventory and Source Apportionment Study for Indian Cities: National Summary Report.
- Copeland, B.R. and Taylor, M.S., (1994) North-South trade and the environment, *Quarterly Journal of Economics*, vol 3 no.109, Oxford University Press, (U.S.A), pp. 755-787.
- Cropper, M. L., Nathalie, B. S., Anna, A. Seema, A., Sharma, P. K. (1997). —The Health Benefits of Air Pollution Control in Delhi, *American Journal of Agricultural Economics*, Vol. 79, No. 5, Proceedings Issue, pp. 1625-1629.
- Cropper, M., S. Gamkhar, K. Malik, A. Limonov, and I. Partridge (2012): Air Pollution Control in India: Getting the Prices Right; available at www.aeaweb.org/aea/2012conference/program/retrieve.php?pdfid=600
- Dasgupta, Sumita., (2013) Political economy of the environmental pollution in the Indian steel industry, downloaded from <http://www.slideshare.net/susmitadasgupta1/pollution-in-the-steel-industry>
- Dasgupta, Susmita, Hua Wang, and David Wheeler., (1997) *Surviving Success: Policy Reform and the Future of Industrial Pollution in China*, World Bank Group publications, Washington D.C (U.S.A)
- Dufournaud, M., Harrington, J., Rogers, P., (1988). Leontief's environmental repercussions and the economic structure revisited: a general equilibrium formulation. *Geographical Analysis* 20 (4), 318– 327.
- Edington and Edington, (1981) "Ecology and Environmental Planning", Chapman and Hall. pp. 64-65.
- Gosain, Rao and Basuray (2006). Climate change impact assessment on hydrology of Indian river basins, ' *Current Science*, Vol. 90, No. 3, February.
- Goulder, L., ed. (2002). *Environmental Policy Making in Economics With Prior Tax Distortions*, Northampton MA: Edward Elgar.

- Government of India (2011) Low Carbon Strategies for Inclusive Growth, Interim report of the expert group on Low Carbon Strategies for Inclusive Growth, New Delhi (India)
- Government of India (2012) Central Statistical Organisation (2016), Annual Survey of Industries 2013-14, Ministry of Statistics and Programme Implementation,
- Government of India (2014) Annual Report 2013-14 Ministry of Micro, Small and Medium Enterprises, New Delhi (India)
- Government of India (2014) Central Statistical Organisation (2012), Annual Survey of Industries 2011-12, Ministry of Statistics and Programme Implementation,
- Government of India (2016) Centre for Science and Environment (2015) Green ratings of cement industry, New Delhi (India), Downloaded from <http://cseindia.org/node/281> on 7/4/2015
- Government of India., (2012) Estimation of Investment, its Composition and Trend for Twelfth Five-Year Plan (2012-13 to 2016-17), Planning Commission, Report of the Working-Group, New Delhi (India)
- Government of India., (2012) Estimation of Investment, its Composition and Trend for Twelfth Five-Year Plan (2012-13 to 2016-17), Planning Commission, Report of the Working-Group, New Delhi (India)
- Government of India., (2014) Economic Survey, Ministry of Finance, New Delhi (India)
- Government of India., (2014) Economic Survey, Ministry of Finance, New Delhi (India) Grossman, Gene M., and Alan B. Krueger., (1993)
- Gupta, Poonam and Utsav Kumar., (2010) Performance of Indian Manufacturing in the Post Reform Period', Munich Personal RePEc Archive, Downloaded from http://mpira.ub.unimuenchen.de/24898/1/Gupta_Kumar_OUP_revised_FINAL.pdf
- Guttikunda S. and Jawahar P. (2011): Urban Air Pollution & Co-benefits Analysis in India – for Climate Works Foundation and Shakti Foundation - shared by Author
- Lucas, R., Wheeler, D., Hettige, H., (1992). Economic development, environmental regulation and the international migration of toxic industrial pollution: 1960–1988. In: Patrick, Low (Ed.),
- Macerata, (Italy) Gallagher, Sean (2014) Toxic development: pollution in India, Downloaded from www.pulitzercenter.org/projects/asia-india-pollution-toxic-ecosystem-waste-population-ganges
- Mintzer I. M., (1988), A Matter of degrees : A fresh look at the greenhouse effect, Environmental Awareness, 11:3 and 4. pp. 49 - 55. 12. Hohteld. Jural Relation of Rights and Duties, University News, A Weekly Journal of Higher Education, Vol. 37, No. 29, July, 19, 1999. p 8.
- Pandey, R. (2005). Estimating sectoral and geographical industrial pollution inventories in India: implications for using effluent charge versus regulation. *The Journal of Development Studies*, 41(1), 33-61.
- Parikh, K. (2009), 'India's Energy Needs, CO₂ Emissions and Low Carbon Options', 22nd International Conference on Efficiency, Cost, Optimization, and Environmental Impact of Energy Systems, August 31 – September 3, 2009, Foz do Iguaçu, Paraná, Brazil
- Patnaik, Prabhat., (1979) Industrial Development in India since Independence, Social Scientist, June Vol. 7, No. 11, New Delhi (India), pp. 3-19
- Perry, G., J. Whalley and G. McMahon, eds. (2001). Fiscal Reform and Structural Change in Developing Countries, New-York: Palgrave-Macmillan.
- Pigott, J., Whalley, J., Wigle, J., (1992). International linkages and carbon reduction initiatives. In: Anderson, K., Blackhurst, R. (Eds.), The greening of world trade issues. University of Michigan Press.
- Pigou, A. (1932): The Economics of Welfare, MacMillan, London
- Pigou, Arthur C., (1920), The Economics of Welfare, Macmillan & Company, London (U.K)
- TERI (2003): Electricity externalities in India: information gaps and research agenda; The Energy and Resources Institute, New Delhi, *The Indian Economic Journal*, pp. 105 – 114.
- The Indian Express Case, 1985, I SCC 64
- Toman ,Michael., (2003) The Roles of the Environment and Natural Resources in Economic Growth Analysis, discussion

paper2/71, Resources for the Future
Washington, D.C (U.S)

U.S. environmental regulation. *Journal of Policy Modeling* 12 (4), pp. 715– 744.

UNIDO, (1991) Proceedings of the conference on Ecological sustainable industrial development, Oct. 1991. p. 47.

United Nations, Department of Economic and Social Affairs, Population Division, *World Urbanization Prospects*, 2009.

World Health Organisation, (1946), Constitution of the World Health Organisation, WHO. Geneva.

Corresponding Author

Puneet Kumar*

Research Scholar, OPJS University, Churu,
Rajasthan