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ENVIRONMENTAL AND ITS IMPACT–AN ASSESSMENT A.R.ANITHA¹ & Dr. G. YOGANANDHAN²

ABSTRACT

Natural resources were virtually untouched in the universe for millions of years that built up the capacity of the Earth. However, the vast industrial revolution for a couple of hundred years at unimaginable rates aided by the technological inventions and innovations by super efficient capitalist firms had resulted in the exploitation of natural resources and their wastes are invariably and seriously damaging the quality of air, water and land causing environmental pollution. The environmental regulations were that main focus centered on water pollution, ignoring the problems of air pollution and solid wastes. Moreover, environmental regulations imposed on tanning industry are all domestic and thereby having weak governance and surveillance nature. This weak enforcement has accelerated fraudulent activities in Indian tanning industry. There are certain domestic standard for pH, total suspended solids, sulphides and chrome that the tannery effluent shall not exceed, which takes care of the negative externalities generated by the tanning industry within the domestic territory. India's policy response to the challenges of environmental standard was reactive rather than pro-active, lacking long-run perspective. The speed of response was relatively slower in realizing the potential supply of raw hides, tannery modernization and restructuring of manufacturing units. The main objective of the present study is to understand the various environmental impacts related to it. Therefore, this research paper mainly concentrates on the Environmental and its impact in the humanity.

Keywords: Environmental impact, Health Hazards, development and types of pollution.

¹ Ph.D., Research Scholar, Department of Economics, Thiruvalluvar University, Serkkadu, Vellore.

² Associate Professor and Head, Department of Economics, Thiruvalluvar University, Serkkadu, Vellore.

Introduction

Human life is threatened as the air, water and land are being contaminated with undesirable substances and the pressure on air, water and soil will become highest in the world by 2020. The Planet Earth is the dwelling place for human beings and other creatures. It is where people do live, eat, breathe, grow and spend for long years along with the flora and fauna of the environment. Among all the creatures of life, man occupies a prime position because of his sixth sense. All along from the beginning of human race on earth, it has been in confrontation with nature. The human fight against nature was slow but continuous. As centuries rolled on, his fight against nature was not only incessant but also multi-dimensional in character.

The unique human obstruction into the nature of environment has upset the delicate ecological balance of the earth. Man has been continuously exploiting the earth particularly the non-renewable sources of nature, mining of metals and minerals, exploitation of water indiscriminately not only from the surface level sources but also digging deep into earth mindlessly and mercilessly, changing water ways disturbing landscapes, damaging the natural character of earth by application of chemicals and disorder creating substances, and deforestation of vast tracks of forest areas, that have caused major ecological disasters with the ultimate consequences of disruption in man's life and disturbance of the life of several species. Adding fuel to the fire was man's greedy speed of industrialization and creation of all types of pollution. The greatest danger that humanity is facing in the new millennium is environmental pollution of all sorts. Man has to curtail himself from excessive use of resources and avoid degradation of land and atmosphere for a considerable period of time in the near future to arrest the present trend from its continuity and intensity and then start the process of its reversal. The genuine interest of all is a happier and healthier life for which managing ecological balance is sin qua non.

However, like many other manmade activities, quarrying activities cause significant impact on the environment. Quarried rock lead to removing the protective cover of an aquifer may cause severe pollution of the groundwater. Sites of quarries, therefore, should be selected by considering the hydro geological, environmental and economic factors. Some types of quarries will produce significant amounts of waste material such as clay and silt, unfortunately discharge dust that settles not only on land, plants and trees but also on surface waters used for drinking and other domestic chores by the community. Quarry activity involve blast rocks with explosives in order to extract material for processing despite extraction gives rise to noise pollution, pollution, air damage to biodiversity and habitat destruction.

Objectives of the study

- To review the origin, development and the types of pollution.
- 2. To study the Occupational Health Hazards.
- 3. To study the Environmental impact assessment.
- 4. To study the Social-battle against and Atrocity of the Women.
- 5. To study the Contemporary of Women movements in Tamil Nadu.

Environmental Problems

Global warming has become an undisputed fact about people's current livelihoods; and earth is warming up and the living creatures are affected by it. Some of the environmental problems are only affecting a few ecosystems, while others are drastically changing the landscapes and earth; the mother planet is experiencing a severe environmental crisis necessitating urgent remedial measures to tackle this serious problem. Some of the environmental problems are seen below.

Acid Rain

Acid rain occurs due to the presence of certain pollutants in the atmosphere. Acid rain can be caused due to combustion of fossil fuels or erupting volcanoes or rotting vegetation which release sulfur dioxide and nitrogen oxides into the atmosphere. Acid rain is a known environmental problem that can have serious effect on human health, wildlife and aquatic species.

Climate Change

Climate change is yet another environmental problem that has surfaced in last couple of decades. It occurs due to rise in global warming due to increase in temperature of atmosphere by burning of fossil fuels and release of harmful gases by industries. Climate change has various harmful effects causing melting of polar ice, change in seasons, occurrence of new diseases, frequent occurrence of floods and change in overall weather, wealth and welfare scenario.

Deforestation

Forests are natural mechanism in reducing carbon dioxide and produce fresh oxygen that inevitably helps in regulating temperature and rainfall. At present forests cover 30% of the land but every year tree cover is lost amounting to the country of Panama due to growing population, demand for more food, shelter and cloth. Deforestation simply means clearing of green cover and makes that land available for residential, industrial or commercial purpose.

Genetic Engineering

Genetic modification of food using biotechnology is called genetic engineering. Genetic modification of food results in increased toxins and diseases as genes from an allergic plant can transfer to target plant. Genetically modified crops can cause serious environmental problems as an engineered gene may prove toxic to wildlife, while that increased use of toxins to make insect resistant plant can cause resultant organisms to become resistant to antibiotics, which will be harmful to the human existence in future.

Global Warming

Climate changes like global warming is the result of human practices like emission of Greenhouse gases. Global warming leads to rising temperatures of the oceans and the earth's surface causing melting of polar ice caps, rise in sea levels and also unnatural patterns of precipitation such as flash floods, excessive snow or desertification.

Natural Resource Depletion

Depletion of natural resource is another crucial current environmental problem. Fossil fuel consumption results in emission of Greenhouse gases, which is responsible for global warming and climate change leading people to shift to renewable sources of energy like solar, wind, biogas and geothermal energy, the installation of which added up to expenditure.

Over population

The population of the planet is reaching unsustainable levels as it faces shortage of resources like water, fuel and food. Population explosion in less developed and developing countries is straining the already scarce resources. Intensive agriculture practiced to produce food damages the environment through use of chemical fertilizer, pesticides and insecticides. Overpopulation is one of the crucial current environmental problems.

Pollution

Pollution of air, water and soil require millions of years to recoup. Industry and motor vehicles exhaust are the number one pollutants. Heavy metals, nitrates and plastic are toxins responsible for pollution. While water pollution is caused by oil spill, acid rain, urban runoff; air pollution is caused by various gases and toxins released by industries and factories and combustion of fossil fuels; and soil pollution is mainly caused by industrial wastes that deprive soil from essential nutrients.

Public Health Issues

The current environmental problems pose a lot of risk to the health of humans, and animals. Dirty water is the biggest health risk of the world and poses threat to the quality of life and public health. Run-off to rivers carries along toxins, chemicals and disease carrying organisms. Pollutants cause respiratory disease like Asthma and cardiacvascular problems. High temperatures encourage the spread of infectious diseases like Dengue.

Waste Disposal

The over consumption of resources and creation of plastics are creating a global crisis of wastes disposal. Developed countries are notorious for producing an excessive amount of waste or garbage and dumping their wastes in the oceans and less developed countries. Nuclear waste disposal has tremendous health hazards associated with it. Plastic, fast food, packaging and cheap electronic wastes threaten the well being of humans. Waste disposal is one of urgent current environmental problems.

Water Pollution

Clean drinking water is becoming a rare commodity. Water is becoming an economic and political issue as the human population fights for this resource. One of the options suggested is using the process of desalinization. Industrial development is filling nations' rivers, seas, and oceans with toxic pollutants which are a major threat to human health.

Air Pollution

Man has realized that there is more to life than mere material, goods and services. The pleasure of breathing fresh air, drinking pure water, and enjoying the beauty that nature has provided is priceless and must not be sacrificed as they are the best things in life to enjoy and are free. Air lets living planet breathe—it's the mixture of gases that fills the atmosphere, giving life to the plants and animals that make Earth such a vibrant place is now paving way for air to be a threat to human life.

Role of Education in empowerment of social status:

Noise Pollution

There are a number of sources from which high noise level are generated, some continuously and some intermittently. The vibratory screen is the most predominant source of continuous noise. Especially vibratory screens are operated at higher frequency and without enclosures can give rise to abnormally high noise levels. Intermittent noise level is also generated at the crusher during the time of the breaking of stones. Intermittent noise is also generated during unloading and loading operations. Belt conveyor movement is also a source of continuous noise, especially the ill maintained and cheaper end conveyor system make more noise.

Air Pollution

Pollution from crusher unit is a major source of air and noise pollution in Pummal. According to the analysis of air samples in February 2013 the air quality in residential areas was not found as per standards with respect to SPM and carbon monoxide. This is due to heavy rise in vehicle users. Especially the air quality at junctions is found to be more polluted. Reducing automobile emissions is possible through traffic and transportation improvements. Since traffic congestion delays increase the level of emissions, congestion management has air quality benefits high priority would be given to traffic improvements that improve vehicle operating conditions (average speed, delay) such as signal timing improvements, signal Synchronization, turn lanes, etc. Tree plantation schemes shall be introduced along the major roads

Occupational Health Hazards

For years, stone quarrying and crushing has been known as a highly hazardous work, whereby workers are affected by many debilitating occupational health hazards and diseases. Mostly the migrant workers are engaged in this highly unorganized industry. The most common exposure is from silica dust, which causes Silicosis (a type of Occupational Lung Disease known by a common name of Pneumoconiosis) among the exposed workers Silicosis is a disabling, nonreversible and sometimes fatal lung disease caused by overexposure to respirable crystalline silica. Silica is the second most common mineral in the earth's crust and is a major component of sand, rock, and mineral ores. Overexposure to dust that contains microscopic particles of crystalline silica can cause scar tissue to form in the lungs, which reduces the lungs' ability to extract oxygen from the air. In addition to silicosis, inhalation of crystalline silica particles has been associated with other diseases, such as bronchitis and tuberculosis. Some studies also indicate an association with lung cancer. There is no cure for the disease, but it is 100 percent preventable if employers, workers, and health professionals work together to reduce exposures. The other health hazards could be due to noise pollution, heavy manual labour, minor / major injuries and accidents at workplace, and long working hours. Lack of basic sanitation facilities, drinking water, and shelter add to aggravation of the bad working conditions. Malnourishment,

lowered immunity, smoking and alcoholism are common among these workers.

Conclusion

In the present study is analysis the environmental issues of air, water and soil pollution. During construction phase air pollution may be due to dust, vehicular movements by transportation and material handling, etc and during the operation phase emissions may occur from the diesel generators. Water Pollution is not much significant due to this proposed project since proper waste water management is proposed to be carried out. Also, the noise generated during construction and operation phase caused due to vehicular movements and machineries will be minimized using proper adequate preventive measures. Further, the proposed project will include proper solid waste management techniques which would prevent the environment from any adverse effects caused due to solid waste generated from the proposed project site

Groundwater system can be altered by quarrying in greater magnitude and extent than by any other activity of man. Thus quarrying showed its negative effects on the quality and quantity of the groundwater resources potential can extend further. Noise pollution and air pollution is much higher in the inner region of quarry compared to out boundary of quarry. This results in lot health concerns for the labourers working in the quarries as well to the nearby residents of the quarries. A proper planning is required to arrest the dispersal of toxic air pollutants, ground water leaching and soil pollution.

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