

Role of International Institutions in Combatting Environmental Degradation

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Abstract

Ever since the advent of industrial revolution back in the 1700s, a new plague took birth in the form of environmental degradation which was a byproduct of the industrial revolution. Over the last few centuries environmental degradation has multiplied at an alarming rate and humans are almost at the point of no return. Humanity is at a pivotal point as the issue of environmental degradation affects every living being on this planet equally. There are four primary impact points when it comes to industrialisation — air, water, soil and habitat. Human activity is the root cause of environmental degradation. Every country is working towards achieving a solution which would facilitate environment protection. Sustainable development is said to be the guiding principle of countries to prevent further environmental degradation. The subject of environmental degradation is at the forefront of global debate. Various institutions across the globe have either been tasked or taken it upon themselves to tackle this ever-growing complication. With the advancement in modern technology and understanding of the environment, efforts in various spheres are being made globally to curb this vital issue. It has been noticeable in the past few decades, governments across the globe are placing more significance on uncompromising environmental laws and its stringent enforcement to ensure preservation of the environment and its sustainable development. This research paper aimed to apply Doctrinal legal research method and focus of this research paper is to delve into such measures and laws primarily dealing with environmental degradation- I.e., environmental laws across the globe and to determine whether the existing environmental laws are adequate to combat environmental degradation; and if not, what can be done to further strengthen such laws.

Keywords: *Environmental degradation; Environmental laws; International institutions; Industrial Revolution; Sustainable Development*

Introduction

The process of disintegration or the deterioration of the environment is said to be environmental degradation. The consumption of natural resources like air, soil and water coupled with the eradication of wildlife are said to be some of the primary factors contributing to environmental degradation. The increase in degradation of the environment is on par with the rise in human population and the resulting rise consumption of the available natural resources. This ultimately results in the depletion of such resources. The factors indicating such a degradation are extinction of species, deteriorating quality of air, soil and water.

The apex cause of such a deplorable state of the environment is human greed. The birth of the concept of sustainable development is closely related to the industrial revolution. In the latter half of the 19th century, the western world came to a realization that their industrial and economic activities were causing a significant impact on the deteriorating quality of the environment. Such deteriorations lead to several social and ecological crisis and such a situation gave rise to the need for sustainable development. The concept of

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sustainable development is that human beings and the societies that they live in must live and make ends meet in such a manner that their activities don't compromise the capacity of future generations to fulfil their own needs.

The efforts of only one society or even once country for that matter are not enough to tackle the ever-growing menace of environmental degradation. A collective effort of every nation is of the essence to combat such a peril. Global Environmental Governance (GEG), aims to balance the process of environment protection at global level through organizations, rules and policies. The efficacy of GEG is ultimately dependent on implementation at a global stage. International implementation is the ultimate key for its efficiency. Global environment politics and policies have increased since 1970s, with the advent of environmental issues into international agenda. Conducted in Stockholm in 1972, the first ever global conference on environment got the ball rolling for three decades of discussion, negotiation and ratification of a whole series of international environmental agreements. The Stockholm Convention birthed the United Nations Environment Programme. This was the origin of a series of international organizations which are dedicated to stop environmental degradation and protect the environment.

First the international organizations working for environment protection are discussed, the second part marks some of the incidents and disasters that affected the environment drastically and the methodology of the study and third part presents the findings and impact of environment degradation. A concluding precise ends the paper.

International Organizations Dedicated to Environment Protection

The most impactful organizations dedicated to environment protection have been flowingly discussed:

United Nation Conference on Environment and Development

The UN Conference on Environment and Development conference was held in Brazil in 1992. The purpose of this conference was to ensure protection of environment through advance social equity and countries have to rethink about their economic growth. This conference highlighted the fact that economic, social and environmental factors are dependent on each other and success in one sector affects the other sector.

The results of this conference were Rio declaration on environment and development, Agenda 21, Convention on biological diversity, forest principles, and framework convention on climate change.

Agenda 21: Agenda 21 was an action plan with 40 points document that gave recommendations so that overall sustainable development can be achieved in 21st century that there should be new strategies for preserving natural resources, new methods of education and new ways to have sustainable economy.

Commission on sustainable development was established for the implementation of Agenda 21. It is regarded as one of the major outcomes of this conference.

Forest Principles: For forest sustainable development and conservation, non-binding recommendations were set.

Convention on Biological Diversity: The convention on biological diversity is legally binding and has three goals: conservation of biological diversity, sustainable use of components, fair and equitable use of resources.

UN Framework Convention on Climate Change: The UNFCCC is an international environment treaty and is legally non-binding treaty, but can set protocols of various negotiating countries where certain issues, recommendations and limits can be made and they all will be

legally binding. This framework is concerned with the greenhouse gas emissions and has no enforcement mechanism but framework highlights how countries can negotiate International treaties to set limits on greenhouse emissions. Thus, as a result Kyoto protocol was negotiated. This framework sets common responsibilities for countries. The countries are divided into three groups and according to their group they have the responsibility for protection of environment.

Rio Declaration of Environment and Development: The rio declaration of environment and development also known as rio declaration informally known as Earth Summit. It was a document at UN conference on environment and development and comprises of 27 principles that will guide countries to attain sustainable development.

Rio+5 was a special session of UN General Assembly which gave analysis of 5 years of progress that happened after implementation of Agenda 21.

Rio+10 was held after 10 years of first Earth Summit to discuss about sustainable development by UN. The outcome of this summit was the implementation of Johannesburg plan as an action plan.

Rio +20 was third international conference on sustainable development and aims at bringing back the economic and environmental goals of the country.

UN Convention to Combat Desertification

The UN convention to combat desertification aimed to combat desertification in areas who were facing serious droughts. This convention is only International legally binding framework and is built upon the recommendations of Rio Agenda 21 to deal with the problem of desertification.

UN Conference on the Human Environment

Environment related issues and environment conservation was started in 1972 at Stockholm conference or UN conference on environment and development on initiatives of Swedish Government.

Only One Earth was conference motto. In 1968-69 proposals were given to UN that world environment is degrading because of cold war, industrial revolution, population, pollution and nuclear radiations.

This conference was the first major conference on environmental issues and it brought major changes as after this conference. Environment was given a special position as after that whatever decisions were taken always environment was considered as a stakeholder and major concern. Environment started playing a big role after this conference.

The action plan of this conference has three main categories:

1. Watch plan (Global Environmental Assessment Program).
2. Environmental management activities.
3. International measures to support assessment and management activities.

The participants in the meeting adopted declarations called Stockholm declarations which consist of 26 principles containing the environment and development.

This conference led to the creation of UNEP and also produced the framework for environmental action this action plan contains 109 specific recommendations relating to human settlements, pollution, natural resource management, educational and social aspects of the environment, development and international organisations.

Through this conference environment became political agenda. Environment was made a major issue in this conference.

Several resolutions and action plan for Human Environment was also convened in this conference. Developed and developing countries

started focusing on environmental issues after this conference.

Commission on Sustainable Development

The UN Commission on sustainable development on December, 1992 was established by the General Assembly of the UN and was later replaced by high level political forum on sustainable development it meets now every four years under General Assembly and in other years under UN economic and social council, earlier it was just under UN economic and social council. CSD was established to administer the result of earth summit and to check the progress of agenda 21. Role of Commission is threefold to ensure effective oversee of earth summit, to have intergovernmental cooperation and to justify decision-making capacity of intergovernmental and to review the process in the implementation of agenda 21 at national, local and international level. The CSD for its first five years reviewed the implementation of all sectors of agenda 21 and among its accomplishments there was the formation of intergovernmental panel on forest. The CSD was given the responsibility to oversee Barbados programme of action of sustainable development of small island developing states in 1995 and review its progress. In 2009 the UN General Assembly adopted resolution and agreed to convey another conference on 20th anniversary of earth summit. Rio+20 met in Rio de Janeiro and adopted document "Future we want". Critical outcome of Rio+20 was to establish intergovernmental high level political forum on sustainable development to replace CSD through the years. CSD has added valuable achievement to its legacy sustainable development.

Convention on International Trade in Endangered species

International trade if not regulated properly it may result in the extinction of plants and animals because of overexploitation thus this convention was held and through this convention the only international agreement CITES was signed by the nations which regulated that international trade will be carried out in such a way that it won't affect any species of plants and animals. This convention stated that by licensing system only import and export of certain species which are mentioned by this convention will be authorised. So even though it is successful in regulating international trade but it has various limitations because this sight per se do not have enforcement authority of its own it has to rely on the member countries for its enforcement of its rule and regulations and Secondly under the convention various plants and animal species are seized because of illegalities and this plants and animals are released into nonnative areas without bringing them into the original state and thirdly this over fuelling of restriction in international trade is fuelling the black marketing in the trade of plants and animals.

World Summit on Sustainable Development

World Summit on sustainable development known as Rio+ 10 or Earth Summit II took place after 10 years from Earth Summit I at South Africa as progress on sustainability was not achieved. The aim of this summit was to have sustainable development in certain areas for the betterment of humans and to narrow the gap between rich and poor. After this summit many dead issues came forward Like poverty, health, water, agriculture, energy, biodiversity and climate change. The plan of action of this summit brought many positive outcomes. Countries agreed that they will ratify Kyoto protocol and will provide proper healthcare facilities to its citizens also will provide them with clean drinking water and energy and will control the rate of extension of plants and animals also the corporate accountability will be increased and recognised by nations.

UN Millennium Development Goals

UN Millennium summit held in September 2000; the main aim of the summit is to get development in developing nations. Member countries of UN agreed on 8 specific goals which now known to us as MDG's to achieve these 8 MDGs, 18 targets were set and 48 indicators were set to check the results of these goals. Member countries agreed on 7 areas that required development peace, security, poverty eradication, human right and democracy, good governance, protecting vulnerable population. For the seven areas these eight

goals were made to be achieved in 15 years till 2000.

UN Environment Programme

UNEP supervise environmental activities of UN and is founded by Maurice Strong who was also the first director of UNEP it was founded as a result of UN conference on human environment. It deals with all the environmental concern of UN but for specialized issues specialised conventions are made by UN. UNEP and world metrological organization together established intergovernmental panel on climate change. UNEP is a member of UN development group and international cyanide management codes was developed under UNEP. Mission of UNEP is to improve the quality of life so that no future generations will face environment concerns because of present generations. It covers wide range of issues concerning atmosphere, marine and terrestrial ecosystems, Green economy and environmental governance and sets global environment agenda, promotes global environment and promote that sustainable development should be turn coherently with environment.

Global Environment Facility

GEF is a unique partnership of 18 agencies and has a network of civil society organizations, it is an independent financial organization and give grants for biodiversity climate change, land degradation, mercury, forest protection and projects It acts as a financial mechanism for various conventions of UN it is not linked formally to Montreal protocol however it supports its implementation in countries that have developing economies. It promotes multi stakeholder alliances to protect ecosystems and environment thus acts as a catalyst. GEF was able to handle environmental threats but more comprehensive vision is needed for handling environment threats thus 2020 strategy was made to tackle root causes of environment degradation through projects and thus GEF will adopt multi stakeholder approach. GEF 2020 strategy positions GEF as champion of global environment.

United Nation Development Programme

UNDP aim is to eradicate poverty, to remove inequalities and to help countries to develop policies and abilities so that sustainable human development can be achieved. The objectives of UNDP are eradication of poverty, Democratic governance, reducing vulnerabilities and protection of environment. UNDP publish human development report and provide advises and grants to developing countries. UNDP is funded by voluntary contributions of member countries. UNDP has adopted SDG 17 goals to protect planet, to eradicate poverty so that people can live peacefully and can enjoy prosperity by 2030.

World Nature Organization

World Nature Organization focuses on efficient use of energy and climate protection. It aims to have sustainable development and proper supply of energy. WNO promotes global environment protection that business interests should be carried on along with environment protection.

Kyoto Protocol

Kyoto protocol was not supported by many countries however still the conference made a notable achievement as it led to the creation of Green Fund for which a management framework needs to be adopted and through this treaty it was proposed that nations need to reduce their greenhouse gas emissions. Another remarkable achievement of this conference was that US \$100 billion to be distributed to countries so that they can adapt and deal with climate impacts.

United Nation Population Fund

United Nation Population fund is the sexual and reproductive health agency of United Nations. It works on voluntary contributions by

countries. It works to achieve sustainable development goals on health, gender equality and education. SDG's are supposed to be achieved by 2030.

Inter-Governmental Panel on Climate Change

Inter-Governmental Panel on Climate Change was established by UNEP and world meteorological organisation and it assess the climate change and provides scientific views on current status of climate change and impact of climate change. It submits reports on climate change and global warming that how it can be tackled and to what extent nations have to reduce global warming otherwise the impacts of climate change will be drastic.

Contribution of International Conventions in Environment Protection: Findings

Despite the presence of a slew of international organizations solely dedicated to the protection of the environment, it can still be observed that it has had minimal effect on reversing environmental degradation. A few concerning facts regarding degradation of the environment are as follows:

- Approximately 80% of the total world's forest has been lost
- Approximately every year 55 billion tons of fossil fuels, fossil energy, minerals and metals are extracted from the earth.
- The current rate of deforestation indicates the extinction of about 5-10% tropical forest species every decade
- Remaining 60% of the coral reefs will disappear in the next 30 years
- Approximately 16000 acres of productive land turns into desert every day (desertification)
- Metric tons of garbage (mostly plastic) still floats in the ocean endangering marine life.

A pollution boom which is followed by growing need for food grains is the driving factor behind the development in the agricultural sphere. But these developments also come with adverse effects to the environment. The improper management of the constituents of animal manure, which is used during farming, causes adverse effects in the environment. Plants, animals and humans alike are affected by it.

Outcomes of Environment degradation: Environmental Catastrophe

Environmental degradation is both a driving factor and a consequence of environmental disasters. As stated earlier, the overconsumption of natural resources is ultimately resulting in environmental degradation, minimizing the effectiveness of natural and essential ecosystem fail safes such as mitigation of landslides and floods. This ultimately leads to increased risks in the form of natural disasters, which in turn leads to increase in environmental degradation. It was a vicious cycle where and earth is caught in between and humans are solely responsible for it.

Recent Environmental Disasters

Australian bush fires: The continent of Australia was ravaged by engulfing fires in the latter half of 2019 which went on till the start of 2020. It was also referred to by many as a 'Black Summer' for the country. Approximately 18 million hectares of land, which included nearly 3000 homes, 34 humans and numerous species got burnt down. According to reports, approximately more than one billion animals were killed amongst which were endangered species who were driven into extinction due to the fires. The animals which survived have permanently lost their natural habitat.

There is evidence which connects environmental degradation to cause rise in the earth's temperatures which in turn causes the intensity

of such natural fires to increase.

Russian oil spill in the Arctic region: During May, 2020, a fuel tank registered to an ancillary company of Norilsk Nickel leaked which led to dumping a little over 20,000 tons of diesel into the Ambarnaya river situated in the Arctic. This accident is considered to be Arctic's worst oil spill till date. A state of emergency was declared by president Vladimir Putin.

The environmental consequences of oil spills are often quite disastrous. If spilt oil washes into the marshes of coastal areas and other such wetlands, it effects the vegetation of the area making it an unsuitable area for wildlife habitat.

When eventually the spilt oil floating on the surface of the water begins to sink infiltrating the marine environment, it usually contaminates fishes residing in the area and such other smaller organisms that are crucial entities of the food chain.

Forest fires of Uttarakhand: The state of Uttarakhand was recently engulfed by forest fires. Even though the devastation caused by the forest fire was minimal as compared to the Australian bush fires, the damages caused by it was still a substantial amount in the history of the state of Uttarakhand. 51 hectares of forest area was affected due to the spreading fire.

Environmental factors like severe heatwaves literally added fuel to the fire. The eventual increase in the intensity of such heat waves is directly a result of environmental degradation.

Chernobyl Nuclear Accident: A nuclear accident in 1986 which was the result of ineptitude of the staff in the Chernobyl nuclear plant resulted in a catastrophic event which shook the world. The after effects of the tragic disaster can still be felt to this very day. A little over 2000,000 Kms of Europe was contaminated. Russia, Belarus and Ukraine were the three most affected countries.

Environmental impact

- The power plant was located near the Pripjat river which fed into a reservoir, which is the largest surface water system in Europe. The contamination of the aquatic system became a major concern in the immediate aftermath.
- The surrounding flora and fauna suffered a huge brunt of the disaster. The surrounding forest of the nuclear plant immediately turned reddish-brown and subsequently died. The forest earned the name "Red Forest". All animals in the immediate vicinity died and the ones who survived were stripped of their reproductive capabilities altogether.

Bhopal Gas Tragedy: The Bhopal gas disaster, also more commonly known as the Bhopal gas tragedy was the result of a gas leak incident which occurred on December 2, 1984 at the union carbide plant in Bhopal, Madhya Pradesh. The number of deaths was estimated to be in between 15,000 to 20,000.

Exxon Valdez oil spill: On March 24 1989, an Exxon owned oil tanker called as Exxon Valdez strucked Bligh reef off the coast of Alaska just after midnight the collision occurred in Prince William Sound a remote area nearly inaccessible to emergency response crews in the days that followed 10.8 million US gallons of crude oil poured into the sea. This is the second most significant spill in the US territory after the 2010 deep water horizon spill. Wildlife around the area was strongly affected with hundreds and thousands of birds and mammals dying and the effect on sea life can't be calculated decades later the fauna of the area is still affected by this environmental catastrophe.

There is an emerging pattern which indicates that despite of earlier disasters that shook the world and international organisations working for Environment Protection still similar disasters are happening like oil spills, cyclones, earthquakes, volcanic eruptions and forest fires that we witnessed in the past we are still witnessing the similar incidents. Even during COVID-19 when everything came to a standstill, it

was believed that environment is recovering but alas in the same year 2020 a lot of environmental disasters occurred implying that environment is destructed to a huge level by humans and its time that we work towards its protection.

Conclusion

With the way things are going about, humans are heading down a slippery slope. Even with a slew of conventions and international organizations solely dedicated to protecting the environment in existence, the noticeable positive changes can be said to be in the lower if not the lowest strata. The amount of environmental degradation, which is the direct consequence of human activity, is almost at a point of no return. A pertinent instance is Manhattan's Metronome digital clock which was reprogrammed to put on display an alarmingly critical window of action to reverse the effects of global warming.

According to the National Oceanic and Atmospheric Administration situated in the United States of America, earth's average temperature increased by over 1.4 degrees Fahrenheit. As per the United Nations Food and Agricultural Organisation, deforestation causes the loss of approximately eighteen million acres (72843.415603 square kilometres) of forest each year. These alarming statistics are the first of many that all point towards one inevitable conclusion, earth eventually and surely turning into an uninhabitable planet for most living beings.

International organisations and conventions solely dedicated to protect the environment can only achieve a limited amount of positive results without the cooperation of every one around the globe. A convention is merely a piece of paper until and unless it is strictly implemented and enforced. The uncompromising and strict implication of present conventions is the need of the hour. Measures should be taken up by every country the put the interest of protection of the environment with on par or ideally above their national interest. Immediate steps should be taken to implement and enforce such conventions.

India is the world's second most polluted country and is ranked 10th in climate change performance index 2021. Despite of all these conventions the environment is still deteriorating and the reason behind it is that most of the conventions are not legally binding thus they have no enforcement mechanism. More often than not, while framing environmental laws all factors that affect environment are not taken into account thus resulting in irregular environment protection practices. Moreover, awareness needs to be spread among people that the earth is at a critical stage and it is of the essence to conserve resources and protect environment. Strict environmental laws and penance mechanism should be made by countries to combat environmental degradation.

Despite of environment protection what we need is environment restoration as we are at a stage where we first need to restore resources and species from endangerment and then begins the protection stage.