GSJ: Volume 10, Issue 5, May 2022, Online: ISSN 2320-9186 www.globalscientificjournal.com

INTERNATIONAL RESPONSE TO ENVIRONMENTAL PROTECTION:

THE GLOBAL BURDEN OF CLIMATE CHANGE

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INTERNATIONAL RESPONSE TO ENVIRONMENTAL PROTECTION: THE GLOBAL BURDEN OF CLIMATE CHANGE

ABSTRACT

This study focused on "International Response on Environmental Protection vis-à-vis the Global Burden of Climate Change." it aimed at critical examination of international response on environmental protection. The specific objectives were to examine the international policies and treaties made in response to environmental issues, to assess the statistics of states involvement in the international response, to evaluate the principles of international environmental law adopted in responding to environmental policies, to examine the states commitment and compliance to international environmental protection policies, and to analyse some challenges and the wayforward. These also defined the scope and limitation of the study. The research design and methodology was doctrinal approach, using analytical and descriptive research methodology. The main sources of data collection were various related materials, both from the conventional library and e-library. For the summary of findings, it was submitted that it is not practicable for all states in the international parlance to operate on the same international policy to respond to environmental protection, because the challenges of each are distinct from another except relatively affected. It was therefore observed that the viable solution to the negative effects of pollution and poor response is to urge the world powers like the US to honour international environmental policies. Sequel to these, the Seminar made some recommendations among others that international communities should effectively assist the developing countries like Nigeria to practically respond to her environmental protection issues like oil spillage and gas flaring which add to the burden of climate change. Also, that States should not just sign but should proceed to ratify and domesticate international policies on environmental protection. It was concluded that in order not to celebrate pollution but protect the environment, international response is needed to trigger threats internationally (as opposed to solely national or local) response, and that for countries to sacrifice their autonomy, some advantages must be gained to collectively address the environmental pollution quandaries and morasses. Finally, this work is significant in all environmental stakeholders.

Keywords: International, Response, Environmental, Protection, Climate Change, challenges

and policies.

1.0 INTRODUCTION

Environment is composed of land, air, and water. There is built environment (i.e. things built by human beings on the environment), explored environment (where mining activities and grazing are carried out), and there is the natural environment. We need to understand and internalize the doctrine of restoration of environment after the different use, exploration, and exploitation of the environment. Environmental protection is also a phenomenal task to save the environment from continuous degradations, climate change and environmental pollution which results from toxic waste, hazardous waste, and solid waste.

These backdrops bring about the concept of environmental policies in response to climate change. Therefore, we study the environment to regulate the use of the entire environment. According to Adam, environmental policy is concerned with sustainability of the environment. It is a multi-disciplinary and cuts across many disciplines in law, Oil and Gas, maritime, torts, Sociology, Political Science, etc.¹ It can be seen as both a course of study in the higher institution as well as a practice in some professions.

Environmental policies for environmental protection did not just develop locally but became international concern. At the international parlance, it was developed with *Agenda 21*, *Conference of Party 21*, United Nations Environmental Programme (UNEP) in Nairobi, *Convention of Trend on Endangers*, etc. In Nigeria, for instance, we did not border much about E environmental policies, despite climate change, until Cocoa dumping in 1988 during General Ibrahim Babangida's rule and it brought about first formal engagement into Environmental policies.²

¹ S. Adam, "Law 819: Environmental Law and Policy 1" *Post Graduate Lecture Notes* (Faculty of Law, University of Jos, 2021).

² Ibid.

In the past three decades, protecting the global environment has emerged as one of the major challenges in international relations. To succeed in this trend, states have entered into treaties, bilateral and regional agreements to respond to global environmental issues and protection. Governments have also endorsed dozens of comprehensive action plans, most notably the 400-page *Agenda 21*, which set forth a blueprint for implementing sustainable development.

According to Hunter³ this rich body of treaties, action plans, and other instruments has not reversed global environmental decline. Virtually every major environmental indicator is worse today than it was at the time of the 1992 UN Conference on Environment and Development (UNCED or the Earth Summit) held in Rio de Janeiro.

Global environmental issues are still prevalent and begging for international response. Climate change which causes the global warming and the ozone layer has continued to deteriorate. After the dinosaur era, there continue to be species extinction at the highest rate, acquatic lives are affected, and toxic chemicals are mounting up in every part of the planet and in living organisms, as well as human beings. These backdrops makes it adroit imperative to critically examine the "International Response on Environmental Protection vis-à-vis the Global Burden of Climate Change."

2.0 TREATIES, LAWS, AND POLICIES MADE IN RESPONSE TO ENVIRONMENTAL ISSUES

2.1 Stockholm Conference

The United Nations first convened countries to address the global environment at the 1972 UN Conference on the Human Environment in Stockholm. The Stockholm conference highlighted the international aspects of emerging environmental challenges and legitimized the

³ D. Hunter, "Institute for Policy Studies: Global Environmental Protection in the 21st Century" *Online Database* < https://ips-dc.org/global_environmental_protection_in_the_21st_century/> surfed on 24th April, 2021.

environment as an area for international cooperation. The Stockholm conference also created the United Nations Environment Programme (UNEP) — an institutional home for environmental protection in the United Nations. Headquartered in Nairobi, Kenya, UNEP continues today to be a leading catalyst for global environmental cooperation.

2.2 Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) was created in November 1988 in response to the lessons learned from the ozone talks, where independent scientists had strongly shaped the agenda. The governments kept negotiations about greenhouse gases out of the hands of scientists, who had already caused a lot of political consternation at Villach and Toronto.⁴ Although IPCC was administered by UNEP and WMO, the panel's scientists were chosen and briefed by government officials, and the final reports of three IPCC working groups, released in August 1990, were closely edited to ensure that the scientists did not pursue agendas that are potentially threatening to broader national interests. In December 1990, the United Nations General Assembly moved the focus of authority from the IPCC to a newly created Intergovernmental Negotiating Committee (INC) with its own secretariat. Many delegates were tired of being browbeaten by UNEP's executive director Mostafa Tolba at UNEP-sponsored meetings, and they designed the greenhouse-gases institutions to avoid a repetition of that process.⁵

To date, INC has met four times, but talks have been disappointing because countries are deadlocked. At the September 1991 meeting in Nairobi, for example, it was proposed that the meeting followed a procedure known as "pledge and review," in which delegates would present

⁴ R. W. Kates, B. L. Turner II, and W. C. Clark, "The Great Transformation," *The Earth As Transformed by Human Action* (Cambridge, England: Cambridge University Press, 1990), p.8.

⁵ J. G. Speth, *Earth '88: Changing Geographic Perspectives* (Washington, D.C.: National Geographic Society, 1988), p.11.

and discuss their national measures, but this format was discarded after a week. The United States continues to argue that science does not yet support the need for rapid responses and still opposes any emission controls. All other OECD countries have announced a willingness to restrict emissions, and many European governments have already announced unilateral plans to stabilize or reduce their national carbon dioxide emissions.⁶

2.3 Basel Convention on Transboundary Movements of Hazardous Wastes

The *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* was adopted in 1989 and entered into force in May 1992. This global environmental treaty regulates the transboundary movement of hazardous wastes and obliges its parties to ensure that such wastes are managed and disposed of in an environmentally sound manner. It also protects the right of states to ban entry of foreign waste into their territories. The United States signed the Basel Convention on March 22, 1989, but has not yet ratified it.⁷

2.4 The 1992 Rio Earth Summit

The 1992 Rio Earth Summit was heralded as the turning point for global environmental policy. More than one hundred countries came to the Rio summit, which sought to merge two critical international concerns—environmental protection and economic development—that had been evolving on different tracks during the 1970s and 1980s. For developing countries, the merger of environment and development was a major improvement over earlier environmental conferences and provided hope for increased North-South cooperation. In addition, the cold war

⁶ R. W. Kates, B. L. Turner II, and W. C. Clark, "The Great Transformation," The Earth As Transformed by Human Action (Cambridge, England: Cambridge University Press, 1990), 8

⁷ M. A. Levy, G. Osherenko, and O. R. Young, "The Effectiveness of International Regimes: A Design for Large-Scale Collaborative Research" *Discussion Paper* (Institute for Arctic Studies, Dartmouth College, Hanover, N.H., 4 December 1991).

had recently ended, and the rise of a one-superpower world meant that East-West conflicts would not dominate this conference, as they had earlier international environmental efforts.⁸

2.4.1 Extract of Some Provisions of the Rio Declaration

(a) Principle 13: Common Concern

The global environment is a common concern of humanity.⁹

(b) Principle 19: Notification and Consultation

States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.¹⁰

(c) Principle 7: Common but Differentiated Responsibilities

In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities.¹¹

(d) Principle 26: Peaceful Resolution of Disputes

States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.¹²

(e) Principle 2: Duty Not to Cause Environmental Harm

States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.¹³

⁸ J. P. Sewell, "UNESCO: Pluralism Rampant," in R. W. Cox and H. K. Jacobson(Eds.) *The Anatomy of Influence: Decision Making in International Organization* (New Haven, Conn.: Yale University Press, 1973), p.149.

⁹ IUCN Covenant, Principle 13

¹⁰ Principle 19, Rio Declaration, World Resources Institute, World Resources 1998-1999: A Guide to the Global Environment (New York: Oxford University Press, 1998).

¹¹ Rio Declaration, Principle 7

¹² *Rio Declaration, Principle 26*

(f) Principle 16: The Polluter Pays Principle

National authorities should promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution.¹⁴

(g) Principle 17: Environmental Impact Assessment

Environmental impact assessment shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.¹⁵

(h) Principle 15: The Precautionary Principle

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹⁶

(i) Principle 7: Global Partnership

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem.¹⁷

(j) Principle 10: Public Participation

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level.¹⁸

(k) Principle 4: Integration

In order to achieve sustainable development, environmental protection shall constitute an

integral part of the development process and cannot be considered in isolation from it.¹⁹

¹³ Rio Declaration, Principle 2

¹⁴ *Rio Declaration, Principle 16*

¹⁵ *Rio Declaration, Principle* 17

¹⁶ *Rio Declaration, Principle 15*

¹⁷ *Rio Declaration, Principle 7*

¹⁸ *Rio Declaration, Principle 10*

(l) Principle 4: Right to Development

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.²⁰

(m)Principle 14: Non-relocation of Harm

States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.²¹

(n) Principle 2: State Sovereignty

States have the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies.²²

With all these principles, however, this summit achieved less and that is why some analysts like Hunter²³ describe the summit as Rio's rhetoric of international environmental consciousness. According to Hunter, there still exist important gaps in the international environmental policy framework. That, just like the Stockholm, Rio declaration has no binding effect and some newly environmental complicated issues still with already existing ones are still awaiting international attention.²⁴

2.5 Commission on Sustainable Development (CSD)

The Rio Earth Summit went further to establish the Commission on Sustainable Development (CSD) to incorporate environment and development into the UN system and as

¹⁹ *Rio Declaration, Principle 4*

²⁰ Rio Declaration, Principle 3

²¹ *Rio Declaration, Principle 14*

²² *Rio Declaration, Principle 2*

²³ (n4).

²⁴ J. K. Sebenius, "Negotiating a Regime to Control Global Warming," In R. E. Benedick et al., *Greenhouse Warming:* Negotiating a Global Regime (Washington, D.C.: World Resources Institute, 1991), 69-98

well providing a platform to monitor the implementation of the development from the summit commitments.²⁵

2.6 Convention on Biological Diversity

The Convention on Biological Diversity was signed by over 150 governments at the Rio Earth Summit in 1992 and entered into force in 1993. It has become the centerpiece of international efforts to conserve the planet's biological diversity, ensure the sustainable use of biological resources, protect ecosystems and natural habitats, and promote the fair and equitable sharing of the benefits arising from the utilization of genetic resources. The convention was signed on June 4, 1993, but the United States has failed to ratify it.²⁶

2.7 Convention on Climate Change

Over 150 states signed the United Nations Framework Convention on Climate Change in June 1992 at the Rio Earth Summit, recognizing climate change as "a common concern of humankind." The convention aimed to reduce emission levels of greenhouse gases to 1990 levels by the year 2000 but failed to set binding goals. The United States signed the treaty on June 12, 1992, ratified it on October 15, 1992, and entered it into force in the United States on March 21, 1994.²⁷

2.8 Paris Agreement

The 2015 Paris Agreement on Climate Change, which sits within the framework established by the 1992 United Nations Framework Convention on Climate Change (the UNFCCC), significantly advanced the world's effort to address climate change. For the first

²⁵ Ibid., p.80

²⁶ Ibid., p.83

²⁷ E. L. Miles, "Science, Politics and International Ocean Management," *Policy Papers in International Affairs*, no. 33 (Berkeley, Calif.: Institute of International Studies, 1987).

time all countries, including the two largest emitters (China and the United States), pledged to take serious, if not binding commitments. The governments endorsed a specific global average temperature goal— of "well below" 2°C increase over pre-industrial levels —as the temperature that would give the world a reasonable chance of avoiding the worst climate impacts. The Parties also signaled that if necessary they will "*pursue* efforts" to limit the temperature increase to $1.5 \, {}^{\circ}C.^{28}$

The Paris Agreement not only aimed at reducing GHG emissions but also at maintaining forests, improving land-use, expanding financial and technical resources for developing countries, supporting adaptation to unavoidable climate change impacts and compensating those who suffer loss and damage from climate change.²⁹

2.9 Kyoto Protocol to the United Nations Convention on Climate Change

The agreement sets, for the first time, legally binding limits on the heat-trapping greenhouse gases that cause global warming. Under the protocol, 38 industrialized countries agreed to reduce their overall emissions to about 5% below 1990 levels by 2012, and a range of specific reduction requirements was set for other countries. The U.S. signed the protocol on November 12, 1998, but has not yet ratified it.³⁰

2.10 Convention to Combat Desertification

The Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Especially in Africa (CCD) promotes an integrated approach to managing the problems posed by dry-land ecosystems and encourages developed nations to

²⁸ Ibid.

²⁹ n4.

³⁰ R. O. Keohane, "Sovereignty, Interdependence and International Institutions," *Working Paper* no. 1 (Cambridge, Mass: Center for International Affairs, Harvard University, February 1991).

support such efforts internationally. The convention came into effect in 1996 and has over 120 parties. The United States has signed but not ratified the convention.³¹

2.11 Convention on International Trade in Endangered Species (CITES)

CITES establishes international controls on global trade in endangered or threatened species of animals and plants. For example, CITES prohibits all commercial trade in wildlife species threatened with extinction. CITES was ratified by the United States on January 14, 1974, and implemented as the Endangered Species Act. More than 125 countries are members.³²

2.12 Montreal Protocol on Substances that Deplete the Ozone Layer

The Montreal Protocol and subsequent revisions is the primary international regime for controlling the production and consumption of ozone-depleting substances such as CFCs, halons, and methyl bromide. As of June 1994, 136 states, including virtually all major industrialized countries and most developing countries, had become parties to the protocol. The United States signed the protocol on September 16, 1987, and ratified it on April 21, 1988. The protocol and its subsequent revisions modified the original 1985 Vienna Convention for the Protection of the Ozone Layer.³³

2.13 The UN Environment Program (UNEP)

This is widely considered the primary international environmental agency. Its mission is to "facilitate international cooperation in the environmental field; to keep the world environmental situation under review so that problems of international significance receive

³¹ Ibid.

³² Ibid.

³³ P. M. Haas, *Saving the Mediterranean: The Politics of International Environmental Cooperation* (New York: Columbia University Press, 1990), p.55.

appropriate consideration by governments; and to promote the acquisition, assessment, and

exchange of environmental knowledge."34

Partly in response to UNEP's weaknesses and partly because of the many different international institutions that exercise at least some environmental authority, governments created the UN Commission on Sustainable Development (CSD) at the 1992 Earth Summit to coordinate and integrate environmental and economic issues within the United Nations. Unfortunately, the CSD's role is limited to providing a political forum for discussion, without any operational mandate or authority. The result is that international environmental governance is still spread across too many institutions with diffuse, conflicting, or weak authorities.³⁵

3.0 TABLE SHOWING THE STATISTICS OF DIFFERENT STATES INVOLVEMENT IN THE INTERNATIONAL RESPONSES

Global Environmental	Number of State	Opened for	Entered into
Agreements/Policies	Parties	Signature	Force
Global Atmosphere			
Montreal Protocol	197	1985	1988
UN Framework Convention on Climate	195	1992	1994
Change			
Kyoto Protocol	192	1997	2005
Paris Agreement	166	2015	2016

³⁴ Ibid., p. 57

³⁵ Ibid., p. 41

Wildlife and Biodiversity			
Convention on Biological Diversity	193	1992	1993
Cartagena Protocol on Biosafety	166	2000	2003
Convention on International Trade in	178	1973	1987
Endangered Species (CITES)			
Convention on Migratory Species	120	1979	1983
Convention to Combat Desertification	195	1994	1996
Ramsar Wetlands Convention	168	1971	1975
UNESCO World Heritage Convention	190	1972	1975
Oceans		\mathbf{D}	
Law of the Sea Convention	166	1982	1994
Straddling Fish Stocks Agreement	88	1995	2001
Chemicals			
Basel Convention on Hazardous Wastes	181	1989	1992
Stockholm Convention on POPs	179	2001	2004
Rotterdam Convention on PIC	154	1998	2004
Minimata Convention on Mercury	128 signed (30)	2013	
This table chat is an extract from Da	· 1 TT / 36		

This table chat is an extract from David Hunter.³⁶

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4.0 PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW ADOPTED IN RESPONDING TO ENVIRONMENTAL POLICIES

- (1) **State Sovereignty:** Countries have the sovereignty to exploit their own resources pursuant to their own environmental and developmental policies.
- (2) Common Concern: The global environment is a common concern of humanity
- (3) Duty Not to Cause Environmental Harm: Countries have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other countries or of areas beyond the limits of national jurisdiction.
- (4) Common but Differentiated Responsibilities: In view of their different contributions to global environmental degradation, countries have common but differentiated responsibilities.
- (5) The Polluter Pays Principle: Countries should promote the Internalization of environmental costs, reflecting the approach that the polluter should bear the cost of environmental harm.
- (6) Environmental Impact Assessment: Environmental impact assessment shall be conducted for proposed activities that are likely to have a significant adverse impact on the environment.
- (7) The Precautionary Principle: Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
- (8) **Public Participation**: Environmental issues are best handled with the participation of all concerned citizens.

- (9) Notification and Consultation: Countries shall provide prior and timely notification to, and consult with, potentially affected countries on activities that may have a significant adverse transboundary environmental effect.
- (10) Peaceful Resolution of Disputes: Countries shall resolve all of their environmental disputes peacefully.³⁷

5.0 STATES COMMITMENT AND COMPLIANCE TO INTERNATIONAL ENVIRONMENTAL PROTECTION POLICIES

The studies at Harvard reveal four types of national policy responses. Some countries simply avoid international obligations by failing to sign treaty commitments. Others accept commitments but fail to live up to them. A third group accepts commitments and achieves compliance. Finally, a fourth group surpasses the explicitly required obligations. Effective institutions nudge countries further along this continuum of commitment and compliance.³⁸

5.1 The United States' Case

United States have been hostile to international environmental protection policies. For instance, the Paris Agreement was most comprehensive effort yet to address climate change. Nonetheless, the Trump Administration has renounced Paris Agreement, leaving the United States once again isolated globally with respect to fighting climate change.³⁹

More than any other country, the United States is responsible for the existing gulf between Rio's rhetoric of international environmental consciousness and the post-Rio environmental reality. Not only is the U.S. the world's only remaining economic and political superpower, it is also the largest polluter and the largest user of most important resources.

³⁷ D. Hunter, et al. International Environmental Law and Policy (Foundation Press, 2013) p.23.

³⁸ Ibid., p.25

³⁹ D. Bodansky, *The Art and Craft of International Environmental Law*, (Harvard University Press, 2009) p. 121

Although the United States is often in the vanguard in recognizing global environmental threats and in calling for a multilateral response, it often lags in changing its own behavior. Once considered the leader in environmental regulation, the United States now lags well behind Germany and other European countries in adopting new and innovative regulatory approaches such as ecological taxes, extended product responsibility, and the precautionary principle on avoiding probable environmental damage.⁴⁰

Although a leader in previous environmental conferences and negotiations, the United States (under then-President George Bush) almost single-handedly undermined the Earth Summit. Just days before the Rio summit opened, for example, the United States announced that it would not sign the Biodiversity Convention, despite provisionally adopting the draft version at the end of the negotiation session two weeks before. Instead, the United States emphasized the need to conserve the world's forests and offered what was considered a small, \$150-million aid package to protect forests in developing countries. Southern leaders immediately labeled this gesture as "greenwash," viewing U.S. support for forest conservation as a cynical effort to shift the focus from the North's responsibility to control industrial pollution to the South's responsibility to conserve forests as carbon sinks. Malaysia's Ambassador Ranji Sathia responded, "The [\$150 million] does not impress us. They are just trying to divert attention from their failing elsewhere—for example, in the watering down of the climate change convention and their refusal to sign the biodiversity treaty."⁴¹

5.2 The Mexico's Case

⁴⁰ n38, p. 25

⁴¹ P. M. Haas and T. Sungen, "The Evolution of International Environmental Law," in N. Choucri, ed., *Global Environmental Accords* (Cambridge, Mass.: MIT Press, forthcoming). P.17

At the beginning of 1986, SEDUE announced a set of 21 antipollution measures to be applied in Mexico City.⁴² Among these, the following were the most important:

- (a) 2,000 state-owned public service buses were converted to run on new, low-emission engines;
- (b) non-polluting urban electric transport was extended to include 4.7 km of new lines for underground trains and 116 km of new lines for tramways, trolley-buses, and light trains;
- (c) solid wastes were dumped in sanitary landfills and the old open-space dumps were covered;
- (d) a programme was begun gradually to substitute natural gas for oil as fuel in the thermoelectric generators in the basin;
- (e) the metropolitan zone of Mexico City was supplied with low-lead gasoline in 1986;
- (f) a programme was established gradually to incorporate anti-pollution devices in new automobiles,⁴³
- (g) Emission of atmospheric pollutants was to be controlled in service facilities such as public baths, dry-cleaning shops, and laundries. These places frequently did not comply with technical standards owing to their old equipment and a notorious lack of maintenance.
- (h) Industries in the basin were to be inspected regularly and systematically in order to verify the correct functioning of their pollution-monitoring and emission-control equipment. The use of this type of equipment became mandatory for all industries.

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⁴² Ibid., p.20.

⁴³ Ibid.

- (i) Checking vehicular exhaust emissions every six months became mandatory in late 1989, for both official and private vehicles. From 1991 onwards, the regulation was changed to compulsory verification every six months for heavy-use vehicles only and yearly for all other vehicles.
- (j) The use of each car was banned one day of the week, according to the numbers on the licence plate. The programme, initiated in the 1989-1990 winter, was aimed at reducing the circulation of vehicles to approximately 500,000 cars on average during working days. Currently, it is still in force, although some people have tried to outwit the ban by purchasing second, or even third, vehicles (often older heavy polluters).⁴⁴
- (k) The levels of lead in gasoline were to decrease even more than in 1986, and in 1991 unleaded gasoline was introduced to the basin and the use of catalytic converters became obligatory in all new cars. The lower levels of lead, however, increased the amount of unburnt oil residues, which in turn increased the ozone formed in the air of the city during daylight hours.
- (l) The two thermoelectric generating plants that work in the basin of Mexico increased their consumption of natural gas as a substitute for oil.⁴⁵

5.3 Nigeria's Case

Some areas of concern in the Nigeria's case relating to environmental degradation and pollution include spillage, gas flaring, and solid mineral mining deterioration of the land. Others

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⁴⁴ Birnie, Patricia, and Alan Boyle. International Law and the Environment. 3rd ed. Oxford University Press, 2009. Bilateral disputes involving for example Slovakia's proposed construction of a dam on the Danube River near Hungary, Uruguay's authorization of two pulp mills that threatened to pollute Argentina, and Australia's challenge of Japanese whaling operations, highlight the importance of international law in peacefully resolving environmental conflicts between countries. Such disputes are resolved at the International Court of Justice, the UN Law of the Sea Tribunal or other international tribunals. ⁴⁵ Ibid.

include industrial waste negative disposal, deforestation, abandoned road construction projects causing further deterioration of the land, grazing activities, etc.

The response made to protect the environment include the Ogoni clean-up programme, proposal to build and operate Modula Refineries, amnesty programme for the Niger Delta Militants and establishment of the Niger Delta Commission. However, the response is very weak with less determination and commitment. For instance, effort to pass the Petroleum Bill into law which will control gas flaring by Oil mining industries and other means to protect the environment is still a utopia in decades.⁴⁶

6.0 CHALLENGES

Despite these measures, atmospheric pollution has remained at critical levels. Many factors have contributed to the sluggish response of official environmental policy. First, a marked delay has occurred in the application of the technical norms that regulate atmospheric emissions. Although the atmospheric problem was clear to many experts by the mid-1970s, strict government control started only when air pollution was overwhelming in its magnitude, and substantial lag time separates the enforcement of control and the observation of environmental impacts.

⁴⁶ M. V. Kerkhof, *The Trail Smelter Case Re-examined* (Oxford University Press, 2011) p.2 (United States v. Canada, 1938) *Case* Brief - Rule of Law: The duty to protect other states against harmful acts by individuals. The **Trail Smelter** dispute was a trans-boundary pollution case involving the federal governments of both Canada and the United States, which eventually contributed to establishing the harm principle in the environmental law of transboundary pollution. One ton of sulfur is the equivalent to two tons of sulfur dioxide (**Trail Smelter Arbitration**, 1938). In response to this increase in production and subsequent increase in smoke, the stacks on the plants were raised to over 409 feet in an effort to diffuse emissions in 1925 and 1927 (Scheffer, 1955).

Most international disputes on environment are related to shared resources like rivers and lakes, and they lead to diplomatic tensions that either resulted in an international legal case or were settled through relatively narrow regional or bilateral treaties. For instance, the *Trail Smelter Arbitration*, where Canada was held responsible for air pollution entering the United States.

Second, the political will to apply continuous and strict antipollution measures has been weak in relation to the economic interests of the main polluting industries. Such is the case of the automobile industry, which for years avoided the use of anti-pollution devices in new models, and of the industrial sector in Mexico City, which for many years avoided the installation of emission controls. Industries have enjoyed the protection of favourable treatment from government officers who did not wish to drive large companies away and found an excuse for not including industrial emissions in the financial costs of pollution control. It was not until the 1990-1991 winter that many industries faced formal closure and large penalties for not complying with the environmental legislation.⁴⁷

Lastly, for many years, government agencies consistently minimized the real danger posed by air pollution. They not only played down the real consequences of air pollution, but they used indices measuring air quality in a way that, by averaging over time and over different stations, hid local peaks in the concentration of pollutants. This self-deluding attitude was shared by many public officers who really believed that the problem was not so serious as some scientists and civil organizations contended.

7.0 WAY-FORWARD TO EFFECTIVE INTERNATIONAL RESPONSE TO CLIMATE CHANGE AND ENVIRONMENTAL POLICIES

7.1 Enhancing the Contractual Environment

The degree of concern that a government expresses about an international environmental problem reflects not only its view on the issues but also its calculations of both the feasibility of such action and the action's costs and benefits. Thus, concern is partly a function of the other two crucial factors: the nature of the contractual environment and a state's capacity. If levels of

⁴⁷ P. M. Haas, Saving the Mediterranean: The Politics of International Environmental Cooperation (New York: Columbia University Press, 1990), p.7.

effective communication among states and their ability to make credible commitments to each other are low, it may seem futile to raise new issues for the international agenda.⁴⁸ Therefore, contractual environmental policies between States can be maintained, sustainable, and properly monitored to ameliorate the looming environmental issues. Also, regulatory rules specifying mutual restraints should be the dominant focus of bargaining.

7.2 Operating through Regulatory Policies

Regulations do more than regulate. They help generate political concern, they set normative standards, they communicate intensity of preferences, and they legitimize financial transfers that might otherwise be termed bribes or even blackmail. This dual role of regulatory rules explains why so many international institutional responses to environmental problems have been regulatory in nature.⁴⁹ Apart from promulgation and implementation of environmental policies, norms, rules, and principles, there are still more to be done before and after this.

According to Levy, Haas, and Keohane, "Governments must also have the technical capacity to negotiate meaningful regulations that take into account both environmental realities and the political and economic incentives facing governments, firms, and other organizations that affect environmental quality."⁵⁰ After the policy promulgation, the burden of action basically shifts from solely international response to more of national response, though this is often inhibited by low political, legal, and administrative capacity. However, international regulations create an external demand for effective domestic action, and international coalitions, including NGOs.

⁴⁸ M. A. Levy, P. M. Haas, and R. O. Keohane, *Institutions for the Earth: Promoting International Environmental Protection* (New York: Random House, 1967), p.19

⁴⁹ Ibid., p.21

⁵⁰ Ibid., 30.

7.3 Monitoring is Essential

Because systematic monitoring of oil tankers at sea is impractical, controls on vesselsource pollution only became effective when equipment regulations, which could easily be monitored, replaced discharge rules as the principal means of regulation. Prior to the adoption of exclusive economic zones in the late 1970s, the ability of fishing fleets to escape detection created a climate of distrust that contributed to the failure of collective efforts to manage fish stocks.⁵¹

7.4 Integrating Human Rights and the Environment

The human right to a healthy environment is recognized, however, the relationship between environmental protection and human rights is a natural one.⁵² This is because Human rights laws may also present important opportunities for gaining better environmental protection. Leading environmental activists such as Chico Mendes and Ken Saro Wiwa have been killed and many others have been beaten for raising their voices. In many of these instances, the international human rights movement offers the best hope for protection from internal oppression.⁵³

7.5 Developing Minimum and Uniform International Administrative Procedures that Move from Principles to Rules

To switch from principles to rules, institutions must create a dynamic process of negotiation in which interests are discussed, possibilities for joint regulations are explored, and reasons for concern are investigated. Such a process serves as a focal point for action and permits

⁵¹ The International Convention on the Prevention of Pollution from Ships (MARPOL).

⁵² "United Nations Department of International Economic and Social Affairs", *World Population Prospects* (New YorkUN, 1994) p.5.

⁵³ Ibid., p. 7

the various coalition-building processes already discussed to develop at their own rates. Such a process also puts the elements of an effective institutional response into place piece by piece.

Many of the mechanisms that facilitate adoption of effective rules and national implementation of joint rules are time consuming to create. A major advantage of an ongoing negotiation process that strives to move from principles to rules is that it helps lay the groundwork for effective rulemaking. When major crises occur, an institution that has laid the groundwork with facilitating mechanisms will be much better positioned to seize the opportunity to lock in strong rules than is an institution that is waiting to put together a comprehensive package. The discovery of the ozone hole in 1987, for example, would not have galvanized a rapid response if it were not for the procedural mechanisms established by the *Vienna Convention* and *Montreal Protocol*.⁵⁴

An evaluation of policy measures must be sensitive to the political process of moving from principles to rules, as well as to issues of economic efficiency and ethics. For example, it is easy to be critical of across-the-board percentage reductions, which are commonly employed at an early stage in international environmental regulation. Such cuts are unlikely to be economically efficient because they do not target the worst polluters, who could attain the greatest improvements at the lowest cost. Also, because such cuts discriminate against governments that have already taken environmentally sound measures, they are not fair. And expectations of similar across-the-board cuts in the future could lead governments to refrain from taking early unilateral action to reduce environmental damage. Yet the political virtue of such across-the-board cuts is that the severity of required reductions is likely to correlate with the intensity of domestic support for environmental actions. In other words, the political support for pollution control is greatest in those countries that have reduced emissions most. Thus, for all

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their drawbacks, across-the-board cuts may facilitate building initial coalitions that support policy regulation, which more efficient or fair rules could foreclose.⁵⁵

7.6 **Contemporary Greenhouse-Gas Negotiations**

Some of the research team's findings are relevant to the current international negotiations on greenhouse gases. These negotiations can be traced back to the concern over greenhouse-gas emissions and global climate change first expressed at the 1979 World Climate Conference. In an October 1985 meeting in Villach, Austria, scientists from UNEP, the World Meteorological Organization (WMO), and the International Council of Scientific Unions concluded that the threat of a greenhouse warming was real and called for cuts in carbon dioxide emissions.⁵⁶

The conferees established the Advisory Group on Greenhouse Gases composed of two representatives from each of the three organizations. The advisory group organized two scientific and expert workshops in 1987 that drafted reports on the extent of the problem of global warming and called for an "intergovernmental mechanism" in response. Three working groups submitted reports to the 1988 Toronto conference on the changing atmosphere and the implications for global security, which called for 20-percent reductions in overall carbon dioxide emissions by the year 2000.⁵⁷

7.7 **Developing Effective International Environmental Institutions**

The international community's ability to preserve the quality of the planet for future generations depends upon international cooperation. Successful cooperation, in turn, requires effective international institutions to guide international behavior toward sustainable

⁵⁵ (n50) p.13 ⁵⁶ lbid., p.13

⁵⁷ Ibid., p.14

development contributing to national policy responses that directly control sources of environmental degradation.⁵⁸

Institutions can also serve to promote concern among governments, enhance the contractual environment by providing negotiating forums and creating ways to disseminate information, and build national political and administrative capacity. International institutions can as well serve as magnifiers of public pressure when they foster competition among governments to be more pro-environmental, for instance the Baltic Sea and North Sea Ministerial Conferences in further ozone negotiations and in acid rain, referred to as the "tote-board diplomacy"⁵⁹ The Convention on Long Range Trans-boundary Air Pollution has also magnified environmental issues at the international level.

7.8 Emphasizing the Individual and Groups to Protect the Global Environment (through NGOs)

NGOs or civil society organizations typically play an active role, using information from formal international meetings and public statements made by governmental officials to embarrass and criticize a country's national policy.⁶⁰

7.9 Other Measures for Way-forward

- (a) Developing a Binding Framework of Environmental Principles
- (b) Getting the Rules Right Regarding the Water Shortages Climate Regime
- (c) Imposing Liability and Providing Compensation
- (d) Emphasizing Environmental Restoration

⁵⁸ M. A. Levy, P. M. Haas, and R. O. Keohane (Eds.), Institutions for the Earth: Sources of Effective International Environmental Protection (Cambridge, Mass.: MIT Press, 2020) p.34

⁵⁹ Hunter, David, et al. International Environmental Law and Policy. Foundation Press, 2013

⁶⁰ United Nations Department of International Economic and Social Affairs, World Population Prospects (New York: UN 1994).

- (e) Addressing Persistent Chemicals
- (f) Water Shortages
- (g) Consumption Levels
- (h) Establishing International Environmental Institutions
- (i) Increasing Governmental Concern
- (j) Integrating Environmental Protection into the Global Economy
- (k) Respecting Global Environment Agreements
- (I) Greening Technology Transfers
- (m) Democratizing International Environmental Law

8.0 RECOMMENDATIONS AND CONCLUSION

From the challenges and the way-forward analysed above, this seminar work settles with the following recommendations:

- 1. There should be effective institutions to harness states' commitment and compliance to international environmental protection policies.
- 2. International Response should be towards having some binding effects on states.
- 3. International communities should device a strategy of making United States honour international environmental policies for environmental protection, like the *Convention on Biological Diversity* and the *UN Framework Convention on Climate Change*.
- 4. International communities should assist the developing countries like Nigeria to overcome environmental pollution challenges like the gas flaring in the Niger Delta, oil spillage, etc.
- 5. States should not just sign but should proceed to rectify and domesticate international policies on environmental protection.

It is to be noted that not all environmental threats trigger international (as opposed to solely national or local) response. For countries to sacrifice their autonomy, some advantage must be gained in addressing the problem collectively. Typically, countries turn to international cooperation where (1) the environmental impacts are transboundary (such as pollution into the Great Lakes) or global (such as climate change); (2) some international activity contributes to environmental harm, for example, the international trade in elephant ivory or the killing of whales; or (3) international coordination of financial or technical support can catalyze action (for example, for the global conservation of biological diversity). In these circumstances, international cooperation—whether in the form of a binding treaty or a non-binding agreement—is necessary for an effective response to the environmental challenge.



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