

**ROLE OF DOMESTIC CONSTRAINTS IN FOREIGN POLICY  
DECISION MAKING ON THE INTERNATIONAL  
ENVIRONMENTAL ISSUES: A COMPARATIVE  
STUDY OF THE INDIAN AND THE US STAND  
ON THE KYOTO PROTOCOL**

*Dissertation submitted to Jawaharlal Nehru University in partial fulfilment of  
the requirement for the award of the degree of*

**MASTER OF PHILOSOPHY**

**SHAILESH KUMAR CHOURASIA**



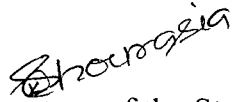
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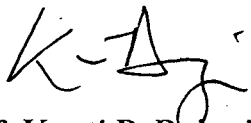
## CERTIFICATE

Certified that dissertation entitled "**Role of Domestic Constraints in Foreign Policy Decision Making on the International Environmental Issues: A Comparative Study of the Indian and the US Stand on the Kyoto Protocol**" submitted by me in partial fulfilment of the requirements for the award of the degree of MASTER OF PHILOSOPHY has not been previously submitted for any other degree of this or any other University and is my own work.

  
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*Dedicated to*

*The Departed Soul of*

*My Mother*

*Late Lakshmi Devi*

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## INTRODUCTION

The foreign policy decision making of a country on any issue is influenced by the internal as well as the external environment. Also, there exists a linkage between the internal and the external environment. The Internal environment or the domestic debate among actors and groups both, inside and outside the government, influences foreign policy especially where the issue being debated internationally has domestic consequences.<sup>1</sup> Global environmental issues come under this category. Here, a global environmental issue is taken to mean environmental pollution. There are pollutants that, irrespective of their place of origin and territorial boundaries, harm the whole planet. The need for common global efforts to mitigate pollution has long been recognized. In spite of some degree of consensus among states, nothing impressive has been done for the mitigation of environmental pollution. Indian and US policies on environmental issues have been influenced by the internal politics of both the countries.

Recently, the United States has rejected its commitment to the provisions of the Kyoto Protocol, which is concerned with decreasing the emission levels of greenhouse gases. On the other hand, India has ratified the Kyoto Protocol and asserted its firm commitment to the Protocol.

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<sup>1</sup> Neil E. Harrison, "From Inside Out: Domestic Influences on Global Environmental Issues", in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p. 91.

Former US President Bill Clinton signed the Kyoto Protocol and played a leading role in the Kyoto negotiations. However, his decision was subject to a strong domestic debate. The policy was criticized by business groups who were expected to be affected by the Kyoto regulations. It did not even get the support of Congress and the Byrd-Hagel resolution was passed in the Senate against the Protocol. Although various environmental groups extended their support to the Protocol, their voice was ignored by opponent groups. Ultimately, the new US President George W. Bush took his country out of the Protocol. On the other hand, the Indian domestic debate has been supportive of it.

This study hypothesizes that internal politics plays a vital role in the shaping of a country's policy on international environmental issues. For this purpose, it investigates the domestic constraints that have influenced the foreign policies of the US and India on the Protocol. More specifically, it tries to make a comparative analysis of the US and Indian domestic constraints that have played a role in framing their respective policies.

The study is divided into four chapters and a conclusion. The first chapter deals with the history of international cooperation on global environmental issues, basically in the post Second World War period. With the establishment of the United Nations, environmental movement went global. Starting from the UN Conservation Conference of 1949, this chapter looks into the major conferences and agreements concluded under the aegis of the United Nations. They are: The Biosphere Conference (1968), the Stockholm Conference (1972), the Montreal Protocol (1987), the

Brundtland Report (1987), the Rio de Janeiro Earth Summit (1992) and the Kyoto Protocol. The main concern of this chapter is the analysis of the gradual growth of international cooperation and the related provisions.

The second chapter is concerned with the US domestic debate on the Kyoto Protocol. It describes the views of proponents and opponents under various subheadings. The effort here is to highlight various issues which have attracted the greatest attention of the opponent groups and which are suspected to affect the US economy and society

The third chapter deals with the Indian domestic debate on the environment and especially on the Kyoto Protocol. Although debate has been divided into opponents and proponents, the chapter basically presents a critique of the Kyoto Protocol which Indian analysts think has several loopholes. The Chapter also describes the Indian debate on internal developmental issues along with environmental policies.

The last chapter presents a comparative analysis of Indian and US domestic constraints and debate over the Kyoto Protocol. I have tried here to analyze some of the commonalities between India and the US on the Protocol

The concluding chapter reaffirms that domestic constraints have played a vital role in the shaping of the environmental policies of India as well as the US. The differences in their approach to the Kyoto Protocol basically emanate from the nature of the domestic debates in the two countries.



## CHAPTER – 1

### INTERNATIONAL COOPERATION ON GLOBAL ENVIRONMENTAL ISSUES: A HISTORY OF MAJOR AGREEMENTS

The very nature of environmental issues makes it virtually obligatory on the international community to co-operate and come together so as to preserve the ecosystem. The ecosystem is an integrated whole which cannot be divided along the territorial boundaries of the nation state system. Irrespective of where the disturbances to this ecosystem occur, the whole globe is likely to be disturbed by any such activities, whether it is deforestation in the Amazon Basin, the emission of greenhouse gases by the developed industrialized countries, fossil fuel use in Third World countries, or the use of chlorofluorocarbons in any part of the world. Directly or indirectly all these disturb the ecosystem, creating hazards like global warming, depletion of the ozone layer, and acid rain. “It is now understood that coal-fired power plants in Beijing contribute not only to local air pollution but also to acid rain in Japan as well as global climate change”<sup>1</sup>.

Although some communities are more vulnerable to these changes, no community can escape the bad effects in the long run. Immediate effects are felt in small island communities due to global warming. Global warming has led to the over-melting of glaciers and the raising of the sea

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<sup>1</sup> Elizabeth Economy and Miranda A. Schreuss, “Domestic and International Linkages in Environmental Politics”, in Elizabeth Economy and Miranda A. Schreuss, eds., *The Internationalization of Environmental Protection* (London: Cambridge University Press, 1997), p. 5.

level. “The global average sea level has risen by 10 to 20 cm over the past 100 years. The rate of increase has been 1-2 mm per year, some 10 times faster than the rate observed for the previous 3000 years. Projections show that sea levels will rise another 9 to 88 cm by the year 2100”.<sup>2</sup> If the trend continues many small islands like Tuvalu and Maldives will vanish from the world map. In his foreword to the book, *Greenhouse Gas Emissions* by Michael See, the President of Maldives writes that “the average height of our islands is less than six feet above the sea level and falling as I write this foreword.... It could very well end in the extinction of a unique civilization.”<sup>3</sup>

On the other hand, the whole world is going to face uncertain climatic changes leading to drought and flood. “Regional rain patterns may change. At the global level, the evapo-transpiration cycle is expected to speed up. It would rain more, but the rain would evaporate faster, leaving soils drier during critical parts of the growing season”.<sup>4</sup> Depletion of the ozone layer will allow ultraviolet rays coming from the sun entering the atmosphere. Ultraviolet rays will take human lives, irrespective of their race and origin, by spreading various diseases like skin cancer. Similarly, the acid content of acid rain will harm living beings as well as historical

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<sup>2</sup> *Climate Change: Information Kit* (Bonn: Climate Change Secretariat, 2001), p. 11.

<sup>3</sup> Michael See, *Greenhouse Gas Emissions: Global Business Aspects* (Berlin: Springer-Verlag Press, 2001).

<sup>4</sup> *Understanding Climate Change: A Beginner's Guide to the UN Framework Convention and its Kyoto Protocol* (Geneva: Information's Unit for Conventions, 1999).

monuments. However, the intensity of acid rain is greater in more industrialized areas.

The need for common global efforts has long been recognized. There has almost emerged a consensus among nations, irrespective of their power and position in world politics, that environmental pollution needs immediate attention and that there is a need for international co-operation. However, problems arise when we talk about the precise steps to be taken against pollution. Many times, these steps come in confrontation with the immediate national interests of the nations.

There has emerged a sort of consciousness that human dominance over nature cannot be very productive. There is a need to properly locate the place of human beings in the biosphere and to make them disciplined towards nature. Lynton Caldwell calls it the second Copernican revolution. "The first revolution removed the earth from the centre of the universe, the second removes humanity from the centre of the biosphere."<sup>5</sup>

This transformation in social thought led to action against environmental pollution, initially at the national and regional levels and, later on, at the international level. In the initial phase, private citizens persuaded their governments to take action for the preservation of biodiversity. Such groups were mainly concentrated in the developed countries of the West. The International Congress, a non-governmental agency, played the foremost role in initiating international co-operation.

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<sup>5</sup> Lynton K. Caldwell, *International Environmental Policy: Emergence and Dimensions* (New Delhi: Affiliated East-West Press, 1991), p. 3.

Several other commissions came up, and a number of treaties were made related to the conservation of forest, water, wildlife, marine mammals, fish and so on.

The establishment of the United Nations provided a global forum to this movement. After the Second World War, American presidents Franklin D. Roosevelt and Harry S. Truman showed a lot of enthusiasm to convene conferences under the United Nations for the conservation and utilization of resources. In fact, it was the idea of Roosevelt, taken up by Truman, that the United Nations Economic and Social Council should convene the UN Conservation Conference of 1949.<sup>6</sup> In the 1960's, Rachel Carson's book, *Silent Spring*, and Garrett Harding's article, "The Tragedy of the Commons", played important roles in galvanizing individual countries and the international community into action. "Thirty years prior to the signing of 'Agenda 21', Rachel Carson, in her somber and epic book *Silent Spring* produced one of the most powerful and eloquent warnings to humanity of the consequences of its actions".<sup>7</sup>

Starting from the UN Conservation Conference of 1949, various conferences have been concluded under the aegis of the United Nations. Some of the most important ones among them are as follows:

- The Biosphere Conference (1968)
- The Stockholm Conference (1972)

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<sup>6</sup> Ibid., p. 42.

<sup>7</sup> Daniel Sitarz, ed., *Agenda 21: the Earth Summit Strategy to Save Our Planet* (Colorado: Earth Press, 1993), p. 3.

- The Brundtland Report (1987)
- The Montreal Protocol (1987)
- The Rio de Janeiro Earth Summit (1992)
- The Convention on Climate Change and Biological Diversity (1992)
- The Kyoto Protocol (1997)

Apart from these, there are hundreds of other bilateral, regional and global environmental agreements. “There are more than 900 legal instruments with environmental provisions among 33000 international agreements registered with the United Nations”.<sup>8</sup> Together these agreements have resulted in the rapid growth of international institutions dealing with environmental problems.

In spite of continuous attempts and the coming into existence of a number of environmental institutions, environmental issues did not get the primary attention of a world divided by the Cold War into two ideological blocks led by the United States and Soviet Union, respectively. In the post Cold War world, the Rio Earth Summit and the Kyoto Protocol have received great attention in world politics, and the debate over environmental issues has been intensified. However, both agreements also face implementation problems. There has emerged a North-South divide. Differences are present even within the developed world:

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<sup>8</sup> Edith Brown Weiss, “The Emerging Structure of International Environmental Laws” in Norman J. Vig and Regina S. Axelrod, eds., *The Global Environment: Institutions, Law and Policy* (Washington, D.C.: Congressional Quarterly Press, 1999), pp. 110-111.

Developing countries are unanimous in their view that the developed countries should bear the burden of managing the climate change problem, because they have the lion's share of the resources with which to do it. Global environmental agreements should contain provisions for technology transfer on noncommercial terms. But, these demands have met systematic resistance from developed countries, led by the United States.<sup>9</sup>

On the other hand, while the United States has rejected the Kyoto Protocol, the European Union is making a serious effort to get it implemented.

### **The United Nations Conservation Conference (1949)**

Held at Lake Success, New York, from August 21 to September 6, 1949, the United Nations Conservation Conference was the first of its kind convened by the United Nations. It was co-ordinated by the United Nations Economic and Social Council (ECOSOC). The conference was limited to the exchange of experiences in the techniques of conservation and utilization of resources. It hardly said anything about international co-operation. The agenda of the conference was divided into various categories of resources like minerals, fuel and energy, water, forest and wild life. Though ecological knowledge was to be taken as a guide to action, it lacked the establishment of relationships among population, resources and environment.

In the course of the conference, the participants detected weaknesses and various progressive ideas came up beyond its agenda. Fairfield Osborn,

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<sup>9</sup> Gareth Porter and Janet Welsh Brown, *Global Environmental Politics: Dilemmas in World Politics* (San Francisco: Westview Press, 1991), p. 133.

President of the New York Zoological Society and the Conservation Foundation, was a forerunner among them. To him:

In the light of experience, and in these terms, conservation becomes a political and administrative problem, an educational, even a social, cultural and ethical problem. Therefore, it is not one with which the scientists or technologists can deal single-handed. Further, conservation in the sense that it implies the wide use and equitable distribution of the earth's resources offers a point of synthesis for international co-operation for which the world is waiting.<sup>10</sup>

The conference initiated a healthy debate over various issue and can be seen as a forerunner of the UNESCO sponsored Biosphere Conference in 1968.

### **The Biosphere Conference (1968)**

Held in Paris in September 1968, the Biosphere Conference of 1968 is considered to be a major advance towards the Stockholm Conference of 1972. This intergovernmental conference on the scientific basis for the rational use and conservation of the resources of the biosphere was attended by a number of international agencies and experts under the leadership of UNESCO. The conference, for the first time, marked the arrival of the "biosphere" concept as an object of international policy deliberations and recognized the relationship between man and the natural world.

One major advance at the conference was that it not only promoted exchange of views and experiences but also made twenty recommendations for future action by the participating governments and by the United Nations system. The final report of the conference assessed man-

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<sup>10</sup> Caldwell, op.cit., p. 43.

environment relationships and their political implications in the following words:

Although changes have been taking place for a long time, they seem to have reached a threshold recently that has made the public aware of them. This awareness is leading to concern, to the recognition that, to a large degree, man now has the capability and responsibility to determine and guide the future of his environment, and to the beginnings of national and international corrective action. It has become clear, however, that earnest and bold departures from the past will have to be taken nationally and internationally if significant progress is to be made.<sup>11</sup>

### **The Stockholm Conference (1972)**

The United Nations Conference on the Human Environment held in June 1972 in Stockholm (The Stockholm Conference) started a new beginning by placing the environment on the UN's agenda on a continuous basis. The emerging concept of collective responsibility towards the environment in the pre Stockholm era got political recognition in this conference. Kiss and Shelton say that "the watershed event in international environmental law was the Stockholm Conference on the Human Environment in 1972 which summed up the awkward conscience and marked the beginning of a truly ecological era".<sup>12</sup> The conferences tried to facilitate international action on environmental issues by linking national sovereignty and international interests. "In fact nation-states joined together their sovereignty and jurisdiction to resolve collectively issues that

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<sup>11</sup> Ibid, p. 45.

<sup>12</sup> Kiss and Shelton, ed., *Manual of European Environmental Law* (London: Grotius Publication. 1993), p. 11.



previously would have been definable only within the limits of particular national jurisdictions”.<sup>13</sup>

For the first time, the Stockholm Conference recognized the link between environment and development. The concept was advanced that environmental protection was an essential element of social and economic development. On development issues, the case of developing countries was also presented. Olof Palme, Prime Minister of Sweden, declared that each individual in the industrialized countries draws thirty times more heavily on the limited resources of the earth than his fellow man in the developing countries. These simple facts inevitably raise the question of equality, of more equal distribution between countries and within countries.<sup>14</sup>

Though both developed and developing countries agreed that pollution prevention was cheaper than cure, their approaches towards the conference were different.<sup>15</sup> The developed industrialized countries had in their mind environmental pollution problems. They agreed that environmental deterioration could threaten their citizen's health and well being. However, there was also a fear that more subtle and widespread effects could modify the global environment over a longer period at the cost of the whole of humanity. “They looked upon the rapidly swelling population of developing countries as an important driver of the coming

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<sup>13</sup> Caldwell, op.cit., p. 55.

<sup>14</sup> “What Happened at Stockholm– A Special Report”, *Science and Public Affairs*, (September 1972), p. 44.

<sup>15</sup> Martin W. Holdgate, Mohammad Kassas and Gilbert F. White, eds., *The World Environment 1972-1982: A Report by UNEP*, Natural Resource and Environment Series, Vol. 8 (Dublin: Tycooly International Publishing, 1982), p. 6.

environmental crisis”.<sup>16</sup> On the other hand, energy and resource consumption was not high in the developing countries, and even the industrial pollution problem was localized. Basically, they were facing severe poverty and related problems. Scarcity of financial resources and skills was an obstacle in the path of rapid change. They branded developed countries responsible for this misery. Indira Gandhi, the then prime minister of India, declared in the conference that “many of the advanced countries of today have reached their present affluence by their domination over other races and countries”.<sup>17</sup> Countries such as advocated the principle of equitable distribution.

Attended by one hundred and fourteen governments, the Stockholm Conference adopted a Declaration of Principles and an Action Plan. Under the Declaration of Principles, twenty-six principles were declared in the form of an international code of conduct. These principles conferred a responsibility on the nations and the peoples of the world for the preservation and enhancement of the human environment. “The declaration was not intended to make legally binding provisions, but to be ‘inspirational’, to put on record the essential arguments of environmentalism, and to act as a preface to the principles, outlining broad

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<sup>16</sup> Marvin S. Soron, “Global Institutions and the Environment: An Evolution any Perspective”, in Norman J. Vig and Regina S. Axelrod, eds., *The Global Environment: Institution, Law and Policy* (Washington, D.C. : Congressional Quarterly Press, 1999), p. 32.

<sup>17</sup> Caldwell, op.cit., p. 57.

goals and objectives".<sup>18</sup> These principles can be broken down into the following five groups:

- Natural resources should be conserved, the earth's capacity to produce renewable resources should be maintained and non-renewal resources should be shared.
- Developmental and environmental concern should go together, and less developed countries should be given every assistance and incentive to promote rational environmental management.
- Each state should establish its own standards of environmental management and exploit resources as it wished, but should not endanger other states.
- Pollution should not exceed the capacity of the environment to clean itself, and marine pollution should be prevented.
- Science, technology, education and research should all be used to promote environmental protection.<sup>19</sup>

### **The Action Plan**

The Stockholm Conference produced an elaborate action plan for the human environment. The salient feature of the conference was the establishment of the United Nations Environment Programme (UNEP) to embrace all activities undertaken within the United Nations system related

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<sup>18</sup> John McCormick, *The Global Environmental Movement* (New York: John Wiley & Sons, 1995), p. 126.

<sup>19</sup> *Ibid.*, p. 126.

to the environment. The UNEP was charged with catalyzing and coordinating environmental activities and programmes within international organizations and member states.

To implement the recommendations of the Stockholm Conference for a United Nations Environment Programme, the United Nations General Assembly on December 15, 1972 established the necessary institutional and financial arrangements through a resolution. It provided a Governing Council, an Environmental Secretariat, a voluntary Environment Fund and an Environmental Co-ordination Board.

Consisting of 58 nations, the Governing Council was to be the nodal agency. It met annually and determined the further course of action. The first three sessions of 1973, 1974 and 1975 set the course of UNEP up to the present date. One hundred and nine recommendations included in the action plan were referred to the Governing Council for international action. The recommendations in the plan were grouped into three categories:

- Environmental Assessment
- Environmental Management
- Supporting Measures <sup>20</sup>

The environmental or earth watch functions were related to research, monitoring, information exchange, evaluation and review of environmental

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<sup>20</sup> C.V. Rajashekara, ed., *Critical Issues in Environmental Management*, Global Environmental Series, Vol. V (New Delhi: Discovery Publishing House, 1992), p. 1.

environmental situations the world over. A network was proposed so as to spread knowledge to governments on different aspects of the environment. This network would help the bridging of knowledge gaps, especially in the developing countries. It would promote information gathering, research work and, finally, proper evaluation.

Environmental management functions concerned the development of comprehensive planning and the protection and enhancement of the environment for future generations. Priority was given to the protection of oceans and seas of the world against pollution.

The third area, namely, supporting measures related to the proper functioning in the first two areas. The first component of supporting measures was education, training and public information so as to produce specialists, multidisciplinary professionals and technical personnel needed in the programme. Other components were organizational arrangements and financial assistance.

With the help of this institutional setup, the UNEP has been functioning very well. It is considered as the best mechanism set up by the Stockholm Conference. "The most tangible outcome of Stockholm was the creation of the United Nations Environment Programme. It had limitations and deficiencies, but it was probably the best form of institution possible under the circumstances, and it became the focus of a new interest in global responses to global problems".<sup>21</sup>

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<sup>21</sup> McCormick, *op. cit.*, p. 129.

## **The Brundtland Report (1987)**

The formation of the Brundtland Commission and the submission of its report, *Our Common Future*, to the United Nations General Assembly added another chapter to the ongoing efforts in the preservation of the environment. "It provided the intellectual framework for the conference held in Rio de Janeiro in June 1992, on the twentieth anniversary of the landmark Stockholm Conference".<sup>22</sup> While the Stockholm Conference had recognized the links between environment and development, the Brundtland Commission came up with the concept of "Sustainable Development". It initiated a debate on development policies and practices in developing as well as industrialized countries. The report was inspired by the aspirations of the South for economic development and equity. The countries from the Southern hemisphere were frustrated with the slow pace of economic development and were demanding a New International Economic Order.

In such a situation, in 1983, the UN General Assembly passed a resolution to form an independent World Commission on Environment and Development (WCED) to propose a long-term environmental strategy for achieving sustainable development by the year 2000. The result was the setting up of a commission chaired by the Norwegian Prime Minister, Gro Harlem Brundtland. The commission constituted twenty-one other members coming from different geographical regions.

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<sup>22</sup> Soron, op. cit., p. 33.

The commission published the report, *Our Common Future*. In place of mere economic growth, the report urged the world to follow a new development path, with one eye on the environment. The report argued that “environmental priorities could not be achieved without at the same time reducing poverty through sustainable economic growth in the developing countries and addressing inequities between rich and poor countries in the consumption of the planet’s limited resources”.<sup>23</sup> The report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>24</sup> The report reached the following conclusion:

- The present development trends leave increasing numbers of people poor and vulnerable, while at the same time degrading the environment.
- Poverty is a major cause and effect of global environmental problems and therefore it is futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality.
- A new pattern of development was required, one that sustained human progress for the entire planet into the distant future.

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<sup>23</sup> Ibid., p. 33.

<sup>24</sup> *World Commission on Environment and Development: Our Common Future* (New York: Oxford University Press, 1987), p. 43.

Sustainable development should be a goal not just for the developing nations but also for the industrialized nations as well.<sup>25</sup>

### **Negotiations on the Ozone Layer Depletion**

The Vienna Convention and the Montreal Protocol are the beginning of negotiations on environmental issues related to the depletion of the ozone layer. These two agreements deal with the protection and restoration of the layer:

The Vienna Convention is a framework agreement aimed at formalizing the ongoing process of international co-operation and research on ozone depletion and providing a more certain scientific basis for specific regulations needed to protect the ozone layer. The Montreal Protocol contains detailed international standards governing the production and consumption of ozone depleting chemicals based on continuing scientific evaluations under the Vienna Convention.<sup>26</sup>

The silver lining was drawn by the findings of Sherwood Rowland and Mario Molina of the University of California in 1975. They pointed out that the chlorofluorocarbons widely used in homes and industries were endangering the ozone layer. The world community realized the intensity of danger. However, industrialists and especially chlorofluorocarbon (CFC) and aerosol manufacturers protested the vagueness of the findings. The findings were further substantiated by the report of the American National

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<sup>25</sup> R. A. Malviya, "Sustainable Development and Environment: Emerging Trends and Issues". *Indian Journal of International Law*, Vol. 36, No. 4, (October – December 1996), p. 57.

<sup>26</sup> *World Commission on Environment and Development: Our Common Future* (New York: Oxford University Press, 1987), p. 43.



Academy of Science (1976). It projected the nature of ozone layer depletion as a global problem and stated that “even if CFC emission levels were held at 1973 levels, there would be a long term reduction of between 6 to 7.5 percent in concentration of ozone in the stratosphere, leading to an increase of 12 to 15 percent in the amount of ultraviolet radiation reaching the surface of the earth”.<sup>27</sup>

In 1976, in the light of this scientific evidence, the United Nations Environment Programme Governing Council called a meeting of international governmental and nongovernmental organizations to review various aspects of the ozone layer. The meeting produced a World Plan of Action on the ozone layer. This World Plan included international research and monitoring of the situation under the Co-ordination Committee of the UNEP. The Co-ordination Committee consisted of various UN bodies, specialized agencies, international, regional, intergovernmental and nongovernmental organizations along with various scientific institutions.

On the basis of scientific information accumulated by the committee, the UNEP established an ad hoc working group of legal and technical experts to work out a framework convention on the protection of the ozone layer. A plenipotentiary conference was scheduled to be convened in Vienna in 1985 for the adoption of an expected protocol.<sup>28</sup> The ad hoc working group met four times between January 1982 and March 1985.

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<sup>27</sup> Rosalind T. Barima and Laura B. Campbell, *Protecting the Ozone Layer Through Trade Measures: Reconciling the Trade Provisions of the Montreal Protocol and the Rules of the GATT* (Geneva: UNEP, 1994), p. 7.

<sup>28</sup> A person with full powers to act on behalf of his government.

However, no protocol could be drawn up for consideration at the Vienna Conference.

During the pre Vienna negotiations, at least three groups of countries emerged with different approaches. The West was divided into two factions, namely, the Toronto group and the European Community. The Toronto group consisting of the United States, Finland, Norway, Sweden and Australia, favoured a worldwide ban on the use of CFCs and aerosol propellants but opposed other CFC restrictions. On the other side, the European Community advocated eventual limits on total production but opposed cuts from current production levels. The third group, developing countries, was concerned about the potential of the convention to impose stipulations that might inhibit their own development.<sup>29</sup>

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### The Vienna Convention (March 1985)

Although until the start of the Vienna plenipotentiary conference in March 1985 nothing considerable had been achieved in the form of a protocol, a general acknowledgement emerged that agreements on the depletion of the ozone layer should not be delayed. This feeling was further strengthened by the announcement of Joe Ferman of the British Antarctic Survey that the ozone layer over the continent had been in sharp decline since the late 1970's.



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<sup>29</sup> Tolaba Mustafa K., *Global Environmental Diplomacy: Negotiating Environmental Agreements for the World 1973-1972* (Cambridge: The MIT Press, 1998), p. 59.

The conference was convened in Vienna in March 1985 under the aegis of the UNEP. Representatives of 43 nations attended the conference and adopted a convention to protect the ozone layer. The convention was opened for signature on March 22, 1985 and entered into force on September 22, 1988. It directs its signatories to take appropriate measures to protect human health and the environment from human activities that affect the ozone layer.<sup>30</sup> However, it does not prescribe any specific measures for the protection of the ozone layer.

The convention also established a framework for future protocols to control ozone-modifying substances. For this purpose, the UNEP Governing Council authorized its executive director to convene a diplomatic conference in 1987 to adopt such a protocol. This protocol came to be known as the Montreal Protocol.

### **The Montreal Protocol (1987)**

The Montreal Protocol signed in 1987, and amended by the Second, Fourth and Seventh meeting of the parties, is a major breakthrough towards the conservation of the ozone layer. It translated the Vienna Convention into a protocol. It was the result of various rounds of negotiations. The ongoing deadlock between different groups of nations was solved by hectic informal negotiations conducted by Tolba Mustafa, the executive director of the UNEP and Iwona Rummel Bulska, the chief of the Environmental Law

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<sup>30</sup> Rosalind T. Barima, *op.cit.*, p. 18.

and Institutions Unit of UNEP. The principal issues debated during the initial negotiations on the protocol included the following:

- The chemicals which were to be controlled
- Whether controls should be imposed on their production or on their consumption
- The timing and size of cutbacks
- Measures to restrict trade with non-parties
- The treatment of developing countries with low levels of CFC consumption<sup>31</sup>

On the basis of debate over these issues, various decisions were taken.

With respect to chemicals to be controlled, the protocol provided control on eight chemicals - five chlorofluorocarbons and three halons. CFCs and halons were kept in different baskets, and controls were imposed on each basket as a whole. The list was to be revised periodically. The second meeting of the parties held in London in 1990 added ten new chlorofluorocarbons, carbon tetrachloride and methyl chloroform in the list of controlled substances. Thirty-four hydro chlorofluorocarbons were also included as transitional substances. In the fourth meeting of parties in Copenhagen in 1992, methyl bromide was included in the list of controlled substances (Art 1 and Annex A, B, C & E).

After a debate it was decided that consumption levels should be controlled. This consumption level could be determined by the formula:

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<sup>31</sup> Ibid, p. 14.

$$\text{Consumption} = (\text{Production} + \text{Import}) - \text{Export}$$

However, the amount recycled and reused was not to be considered as production (Art 3). Also, starting from January 1, 1993, any export of controlled substance to non-parties was not to be considered as an export.

The protocol imposed an obligation on parties to freeze their consumption at 1986 levels. This was to be effective for a twelve-month period starting after seven months of the entry into force of the protocol. After that, a 20% reduction was planned from July 1, 1998. Halons were to be frozen at 1986 levels, three years after the entry into force of the protocol (Art 2).

The second meeting of the parties revised the targets and proposed a 50% reduction in CFCs by 1995, an 85% reduction by 1997 and a complete phase out by 2000 beyond the “calculated level of production”.<sup>32</sup> The targets were further revised in the fourth meeting. The following targets of reductions in consumption were proposed:

- 75% of CFCs from Jan 1, 1994
- 85% of carbon tetrachloride from January 1, 1995
- 50% of methyl chloroform from January 1, 1994
- A complete phase out of all three chemicals by January 1, 1996 and Halons by January 1, 1994

Regarding the trade of controlled substances, the protocol provided that within a year of entry into force, bulk imports of controlled substances

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<sup>32</sup> Production to meet basic domestic needs of the parties.

from non-parties would be banned. From January 1, 1993 exports to non-parties could be subtracted from a party's production in calculating its consumption level. However, imports from non-parties, who are in full compliance with the control measures of the protocol, would be permitted (Art 4).

Special provisions were made for the developing countries with very low consumption levels of CFCs. Developing countries were given a grace period of ten years where per capita consumption was within 0.3 kg. The Protocol also encouraged industrialized countries to provide technical and financial assistance to developing countries for alternative substances and new technologies (Art 5).

With respect to effectiveness, the Montreal Protocol is rated high. According to the 1993 report of the Technology and Economic Assessment Panel, "Most developed nations party to the protocol are well below the amounts authorized under the phase-out schedule. Governments and firms are able to move faster towards the phase out of ozone depletion substances because of the development of substitute substances and processes".<sup>33</sup> Tolba Mustafa, the executive director of the UNEP Governing Council assess the Montreal Protocol in the following words:

The feeling of triumph was general. This was the first truly global environmental treaty and moreover it dealt with an issue still shrouded in scientific uncertainties, one that posed a threat, not immediately, but in the future, one that potentially affected everyone on earth today and far into the future. It was a monument of collective action, a masterpiece of

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<sup>33</sup> Rosalind T. Barima, *op. cit.*, p. 47.

compromises. It had the advantages of ease of implementation, flexibility due to its mechanisms permitting adjustments to meet scientific, technological, and socio-economic changes, and the clearly applied principles of common but differentiated responsibility.<sup>34</sup>

### **Earth Summit (1992): The UN Conference on Environment and Development**

“The Earth Summit held in Rio de Janeiro in June 1992 marked an important milestone in awakening the world to the need for a development process that does-not jeopardize future generations”.<sup>35</sup> Held on the twentieth anniversary of the Stockholm Conference, the Rio Earth Summit was the largest assemblage of world leaders until that date. One hundred and sixteen heads of states along with around 10,000 delegates, 1400 non-governmental organizations and about 9000 journalists attended the summit.<sup>36</sup> The Brundtland Report had given sustainable development a central place in the summit. However, some more specific problems like global warming, threat to the ozone layer and biodiversity got top positions in the conference agenda. The summit provided a blueprint for sustainable development and a comprehensive action plan on environment, having well defined goals as well as a structure of responsibility for achieving these goals.

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<sup>34</sup> Tolaba Mustafa, op. cit., p. 73.

<sup>35</sup> Boutros Ghali, opening address to the United Nations General Assembly in September 1992. Cited in Joycee Quarrie, ed., *Earth Summit 1992: The UN Conference on Environment and Development* (London: The Regency Press, 1992), p. 7.

<sup>36</sup> *Global Environmental Outlook: Past, Present and Future Perspective* (London: UNEP, 2002). p. 15.

The genesis of the Rio Summit can be seen in the Brundtland Report. After finding a link between environment and development, the Brundtland Commission Report had argued that environmental protection should not be seen as an obstacle to growth. It could be taken as an integral and supportive element in that growth. The report realized the importance of an international conference and advocated a review to decide on future action. To that effect, in December 1987, the UN General Assembly passed a resolution agreeing to convene the conference, and the result was the UN Conference on Environment and Development (1992) in Rio de Janeiro. The preparatory meetings were held in Nairobi (August 1990), Geneva (March 1991), and New York (March 1992), during which a draft agenda was produced. The following are the seven major achievements of the summit:

- The Rio Declaration on Environment and Development: 27 Principles
- Agenda 21
- The United Nations Framework Convention on Climate Change (UNFCCC)
- The Convention on Biological Diversity (CBD)
- The Commission on Sustainable Development (CSD)
- Agreement to negotiate a World Desertification Convention



- The Statement of Principles for the sustainable management of forests. Rio Declaration (1992)<sup>37</sup>

With roots in the Stockholm Declaration of 1972, the Rio Declaration, containing 27 principles, outlined a series of rights and responsibilities assigned to the states, key sectors, societies and the people for their cooperation towards a global partnership and sustainable development. In fact, Rio is an extension of the Stockholm Declaration. Like the earlier declaration, it also takes into account the interests and needs of developing and least developed countries and follows the principle of equity. It provides that “the special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority”.<sup>38</sup> Further, it affirms the right to development: “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations”<sup>39</sup> Alleviation of poverty has been given priority, and states have been granted the sovereign right to exploit their own resources subject to their jurisdictions and such that it did not cause damage to the environment in areas beyond the limits of national jurisdiction.

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<sup>37</sup> Ibid, p. 15 - 16.

<sup>38</sup> Art 6, Rio Declaration on Environment and Development.

<sup>39</sup> Art 3, Rio Declaration on Environment and Development.

## Agenda 21

One of the most important outputs of the Earth Summit is Agenda 21. It is a broad action plan to move towards sustainable development into the 21<sup>st</sup> century. Spreading over 40 chapters under four sections, Agenda 21 is the most significant and influential non-binding instrument in the field of environment. It serves as a blueprint for environmental management in most regions of the world. However, it does not replace existing programmes and plans. It merely provides a global interdisciplinary framework for analyzing and proposing solutions to the problems of sustainable development. "Agenda 21 deals with most of the key environment and development problems that we are facing today or anticipating in the near future".<sup>40</sup> To overcome these problems, Agenda 21 advocates a true global partnership. The preamble of the Agenda reads:

We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystem on which we depend for our well being. However, integration of environment and development concerns and greater attention to them will lead to the fulfillment of basic needs, improved living standard for all, a better protected and managed ecosystem and a safer, more prosperous future. No nation can achieve this on its own; but together we can in a global partnership for sustainable development.<sup>41</sup>

Agenda 21 is non-binding in the sense, that it is neither a convention nor a treaty with legal force. It is not obligatory on any country.

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<sup>40</sup> *Global Environmental Outlook*, op. cit.; p. 16.

<sup>41</sup> *Agenda 21: Programme of Action for Sustainable Development* (New York: United Nations Department of Public Information, 1997), p. 5.

However, so far 182 countries have accepted it. The provisions in Agenda 21 can be divided into four main areas:

- Social and economic issues such as international cooperation to accelerate sustainable development, combating poverty, changing consumption patterns, demographic dynamics and sustainability and protecting and promoting human health.
- Conservation and management of resources for development such as protection of the atmosphere, combating deforestation, combating desertification and drought, promoting sustainable agriculture and rural development, conservation of biological diversity, protection of fresh water resources and the oceans and the sound management of toxic chemicals and hazardous wastes.
- Strengthening the role of major groups including women, children and youth, indigenous people and their communities, NGO's, workers and their trade unions, business and industry, the scientific and technological community, and farmers.
- Means of implementation including financial resources and mechanisms for the transfer of environmentally sound technology, promoting education, public awareness and trading international institutional arrangements, international legal instruments and mechanisms, and information of decision-making.<sup>42</sup>

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<sup>42</sup> *Global Environmental Outlook*, op.cit., p. 16.

## **United Nations Framework Convention on Climate Change (UNFCCC)**

Influenced by the evidence provided by the Intergovernmental Panel on Climate Change (IPCC), that climate change posed a real threat, governments at the Rio Summit signed the United Nations Framework Convention on Climate Change (UNFCCC), which entered into force in 1994. Governments who have ratified UNFCCC participate in an annual meeting to discuss and adopt policies on climate change. These meetings are designated as “Conference of Parties” (COP). Eight rounds of COP have already been held. The last one was held in New Delhi in October-November 2002.

“The primary goal of the UNFCCC is to stabilize greenhouse gas emissions at levels that will prevent dangerous anthropogenic interference with the global climate”.<sup>43</sup> The UNFCCC adopts the principle of common but differentiated responsibilities and, on that basis, the regulatory measures are adopted. This principle makes industrial countries more responsible for the emission of greenhouse gases. In this convention lie the roots of the Kyoto Protocol in which actual targets of emissions reductions were set.

## **The UN Convention on Biological Diversity (UNCBD)**

The first global agreement on the conservation and sustainable use of biodiversity was signed at the Rio Earth Summit and came into force in 1993. Biodiversity issues like habitat preservation, intellectual property rights, biodiversity and indigenous people’s rights have been addressed by

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<sup>43</sup> Ibid , p. 18.

the convention. The goals of the convention can be divided into the following three groups:

- The conservation of biological diversity
- The sustainable use of its components
- The fair and equitable sharing of the benefits from the use of genetic resources <sup>44</sup>

A supplementary agreement to the convention was adopted in January 2000 in the form of the Cartagena Protocol on Biodiversity. The Cartagena Protocol addresses the potential risks posed by cross border trade and accidental release of living genetically modified organisms.

### **United Nations Commission on Sustainable Development (UNCSD)**

The commission was established, on the recommendation of the Earth Summit, to support and encourage governments, business, industry and other non-governmental groups to bring about social and economic changes needed for environmentally-sustainable development worldwide.<sup>45</sup>

The Commission is made up of representatives of 53 countries elected from UN member states. Membership rotates among governments and is drawn equitably from each geographic region. The role of the commission can be summarized as below:

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<sup>44</sup> Ibid , p. 18.

<sup>45</sup> *Action 1996: United Nations Commission on Sustainable Development* (New York: UN Department of Public Information, 1997), p. 1.

- To review progress at the international, regional and national levels in the implementation of recommendations and commitments contained in Agenda 21, the Rio Declaration on Environment and Development.
- To elaborate policy guidance and options for future activities towards the achievement of sustainable development.
- To promote dialogue and build partnership for sustainable development with governments, within the international community and the major non-state groups.<sup>46</sup>

### **UN Convention to Combat Desertification (UNCCD)**

The UNCCD developed out of the process associated with the Rio Summit (1992). However, negotiations were completed by 1995 and it came into effect in 1996. In comparison to UNFCCC and CBD, it did not draw much attention from the international community. The industrialized countries opposed it, as they were reluctant to undertake any financial responsibility for combating desertification that was not perceived as a global problem. The convention assigns to the parties a task of giving priority to the prevention of desertification in national policies and creating awareness among their citizens.

### **The Forest Principles**

The forest Principles adopted at the Rio Earth Summit (1992) is a non-binding authoritative statement of principles for a global consensus on

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<sup>46</sup> *Global Environmental Outlook*, op.cit., p. 19.

the arrangement, conservation and sustainable development of forests: “These principles should apply to all types of forests, both natural and planted, in all geographical regions and climatic zones, including austral, boreal, sub-temperate, temperate, subtropical and tropical”.<sup>47</sup>

These principles emphasize the sovereign right of individual states to exploit forest resources but within general principles of forest protection and management. The principles are to be adopted at the appropriate level of the government through national constitutional provisions.

### **Rio+5 Summit**

The nineteenth special session of the United Nations General Assembly was held from June 23 to June 28, 1997 in New York to assess the progress of the Rio Earth Summit in the last five years. This came to be known as the Rio+5 Summit.

Rio+5 conducted an in-depth political assessment of progress achieved since Rio and laid the grounds for continuing work. In the final document governments acknowledged that:

The global environment has continued to deteriorate since 1992 with rising levels of greenhouse gas emissions, toxic pollution and solid waste. Renewable resources, notably fresh water, forests topsoil and marine fish stocks, continue to be used at rates that are clearly unsustainable.

On the positive side, growth in world population is slowing, food production is rising, local air and water quality is improving in many developed countries, and the majority of people are living longer and healthier lives. At the

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<sup>47</sup> *Agenda 21*, op.cit.,p. 291.

same time, the number of people living in poverty has increased, and gaps between rich and poor have grown, both within and between countries.<sup>48</sup>

The Rio+5 summit reconfirmed the political commitment to sustainable development from all members of the international community and other major groups of civil society.

### **Conference of Parties (COP) to the UNFCCC: An Opening to the Kyoto Protocol**

COP has been responsible for promoting and reviewing the implementation of the UNFCCC. It assesses the parties' efforts to meet their treaty commitments and adopts and publishes regular reports on the convention implementation. In fact, COP is responsible for keeping the entire process on track.

The first COP was held in Berlin from March 28 to April 7, 1995. It was to review the commitment of the developed countries that were expected to decrease their emissions to 1990 levels by the year 2000. The parties agreed that the voluntary targets were inadequate to curb rising emissions and new commitments were needed for the post 2000 period. The parties adopted the "Berlin Mandate" and established a new subsidiary body – an Ad hoc Group on the Berlin Mandate (AGBM). This ad hoc group was assigned to draft a protocol to be adopted at COP-3 in 1997. COP-3 was

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<sup>48</sup> *Earth Summit +5: Programme for the Further Implementation of Agenda 21* (New York: The United Nations Department of Public Information, 1997), p. V.



later held in Kyoto and the Protocol adopted came to be known as the Kyoto Protocol.

In between August 1995 and October 1997, the AGBM met eight times and called on governments to establish specific, legally binding targets and a timetable for reducing developed countries' emissions of greenhouse gases. It did not consider any new commitments for developing countries.

Held in Geneva from July 8 to July 19, 1996, COP-2 reviewed the progress on the Berlin Mandate. Participants stressed the need to accelerate talks on how to strengthen the climate change convention. The Geneva Declaration endorsed the 1995 Second Assessment Report of the Intergovernmental Panel on Climate Change as currently the most comprehensive and authoritative assessment of the science of climate change, its impacts and response options available.<sup>49</sup>

### **COP-3: The Kyoto Protocol to the UNFCCC**

The Kyoto Protocol is the main concern of this dissertation, which for the first time set a legally binding emissions reduction target of greenhouse gases in a limited time framework for the industrialized countries. The protocol addresses six main greenhouse gases mentioned in Annex A of the protocol. They are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro fluorocarbons (HFCs), per fluorocarbons (PFCs)

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<sup>49</sup> *Climate Change: Information Kit* (Bonn: The Climate Change Secretariat, 2001), p. 19.

and sulphur hexafluoride (SF<sub>6</sub>). It does not deal with chlorofluorocarbons, which had already been taken up by the Montreal Protocol.

According to the Berlin Mandate, a new protocol was produced at COP-3 held in Kyoto in December 1997. “The conference resulted in a consensus decision to adopt the protocol under which industrialized countries will reduce their combined greenhouse gas emissions by at least 5% compared to 1990 levels by the period 2008-2012”.<sup>50</sup> The average for all countries comes to around 5.2%. The United States agreed upon a target of emissions reduction by 7% below 1990 levels during the assigned period. The protocol does not have any binding limits for the developing countries.

The protocol was opened for signature on March 26, 1998. It will enter into force 90 days after it has been ratified by at least 55 parties to the convention, including developed countries accounting for at least 55% of the total 1990 carbon dioxide emissions from the industrialized group.<sup>51</sup>

The Kyoto Protocol refers to Annex I and Annex II countries categorized under the UNFCCC. Annex I includes 24 original OECD members, 11 former members of the Soviet bloc and the European Union. Annex II includes 24 original members of the OECD and the European Union. Whereas the countries of Annex I have been given a target, the countries of Annex II have been given a special responsibility to help developing countries with financial and technical research. Former

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<sup>50</sup> *The Kyoto Protocol to the UNFCCC* (Bonn: The Climate Change Secretariat, 2002), p. 3.

<sup>51</sup> *Ibid*, p. 28.

members of the Soviet Union were, thus, exempted from this obligation because their economies are in transition.

To obtain the fixed targets, some market-based mechanisms, namely, “Flexible Mechanisms” have been provided by the protocol. They are Clean Development Mechanisms, and Joint Implementation and Emissions Trading. However, rules to govern these mechanisms were left to be taken up at a later COP.

The Clean Development Mechanism is a complementary mechanism in which both developed and developing countries are to be benefited. The purpose of the mechanism is to assist parties not included in Annex I in achieving sustainable development and to provide an option to the developed countries in meeting their specific targets.

The Clean Development Mechanism enables countries listed in Annex I of the convention to invest in projects in countries not included in Annex I and provides that any reduction in greenhouse gases emissions in the host country can be credited to the investor country to meet its own emissions targets.<sup>52</sup>

Joint Implementation is another mechanism of reducing or mitigating emissions through bilateral co-operation between the participants. A joint Project can be conducted by the parties for reducing anthropogenic emissions by sources or enhancing anthropogenic removals by “sinks” of greenhouse gases in any sector of the economy. Sinks are forests that

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<sup>52</sup> Art12, The Kyoto Protocol.

absorb carbon dioxide from the atmosphere. A joint implementation project may either be conducted between the countries of Annex I or between developed and developing countries.<sup>53</sup> Under this provision a country facing the high cost of reducing domestic emissions may invest in eco-friendly projects in terms of finance or technology in another country where the cost of reducing emissions is relatively low.

Third, the flexible mechanism that was evolved is Emissions Trading, which is possible amongst the countries of Annex B of the Kyoto Protocol. Annex B of the Kyoto Protocol includes countries of Annex I of the UNFCCC along with their targets fixed by the Kyoto Protocol. An emissions trading regime will allow industrialized countries to buy and sell emissions credits amongst themselves. Countries that limit or reduce emissions more than is required by the target will be able to sell the excess emissions credits to countries that find it more difficult or more expensive to meet their own targets.

COP-4, held in Buenos Aires (Argentina) from November 2 to 13, 1998, was to make regulations to ensure that the agreement reached in Kyoto would be fully operational when it entered into force. The conference dealt with policies and measures related to issues like flexible mechanisms, transfer of technology. However, nothing substantial was achieved. Governments attending the conference agreed to a conference of parties (COP-6) deadline for deciding how these mechanism will function.

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<sup>53</sup> Art 6, The Kyoto Protocol.

COP-5 held in Bonn in November 1999, set a deadline of November 2000 for finalizing climate change agreement. Participants overwhelmingly agreed that a fully operational protocol is essential for ensuring greater emissions reduction by industrialized countries. Although various aspects of the Kyoto Protocol were discussed, final results were left to be adopted in the Hague Conference (COP-6).

COP-6 started in the Hague in November 2000 with great expectations. Regulations on flexible mechanisms got priority in the agenda. However, issues related to these mechanisms could not be sorted out in the time available. Therefore, the session was reconvened in Bonn in July 2001. In the meantime, the United States had declared its decision to opt out of the Kyoto Protocol. The American president criticized the provisions to keep major third world countries like China and India out of any commitment and said that attaining emissions targets would harm the US economy. He also questioned the science behind the global warming projection.

In such a crisis situation, COP started at Bonn in July 2001. In the absence of US support, Australia and Japan also wanted to reconsider their stands. They questioned the very future of the protocol. However, the strong determination of the European Union attracted the support of the rest of the OECD members. Finally, the Bonn conference came up with some notable regulations, although legal steps to make these regulations actionable and

facilitate their ratification by countries were left to be decided at COP-7 in Marrakesh.

COP-7 held in Marrakesh adopted the Marrakesh Accord, which establishes the initial rules and institutions for the implementation of the Kyoto Protocol. The Following are the important outcomes of the conference:

- An Executive Board was constituted to supervise the Clean Development Mechanism. Members of the board were proposed to be elected by the conference.
- A Compliance Committee was created, comprising a facilitating branch and an enforcement branch. The facilitating branch is to provide advice and facilitate assistance to the parties to promote compliance. The enforcement branch is to apply penalties on parties in case of non-compliance.
- Guidelines under the Kyoto Protocol were adopted so as to regulate countries. The guidelines determine how industrialized countries should be accountable to their commitments.
- The conference agreed on definition, rules, modalities and guidelines relating to deforestation, afforestation, reforestation, cropland management and grazing land management.

- The Global Environmental Facility was requested to operate three new funds, the Special Climate Change Fund, the Least Developed Countries' Fund and the Adaptation Fund.<sup>54</sup>

COP-8, the Last Conference of Parties, was held in New Delhi from October 23 to November 1, 2002. The Delhi Conference discussed on issues like less polluting energy resources, eco-friendly technologies, promoting public awareness, and education and training. As the deadline of reducing overall emissions of greenhouse gases came closer, the entry into force of the Kyoto Protocol was the main concern of the meeting. However, nothing substantial could be done regarding the entry into force of the protocol. The executive secretary of COP-8 addressed the convention as “now the spotlight must focus on action to accelerate the transition to climate friendly economies. Industrialized countries have only 10 years to meet their Kyoto emissions targets and the evidence today is that most of them still have a great deal of work to do to reduce their greenhouse gases”.<sup>55</sup>

## **Conclusion**

Environmental consciousness initially emerged out of the environmental problems of the developed countries has now become a global phenomenon. It has been recognized that environmental pollution

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<sup>54</sup> Report of the Executive Secretary of the UNFCCC to the General Assembly, *Outcome of the COP-7 to the UNFCCC* (United Nations General Assembly, 2002), p. 2-4.

<sup>55</sup> Press Release, *COP – 8 Ends in New Delhi*, Saturday, November 2, 2002.

needs a global solution. Various issues linked to environmental pollution have attracted the response of global society in the form of international cooperation. However, there have emerged some problems regarding the mode of cooperation.

In the post Second World War period, the United Nations has played a positive role in concluding various international agreements on environmental issues. The Stockholm Conference (1972) was the first major step towards environmental pollution mitigation, which culminated in the Rio Summit (1992). Agenda 21 adopted in the Rio Summit was an action plan of sustainable development for the 21<sup>st</sup> century. Governments at the Rio Summit further agreed to meet annually under the aegis of the United Nations Framework Convention on Climate Change (UNFCCC). The third annual meeting of the UNFCCC was held in Kyoto where for the first time developed countries were given legally binding targets to reduce the emissions of greenhouse gases. The principles governing the implementation of the agreement were to be framed in the annual meetings. After the Kyoto round, five more rounds of meetings took place. The New Delhi round of meeting was the last one. Thus, global cooperation on environmental issues has passed through various stages, from agenda setting and voluntary action to the legally binding targets of emissions of greenhouse gases which are mostly responsible for climate change.



## CHAPTER – 2

### THE US DOMESTIC DEBATE ON THE KYOTO PROTOCOL: PROponents AND OPPONENTS

Being the largest emitter of greenhouse gases, the US response to any environmental regulation becomes important. The world's governments and other important actors can hardly deal effectively with climate change without an active role by the US. Its economy is too large, diplomatic influence is too great and its contributions to the cause are too extensive. Therefore, it becomes important to know the factors behind the US stand on the Kyoto Protocol. The US population, which is four percent of the world's population, emits almost twenty five percent of total greenhouse gas emissions.<sup>1</sup> Any binding restriction on this emission is likely to influence the US economy and society at various levels. A strong industrial lobby is working at the governmental level. On the other hand, there is clear cut scientific evidence that the excess accumulation of greenhouse gases in the atmosphere is fatal for the human environment and it needs an immediate cut in emissions. Various environmental groups have taken up this issue and a healthy environmentalism has emerged in America.

Ever since the emergence of environmentalism in the United States, there has been a debate over the issue between the environmental groups and various business groups. The interests of these two parties are often

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<sup>1</sup> Paul G. Harris, "Climate Change and American Foreign Policy: An Introduction", in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p.4.

antagonistic to one another. While environmental groups are all about clean air, clean water and a healthy ecological balance, business activities directly or indirectly disturb these things in the way of production and distribution. Both groups have strong arguments, and they try to create opinion in their favour. To properly understand the US position on the Kyoto Protocol, it becomes essential to take into consideration these domestic debates.

As environmental groups are basically mass based, they try to create strong public opinion in their favour. However, the US public constitutes a highly consumerist society, and in spite of its environmental friendly attitude, they seem reluctant to change their consumerist lifestyle for the sake of a good environment. "A child born in the US will have 30 times more impact on the environment during his or her life time than a child born in India".<sup>2</sup> Philip Shabecoff writes:

Perhaps the greatest problem the environmental movement will have to face lies not in the external world but inside the heads of the American people. Although the great majority of Americans support environmental goals, that support may be shallow among many or most of them. Many people seem to have only a loose grasp of the dimensions of the problems and show little willingness to make any but the slightest changes in life style.<sup>3</sup>

On the other hand, business groups are financially and politically strong enough to influence decision making on various environmental issues. The

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<sup>2</sup> Paul G. Harris "Climate Change: Is the United States Sharing the Burden?", in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p.39.

<sup>3</sup> Philip Shabecoff, *Earth Rising: American Environmentalism in the 21<sup>st</sup> Century* (Washington, D.C.: Island Press, 2000), p.26.

assets of the 500 largest US companies were more than \$2 trillion by the beginning of the 1990's and were approaching \$3 trillion by the end of 1990's. This wealth is greater than that of all but two or three nation states.<sup>4</sup> However, they cannot reject out of hand the reality of environmental pollution and its bad impact. Their arguments mainly revolve around a cost-benefit analysis. The impact of these groups and their debate can be seen in the US government's action on environmental issues.

The Kyoto Protocol has drawn the greatest attention of these two groups. In fact, the Kyoto Protocol became the victim of US domestic constraints. It, for the first time, presents legally binding regulations for industrialized countries. The Clinton Administration agreed upon a target of emissions reductions by seven percent below 1990 levels during the period 2008 and 2012.<sup>5</sup> However, it could not be ratified in the senate and ultimately the George W. Bush administration rejected the protocol. It is not the first time that US environmentalism got a setback at the hands of the US government.

The Reagan government was well known for its anti-environmental policies. The *Global 2000 Report* published just six months prior to the entry of Ronald Reagan into the White House was put in suspension. The Office of Management and Budget created earlier to draw fiscal power to the White House was used by the Regan Administration to reorder

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<sup>4</sup> Ibid , p. 96.

<sup>5</sup> Paul G. Harris, op. cit., p. 13.

government finances away from regulatory functions, especially environmental. The Council on Environmental Quality was deprived of half of its budget and most of its staff. Even environmental restrictions for industries such as mining, timber, oil and automobiles were operationally ignored and unendorsed. These activities were highly influenced by rightwing business groups like the Richard Mellon Foundation and the Olin Foundation. They poured money into advertisement campaigns, lawsuits, elections and books and articles protesting and blaming environmentalists for all the nations' ills from the energy crisis to social misery. The Heritage Foundation in Washington used a \$ 10 million a year budget to provoke a sweeping backlash agenda for the pro-business and pro-development administrations.<sup>6</sup>

Reagan's policy inspired the environmentalists to develop new tactics and methods. Electoral work was emphasized more than ever before, and in later elections, environmental organizations played a good role. "In the election campaign of 1988, George Bush talked more about environment than the Democratic opponent and for the first time the issue played a prominent part in campaign rhetoric and advertising, apparently to Bush's advantage".<sup>7</sup>

Bush's team took some measures in the domestic arena, but it mostly remained reluctant to accept international environmental regulations. The

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<sup>6</sup> Kirkpatrick Sale, *The Green Revolution: An American Environmental Movement 1962-1992* (New York: Hill & Wang, 1993), p. 49-50.

<sup>7</sup> Ibid, p.73.

administration always doubted the scientific assessment of the International Panel on Climate Change (IPCC). When it became clear that efforts made to address the issue might adversely affect the US economy, it remained reluctant to endorse burden sharing. At the 1992 Rio Earth Summit, the United States was the only OECD country during the negotiations under UNFCCC that refused to accept binding targets and a timetable to reduce greenhouse gas emissions to 1990 levels by 2000.

Above all, the Bush administration did not try to avoid the Gulf War in spite of knowing its environmental consequences. In the Gulf war, some 300 million gallons of crude oil were poured into the Gulf waters and more than 700 oil wells were set on fire. It resulted in 50,000 tons of sulfur dioxide and 25 tons of carbon dioxide a day into the air all over the region.<sup>8</sup> Although the United States justified this action on the grounds of international justice, the staff of Greenpeace concluded their assessment in following words: “Ecologically, the war in the Persian Gulf is a consequence of a fundamental distinctive way of life centered on our addiction to oil”.<sup>9</sup>

The Clinton administration brought a shift in US policy towards action on climate change. In contrast to the Bush administration, President Clinton accepted the findings of the IPCC and himself became a potent public advocate. He acknowledged the US’ responsibility in limiting

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<sup>8</sup> Ibid, p.26.

<sup>9</sup> Ibid, p.76.

greenhouse gas emissions and declared that the United States would voluntarily stabilize its greenhouse gas emissions at 1990 levels by 2000. The Vice President Al Gore himself accepted before the UN Commission on Sustainable Development that “the United States and other developed countries have a disproportionate impact on the global environment. We have less than a quarter of the world’s population, but we use three quarters of the world’s raw materials and create three quarters of all solid waste”.<sup>10</sup>

At the UNFCCC’s second COP in mid 1996, the US representative expressed strong support for the second assessment report of the IPCC centering around the theme that climate change was likely caused by industrial and other human activities. The US announced that it would support negotiations for a binding international agreement, with targets and timetable assigned to the developed countries for reducing greenhouse gas emissions.<sup>11</sup> This announcement boosted the proposed COP-3 at Kyoto.

The opponent groups including the business community feared such a development in the government’s policy and the result was the Byrd-Hagel resolution in the Senate. The resolution was adopted by a vote of 95 to 0 in July 1997. The resolution stated:

The United States should not be a signatory to any protocol to, or other agreement regarding, the climate convention that would:

A. Mandate new commitments to limit or reduce greenhouse gas emissions for the Annex 1 (developed country) parties, unless the protocol or other agreement also mandate new specific scheduled commitments to limit or reduce greenhouse

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<sup>10</sup> Paul G. Harris, *op. cit.*, p. 39.

<sup>11</sup> *Ibid.*, p. 40.

gas emissions for developing country parties within the same compliance period, or  
B. Would result in serious harm to the economy of the United States.<sup>12</sup>

The Byrd-Hagel resolution was very significant in the sense that no treaty or protocol could be valid in America without the ratification of the American Senate. In response to the Byrd-Hagel resolution, President Clinton outlined four principles in the White House climate conference that would guide US policy on climate change:

- The science of climate change is deemed sound, and the potential for serious climate disruption is real.
- Countries should commit to realistic and binding goals to limit their emissions of greenhouse gases. Due to the disproportionate contribution to the climate change, the US must show leadership.
- The United States would honour its global responsibilities, but would do so using flexible market based approaches and improvements in technology.
- Developing countries would have to join the developed countries in this process in way that is fair to all. They should join meaningful but equitable commitments that would not sacrifice their economic growth.<sup>13</sup>

This ongoing US domestic debate on environmental issue became most intense on the Kyoto Protocol. The Clinton administration

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<sup>12</sup> Ibid, p. 231.

<sup>13</sup> Ibid, p. 41.

along with some environmental groups emerged as proponents of the protocol while strong business groups along with their allies in the Congress constituted the opposite pole as opponents. Two famous hearings took place in the Congress in which diverse opinions were expressed. The hearings were “The Kyoto Protocol: Problems with US Sovereignty and the Lack of Developing Countries’ Participation”, and “The Kyoto Protocol: Is the Clinton–Gore Administration Selling Out Americans ?”.<sup>14</sup>

The debate on the Kyoto Protocol can be focused under the following broad headings:

## **1. Basic Argument**

### ***Proponents***

Their basic argument is that climate change is a serious matter and cannot be ignored any more. Even though a measure like the Kyoto Protocol is likely to affect the US economy, its impact will be modest under the conditions identified by the protocol.<sup>15</sup>

### ***Opponents***

They argue that the evidence of climate change due to greenhouse gas emissions is not very authentic. The terms and conditions of the Kyoto

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<sup>14</sup> Frank N. Laird, “Just Say No to Green House Gas Emissions Targets”, *Issues in Science and Technology*, Winter 2000, p. 3.

<sup>15</sup> Testimony of Dr. Janet Yellen, Chairperson, Council of Economic Advisers, before the Committee On International Relations, on the issue-“The Kyoto Protocol: Problems With US Sovereignty and the Lack of Developing Country Participation”, 13 May 1998, [http://www.house.gov/international\\_relations/full/ws513981.htm](http://www.house.gov/international_relations/full/ws513981.htm) , p. 5.



Protocol are discriminatory in nature and harsh to the US economy. The Bush administration rejected the protocol on the ground that the Kyoto targets are too disruptive for the US economy and the protocol does not set any emissions targets for the developing countries including China and India.<sup>16</sup>

## **2. Economic Rationale of the Kyoto Protocol**

### ***Proponents***

The earth's surface appears to be warming due to the excess accumulation of greenhouse gases. It affects populations even outside the emitting nations for which emitting nations are not paying anything. In economics, this is called an externality. If greenhouse gases emitting countries are left unrestrained, they will not control pollution at all. Thus the fundamental economic logic of the Kyoto Protocol is that without such global agreements, individual nations will not have the proper incentive to address threats from global climate change. Externalities must be penalized.<sup>17</sup>

### ***Opponents***

Externalities should be penalized uniformly and the burden of mitigating climate change should be distributed equally. Developing as well as developed countries must be the part of the process. While developed

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<sup>16</sup> Frank N. Laird, op. cit., p. 5.

<sup>17</sup> Philip Shabecoff, op. cit., p. 86.

countries are responsible for most of the present level of greenhouse gas in the atmosphere, developing countries' emissions are increasing rapidly. Dr. Janet Yellen, Chairperson, Economic Advisers Committee, has herself accepted that "by 2040, the largest fraction of emissions is estimated to come from developing countries".<sup>18</sup> Thus any comprehensive plan to deal with this global problem must include a mechanism to bring developing countries into the process.

### **3. Science of Climate Change**

#### ***Proponents***

Dr. Janet Yellen in her testimony to the Committee on International Relations cited global climate developments and accepted the findings of IPCC that "the balance of evidence suggests that there is a discernible human influence on global climate".<sup>19</sup> According to IPCC reports, current concentrations of carbon dioxide, methane, nitrous oxide and other greenhouse gases are responsible of global warming. If the present trend is continued, global temperatures will rise by between 2 to 6 degrees Fahrenheit in the next hundred years, with a best guess of about 3.5degree Fahrenheit.<sup>20</sup> Potential consequences associated with this shift in climate

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<sup>18</sup> Statement of Dr. Janet Yellen before the Senate Committee on Environment and Public Work, 17 July 1997, <http://www.senate.gov/~epw/ye117-17.htm> , p.1.

<sup>19</sup> Testimony of Dr. Janet Yellen, Chairperson, Council of Economic Advisers, before the Committee on International Relations, on the issue-"The Kyoto Protocol: Problems With US Sovereignty and the Lack of Developing Country Participation", 13 May 1998, [http://www.house.gov/international\\_relations/full/ws513981.htm](http://www.house.gov/international_relations/full/ws513981.htm) , p. 1.

<sup>20</sup> Ibid, p. 2.

include a rise in sea levels, greater frequency of severe weather events, shifts in agricultural growing conditions from changing weather patterns, threats to human health from the increased range and incidence of disease, change in availability of fresh water supplies and damage to ecosystem and biodiversity.<sup>21</sup>

### *Opponents*

Members of the Global Climate Coalition highlighted scientific uncertainty about whether human activity was contributing to global warming and called for more research on the issue of climate change.<sup>22</sup> To them, a conclusion has been reached based on two points, namely, that the burning of fossil fuels adds carbon dioxide to the atmosphere which may affect greenhouse gases and the earth's temperature has increased slightly over the last one hundred years. This interrelationship between these two facts may not be necessarily true<sup>23</sup>.

## **4. Cost of Climate Change**

### *Proponents*

In the course of assessing the cost of implementing the Kyoto Protocol, the cost of inaction should be counted first. Society must

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<sup>21</sup> Ibid, p. 3.

<sup>22</sup> The Global Climate Coalition formed in 1989 is a coalition of American companies and trade associations from the petroleum, chemical, transportation, iron and steel production and utility sector. It includes more than 230,000 American companies

<sup>23</sup> Michele M. Betsill, "The United States and the Evolution of International Climate Change Norms". in Paul G. Harris,ed., *Climate Change and American Foreign Policy* ( New York: St. Martin's Press, 2000), p.214.

acknowledge that human health is directly dependent on the health of our global environment. By continuously depleting our natural resources, we are degrading the quality of all life on earth. We must find new and creative ways in our day-to-day intercourse with nature so as to preserve our future asset. Jay D. Hair writes:

We must recognize that, while the economic deficit may grab today's headlines, the environmental deficit will dominate our future. Any good accounting system can gauge the relationship between asset and abilities but what accounting system can tell when our environmental deficit is growing beyond our means to reverse the effects of overspending?<sup>24</sup>

Although a monetary estimate of damage caused by climate change is difficult, various researchers have developed estimates of the monetary damage expected from an average worldwide temperature increase. William Cline of the Institute of International Economics estimated that a temperature change of 4.5 degrees Fahrenheit would impose an annual damage of about 1.1 percent GDP per year on the US economy that amounts to \$ 89 billion in today's terms.<sup>25</sup>

The cost of climate change mitigation is not unapproachable. In the mid 1990's about \$ 150 billion per year was spent in complying with environmental regulations in the United States. This was about one third of the national expenditure on defence and about one-third or less of the

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<sup>24</sup> Jay D. Hair, "The Earth's Environment: A Legacy In Jeopardy", in Peter Borrelli, ed., *Crossroads: Environmental Priorities For the Future* (Washington, D.C.: Island Press, 1998), p. 202.

<sup>25</sup> Janet Yellen, op. cit., p. 2.

expenditure on medical care. It was one-half of what the nation spends on clothing and shoes.<sup>26</sup>

In 1997, 25,000 distinguished economists including eight Nobel Laureates signed a statement and affirmed that if emissions reduction is taken seriously and programmed well, it would not reduce American living standards, could increase productivity and would produce benefits that clearly outweigh costs. In the period 2008-2012, meeting the Kyoto targets for the US would be painless because Russia has enough excess credits due to its economic collapse to satisfy European and Japanese demand.<sup>27</sup>

According to a second generation model estimate, an emissions price in the range of \$14 to \$23 per ton of carbon equivalent is expected. It will translate into an increase of 3 to 5 percent in energy prices between 2008 and 2012 at the household level. This will include fuel oil prices of 5 to 9 percent, natural gas prices of 3 to 5 percent, gasoline prices of 3 to 4 percent and electricity prices of 3 to 4 percent. This will raise the average household's energy bill by \$70 to \$110 per year.<sup>28</sup> Again, the government's energy sector restructuring under the climate change agenda is expected to reduce expenditure. In addition year-to-year energy price changes experienced by the US consumers should also be taken in consideration.

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<sup>26</sup> Shabecoff, op. cit, p. 90-91.

<sup>27</sup> Daniel Bodansky, "US Climate Policy After Kyoto: Elements of Success", *Policy Brief*, 15 April 2002, p. 3.

<sup>28</sup> Janet Yellen, op. cit., p.13.

Enhancing energy efficiency with the help of advanced technology can further decrease the cost of implementing the Kyoto Protocol. The President's 1990 budget included a \$ 6.3 billion package of tax cuts and research and development investments intended to promote the discovery and adoption of new technologies. Although results cannot be expected very quickly, such measures could improve energy efficiency that would lower the cost of meeting the Kyoto obligations.<sup>29</sup> The partnership between the administration and US auto companies has produced good results. General Motors has developed a hybrid-based vehicle that can achieve greater fuel efficiency. Such progress may further be replicated in other sectors like VCR's and TV's, which consume electricity even while they are switched off. The administration is negotiating with major manufacturers that have a goal of achieving up to a 70 percent reduction in energy consumption by VCR's and TV's while they are switched off without sacrificing product quality, usefulness or increasing cost. Again, key investment in public transport system and pedestrian amenities may lower emissions.<sup>30</sup>

In the field of job opportunities, cost is transitional. The Bureau of Labour Statistics has found that only 0.1 percent of layoffs in the United States could be attributed to causes related to environmental protection. The

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<sup>29</sup> Gary Bryner, "Congress and the Politics of Climate Change", in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p. 122.

<sup>30</sup> Suzi Kerr, "Domestic Greenhouse Regulation and International Emissions Trading", in Suzi Kerr, ed., *Global Emissions Trading: Key Issues for Industrialized Countries* (Cheltenham, UK: Edward Elgar, 2000), p. 146.

other 99.9 percent of layoffs were due to other causes such automation, corporate mergers and exportation of jobs to low wage countries.<sup>31</sup>

There may be cuts in some sectors while increases occur in other sectors. A healthy environment will itself create jobs. The cleanup industry and the development of new ways of doing business will create new jobs. Some employment reduction could occur in energy intensive sectors, a large number of jobs will be created in other sectors especially high-tech jobs paying a high salary. Above all, the administration is firmly committed to assist any workers who are adversely affected in the transformation to a climate friendly economy.

### ***Opponents***

US society has to pay a heavy cost to meet the Kyoto targets. The effort would cost too much money, absorb investment capital, slow economic growth and would result in the loss of jobs.

Energy is the main input of economic development, and the US mostly depends upon fossil fuels for energy. Coal-fired plants generate about 56 percent of the power in the US.<sup>32</sup> The cuts proposed under the Kyoto Protocol imply major cuts in fossil fuels. Without a breakthrough in alternative energy, like nuclear, solar or wind, the proposed cut is going to hit US economic activities including large-scale industries as well as the

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<sup>31</sup> Sabecoff, op. cit, p. 90.

<sup>32</sup> Andreas Missbach, "Regulation Theory and Climate Change Policy", in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p.143.

small-scale ones like bakers, dry cleaners, auto repairs, recycling, and so on.<sup>33</sup>

The US administration has never provided an authentic economic analysis that policy makers generally require when they assess the likely impact of national policies on American workers, consumers and industries. Estimates of the global economic costs vary between one and five percent of Gross Domestic Product, but no complete analysis has been made, and there were disputes over the appropriate forecasting methodology.<sup>34</sup> The Presidents Council of Economic Affairs followed the second generation model and concluded that the Kyoto targets would keep emissions permit prices in the range of \$ 14 to \$23 per ton of carbon equivalent which would increase the average household's energy bill in ten years by between \$ 70 and \$ 110 per year. However, while the second generation model is particularly good at describing the economy's long-term patterns and not at describing short-term transition issues.

The 1997 Environmental Impact Analysis (EIA) Service Report rejected the analysis of the second generation model.<sup>35</sup> It estimated that returning carbon emissions to 1990 levels in 2010 would cost about \$ 130

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<sup>33</sup> Statement of Christopher S. Bond (Senator) before the Environment and Public Works Committee, 10 July 1997, [http://www.senate.gov/~epw/bon\\_7-10.htm](http://www.senate.gov/~epw/bon_7-10.htm) , p.1.

<sup>34</sup> Neil E. Harrison, "From the Inside Out: Domestic Influences on Global Environmental Policy", Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p. 100.

<sup>35</sup> EIA is an exercise to evaluate the probable change in the various socio-economical and biophysical characteristics in the environment which may result from a proposed project.



to \$ 150 per ton of carbon equivalents, which is much higher than the estimate of the second generation model.<sup>36</sup>

Wharton Econometric Forecasting Associates has estimated that “implementing the agreement would cost each family some \$2,700 a year which included an increase in the cost of gas by 65 cents per gallon, and would result in 2.4 million lost jobs”.<sup>37</sup>

## **5. A Global Treaty with Efficient Mechanism**

### *Proponents*

Climate change is a global problem and requires a global solution. Any unilateral reductions in emissions will be neutralized by other’s growing emissions. The Kyoto Protocol is a global treaty in which the United States and one hundred sixty other nations agreed to reduce emissions of greenhouse gases. The Protocol has also adopted efficient mechanisms. Again, emissions reductions solely in terms of CO<sub>2</sub> are much more costly than reductions in all greenhouse gases. The Kyoto Protocol includes six greenhouse gases including CO<sub>2</sub>. Reilly et al., in 1999, modeled cost impacts for different world regions. They found that for annex B

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<sup>36</sup> Testimony of William F. O’Keefe before the Committee on International Relations, 13 May 1998, [http://www.house.gov/international\\_relations/full/ws513984.htm](http://www.house.gov/international_relations/full/ws513984.htm), p.3.

<sup>37</sup> Gary Bryner, “Congress and Politics of Climate Change”, in. Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin’s Press, 2000), p. 118.

countries (countries with reduction targets) as a whole, total costs were \$27 billion less for tackling all greenhouse gases than for tackling CO<sub>2</sub> only.<sup>38</sup>

Again, the Kyoto Protocol provides market-based flexible mechanisms for cost-effective reduction of emissions. Through clean development mechanisms, joint implementation and emissions trading, the cost of emissions reduction can be cut significantly. Estimates derived from the second generation model confirm that emissions trading among Annex I countries can reduce the cost to the US of achieving its targets for 2008-2012 emissions by about half relative to a situation in which such trading was not available.

The US has the option of trading emissions with Russia whose economy is passing through a transitional phase. It would be cheap. However the government or private firms have an open choice. Stuart Eizenstat, Undersecretary of State for Economic, Business and Agricultural Affairs, made it clear that US private firms are free to purchase international emissions credits from any other countries. This would be purely a private decision. There was no question of blindly giving foreign aid to Russia.<sup>39</sup>

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<sup>38</sup> Tim Denna, "Inclusion of All Sources and Sink Categories in International Emissions Trading", in Suzi Kerr, ed., *Global Emissions Trading: Key Issues for Industrialised Countries* (Cheltenham, UK: Edward Elgar, 2000), p. 115.

<sup>39</sup> Statement of Stuart Eizenstat, Under Secretary of State for Economic, Business and Agricultural Affairs, Department of State, before the Committee on international Relations, 13 May 1998, [http://commdocs.house.gov/committees/inttre1/hfa49425.000/nfa49425\\_0.htm](http://commdocs.house.gov/committees/inttre1/hfa49425.000/nfa49425_0.htm), p.15.

## *Opponents*

The Kyoto Protocol is deeply flawed as a policy instrument. It neither properly defines market-based flexible mechanisms, nor assigns any binding targets to the developing countries. It is not clear what type of regime will be used to implement this treaty, how that flexibility provisions will operate, and whether firms who act early or have already acted would receive credit for early action.<sup>40</sup>

It has been stated in the Kyoto Protocol that the use of flexible mechanisms should be additional to emissions reductions action taken within a country's own territory. However, it is still vague about how much of that effort should be at home and how much abroad; likewise, what share of Northern countries' commitments should be undertaken within their own territories and what share in developing countries is not clear.<sup>41</sup>

The US administration estimated savings from emissions trading with the collapsed economies of the Commonwealth of Independent States (CIS), but trading is itself costly. A huge amount of foreign aid will have to be pumped into the CIS who are going through an economic transition. Again, EU members are particularly concerned about this option and they

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<sup>40</sup> Frank N. Laird, op. cit., p. 5.

<sup>41</sup> Ian Rowlands, "The Kyoto Protocols 'Clean Development Mechanism': A Sustainability Assessment", *Third World Quarterly*, vol. 11, NO. 5, p. 801.

may take US decision to buy credits as an attempt to avoid meeting its national obligations as defined by the protocol.<sup>42</sup>

## 6. Growing Nature of the Protocol

### *Proponents*

For the proponents, the Kyoto process is still evolving. The Protocol is yet to be finalized in COP. The United States will be an active party in these conferences in order to make negotiations favourable to its economy and society. The present protocol presents agreements to limit emissions up to 2012. This is the first step in a long journey. The first step is critical because further steps are not known. In later negotiations, the US will try to delegate responsibility to the developing countries as well. Janet Yellen, the chairperson of the Council of Economic Advisers, said that “we are firmly committed to meaningful developing country participation, the use of sinks to offset emissions requirements and emissions trading both domestically and internationally.”<sup>43</sup>

Thomas Schelling supports the exclusion of developing countries from the Kyoto targets in the first phase. To him, developing countries are much more dependent on agriculture and will therefore suffer relatively more from climate change constrained by poverty and technological backwardness. Their ability to adapt to climate change is limited. It is better

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<sup>42</sup> Testimony of William F. O’Keefe before the Committee on International Relations, 13 May 1998, <http://www.house.gov/international-relations/full/ws513984.htm>, p. 3

<sup>43</sup> Janet Yellen, *op.cit*, p. 1.

to mitigate climate change in developing countries through economic growth.<sup>44</sup>

### *Opponents*

For the opponents, the Kyoto Protocol is a finished document. The claim of proponents that the Kyoto Protocol is a work in progress and that the US will keep negotiating is a fallacy. The Kyoto Protocol is a finished document, which is now being considered for signing and ratification by over 160 nations. The Protocol cannot be changed until it enters into force. Article 26 requires ratification without any reservation.<sup>45</sup>

Kevin Fay, Executive Director of the International Climate Change Partnership, presented his view to the Committee on International Relations.<sup>46</sup> According to Fay, the US has agreed to unrealistic targets and timetables. The magnitude and reduction required could not be met within US borders exclusively in the given time frame without serious consequences. Though it had secured the inclusion of market-based mechanisms, the precise details were yet to be developed, and it was most likely that other nations were not going to favour US views of defining and implementing them. The European Union has already opposed the US approach. The G-8 environment ministers, in the April 1998 meeting, had

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<sup>44</sup> Thomas C. Schelling, "What Makes Greenhouse Sense?: Time to Rethink Kyoto Protocol", *Foreign Affairs*, vol. 81, No. 3, (May-June 2002), pp. 1-2.

<sup>45</sup> William F. O'Keefe, op. cit., p. 1.

<sup>46</sup> International Climate Change Partnership is a coalition of businesses and industries from United States, Europe, Canada, and Japan committed to responsible partnership in the climate change policy process.

made it clear that flexible mechanisms, such as international emissions trading, joint implementation and clean development mechanisms, would be supplemental to domestic action. Buying the entire target would not be possible in any case. Again, developing countries may only support the US view if they are exempted from any targets to limit their commissions.<sup>47</sup>

On the other hand, it is not clear how developing countries can be included further in a finished document that exempts them. To assume that developing countries would agree to a future protocol amendment that would impose binding commitments on themselves defies common sense.

## **7. U.S. Economic Competitiveness.**

### ***Proponents***

Dr. Janet Yellen in her testimony to the Committee on International Relations tried to clear the doubts in the opponents' mind. She argued that it is feared that the Kyoto Protocol might adversely affect the competitive position of American industries, especially those which are energy intensive like aluminum and chemicals. Production costs would increase in comparison to that in the countries without binding targets. Manufacturing units may shift to cheaper places. However, this calculation is very complex. Energy constitutes only 2.2 percent of the total cost of U.S. industry, and energy prices vary from country to country. For example, in 1996, gasoline cost \$1.28 per gallon in the US while it was 8 cents per

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<sup>47</sup> Testimony of Kevin Fay before the Committee on International Relations, 13 May 1998, <http://www.house.gov/international-relations/full/ws513985.htm>, p.1.

gallon in Venezuela. Similarly, gas prices were \$3.71 per gallon in Switzerland while it was \$4.41 per gallon in France. Again, about two-thirds of all emissions are not in manufacturing but the transportation and building sectors whose relocating ability is very restricted.<sup>48</sup>

In the agriculture sector, new technologies including biotechnology, is going to play a vital role in which America is in a better position in comparison to the major developing countries.

### *Opponents*

In a global market economy, the Kyoto targets would adversely affect US competitiveness. Cheap labour and weaker environmental laws would benefit major developing countries with respect to production costs. Robert N. Burt, Chairman of the Business Round Table Environment Task Force Committee on International Relation presented a strong view.<sup>49</sup> He noted that regulating the emissions of a limited number of countries could lead to the migration of energy intensive production like chemicals, steel, petroleum refining, and aluminum mining to the developing countries.<sup>50</sup>

Peter Doran writes:

Globalization appears to be undoing the connection between core corporations and the territorial economies of states. Even former nations' corporate champion such as Volkswagen,

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<sup>48</sup> Jenet yellen, op.cit. p. 4.

<sup>49</sup> The Business Round Table Environment Task Force Committee on International Relations is an association of more than 200 chief executives of leading US corporations who examine public issues that affect the US economy.

<sup>50</sup> Testimony of Robert N. Burt before the Committee on International Relations, 13 May 1998, <http://www.house.gov/international-relations/full/ws513983.htm>, p. 1.

General Motors, British Petroleum and Philips no longer behave with loyalty to their country of origin. They are now looking for the global market.<sup>51</sup>

Therefore, it is unfair to US citizens to let other nations do nothing while the US makes sacrifices.

The Missouri Farm Bureau and American Farm Bureau have indicated that increased energy costs due to Kyoto obligations would cause a fifty percent reduction in agricultural income and farm income. In addition, trade competitors in developing countries like Argentina, Brazil and China are not going to face the same restraint. Thus, the US will lose a great deal in the international agricultural market place.<sup>52</sup>

## **8. Impact on the US Military**

### ***Proponents***

Stuart Eizenstat, in his statement before the Committee on International Relations, on the issue, “The Kyoto Protocol: Problems with US Sovereignty and the Lack of Developing Country Participation”, tried to correct some misinterpretations related to the military. He argued:

We took special pains working with the Defence Department and on my team having the uniformed military present to fully protect our unique position as the world’s only superpower with global military responsibilities. We achieved what we were intending to do and what the Defense Department asked us to do.

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<sup>51</sup> Peter Doran, “Upholding the ‘Island of High Modernity’: The Changing Climate of American Foreign Policy”, in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin’s Press, 2000), p. 55.

<sup>52</sup> Statement of Mrs. Jo Ann Emerson before the Committee on International Relations, 13 May 1998, [http://commdocs.house.gov/committees/intlrel/hfa49425.000/hfa49425\\_0.htm](http://commdocs.house.gov/committees/intlrel/hfa49425.000/hfa49425_0.htm), p.9.



The parties in Kyoto took a position to exempt key overseas military activities from any commission targets in the case of multilateral operations like self defence, peacekeeping and humanitarian relief. The US' global commitments mostly come under this category.<sup>53</sup>

### *Opponents*

The opponents group, on the basis of the statement of the Director of the Center for Security Policy, expressed dissatisfaction over the impact of the Kyoto Protocol on the US military. Director Frank J. Gaffney made his statement on a technical basis and concluded that the Kyoto targets would adversely affect the US defence system. Within the US, the federal government is the single largest user of energy, out of which 70 percent is used by the Department of Defence. It is estimated that the Pentagon's gross energy consumption totals about 24 million metric tons of carbon equivalents of greenhouse gas emissions. Any cut in emissions in this sector would affect military preparedness and US global obligations.<sup>54</sup>

### **Conclusion**

The domestic debate on the Kyoto Protocol has been mainly centered on the environmental policy of the Clinton government. In spite of severe opposition from various business groups and a group of Congressmen, the Clinton administration signed the Kyoto Protocol. However, the government knew that the Protocol could not be ratified in the Senate, as

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<sup>53</sup> Eizenstat, op.cit, p.15.

<sup>54</sup> Statement of Frank J. Gaffney (Jr) before the Committee on International Relations, 13 May 1998, [http://www.house.gov/international\\_relations/full/s513982.htm](http://www.house.gov/international_relations/full/s513982.htm), pp. 1-5.

the Senate had already passed the Byrd-Hagel resolution against the Protocol with a thumping majority. After the signing of the Kyoto Protocol, debate over the issue became more intense and various politico-economic aspects were discussed before the Congressional Committee.

The George W. Bush Administration joined the opponents' group by rejecting the Protocol, though Bush is not ignorant about global warming. Jacob Park writes: "Bush says that he is concerned about the threat of global warming, but he opposes ratification of the Kyoto protocol. He describes it as ineffective and inadequate and a bad deal for American and Americans."<sup>55</sup> Bush's two grounds, economic and non-participation of developing countries, are interrelated to one another. If developing countries were included in the binding target's regime, it would be much cheaper and easier to buy targets from developing countries.

Nevertheless, the US government does not seem serious on climate change problems and is reluctant to take a leading role as it had taken in creating the problem. Instead of making an economic sacrifice, the US wants to buy some emissions targets through very liberal, market-based flexible mechanisms. It doubts the present flexible mechanisms, which are acceptable to the European Union. This US attitude has put a question mark on the very coming into force of the Protocol.

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<sup>55</sup> Jacob Park, "Governing Climate Change Policy: From Scientific Obscurity to Foreign Policy Prominence," in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin's Press, 2000), p. 86.

It is clear that the global environment cannot be rescued and secured in isolation from the nature and condition of the global economy, International trade, geopolitics, global governance and the social conditions the people throughout the world are crucial. Environmentalists as well as business groups in the US need to adjust in such a way as to let the US government take a leading role in the preservation of the global environment.

## CHAPTER – 3

### THE INDIAN DOMESTIC DEBATE ON THE KYOTO PROTOCOL: PROPONENTS AND OPPONENTS

India being a leading developing country is much concerned about the mode of participation of the developing countries in the process of global climate change mitigation. India's main argument is that the Western industrially-developed countries are mostly responsible for the current level of greenhouse gases in the environment and they should be made responsible in the first place. They have to take a leading role, and the developing countries should be given a grace period. Sunita Narain writes about developing countries that "being the late entrants to Western style economic development, their populations are economically poor, and they have a legitimate right to demand an equal right to the use of the available common atmospheric space."<sup>1</sup> The same principle governs India's official stand on global environmental issues and especially on the Kyoto Protocol.

India's domestic debate on global environmental issues and especially on the Kyoto Protocol is different from that on various internal environmental issues. In the former case, the government and various environmental groups are on the same side. They support the Kyoto Protocol. In the latter case, the government and environmental groups are in opposition to one another. Various environmental and social groups are in

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<sup>1</sup> Sunita Narain, "Changing Environmentalism", *Seminar*, vol. 516, August 2002, pp. 19-20.

opposition to government's various development policies which are perceived to endanger the ecological balance and the lives of indigenous communities who are dependent on natural resources. Thus the Indian domestic debate on the environment can be broadly divided into two parts:

- Debate on internal developmental issues
- Debate on global environmental issues and the Kyoto Protocol

### **Debate on Internal Developmental Issues**

The Indian domestic debate basically involves domestic developmental issues. There have been nationwide movements against deforestation, construction of dams, destruction of wildlife and growing pollution. However, these movements are different from the Western green groups. In place of nature-centered environmental movements, Indian environmental movements revolve around various social issues. These are mostly pro-poor, human centered environmental movements because a large number of people depend upon the natural environment for their survival. They survive directly on what they get from nature in the form of firewood, food, water, building material, medicines and fodder for their animals. The destruction of the forest would mean threatening their very livelihood.<sup>2</sup>

These environmental groups have received considerable support from the masses and have played a key role in creating public awareness about the importance of bringing about a balance between environment and

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<sup>2</sup> Ibid, pp. 15-16.

development. They have opposed developmental projects that are inimical to social and environmental concerns. In this process they have got the support of the media and judiciary. With the help of public interest litigation, the judiciary has taken up various environmental issues and delivered justice to the concerned groups. The Supreme Court's decision on issues like Sariska mining, the Tajmahal, coastal zones, forestry, pollution in Delhi, the cleaning of the Yamuna and Ganges, garbage disposal, and relocation of industries, have strengthened the hands of environmental groups. However, their relationship with the political and bureaucratic system remains weak and antagonistic. The government is not against environmental preservation but believes in economic development for the better preservation of the environment.

The government's policies revolve around the argument that poverty is the largest polluter, and it needs to be eradicated for a healthy environment. Prime Minister Indira Gandhi pointed out in the Stockholm Conference of 1972:

On the one hand, the rich look askance at our continuing poverty; on the other, they warn us against their own methods. We do not wish to impoverish the environment any further and yet we cannot for a moment forget the grim poverty of large number of people. Are not poverty and need the greatest polluters?<sup>3</sup>

Challenges posed by a growing population can only be tackled by adequate economic development. Ritambhara Hebbar writes:

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<sup>3</sup> O.P. Dwivedi, *India's Environmental Policies, Programmes and Stewardship* (London: Macmillan Press, 1997), p. 150.

Economic development involves developing or increasing the economic potential of forests for the overall rise in the standard of living in the country measurable by its national income and per capita income. Here the centre shifts from the forest and the forest dwellers to the goal of economic development.<sup>4</sup>

The government of India, after independence, adopted a planned development scheme to change India. Industrialization was given priority, dams became central to irrigation and power generation, forests were taken as a resource for timber, and minerals were to be exploited for better distribution. From the 1970's, the government of India began to take control over various natural resources. The scheme of agrarian reform put more emphasis on redistributing land than preserving it as a national resource.<sup>5</sup> There have been some developmental measures that have posed a real threat to the ecosystem. In Rajasthan, the government permitted marble and other mining in the protected forests and tiger sanctuary in Sariska. In Gujarat, the powerful Shanghi Conglomerate was allowed to build a cement plant and pipeline through two reserved forests, several other forest areas and a sanctuary. In Uttar Pradesh, the Tehri dam is being constructed on a seismically sensitive area with questionable hydrological tests.<sup>6</sup> The Narmada project is a much-discussed issue that will adversely affect a large

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<sup>4</sup> Ritambhara Hebbbar, "Relocating a Centrist Agenda", *Seminar*, Vol. 426, February 1995, p. 23.

<sup>5</sup> Rajeev Dhavan. "The Wealth of Nations Revisited", *Seminar*, Vol. 492, August 2001, pp. 15.

<sup>6</sup> *Ibid*, p.16.

tribal population along with creating a threat to the regional ecological balance.

On the other hand, environmental groups challenge this very developmental model based on industrialization and big projects. Along with the ecological balance, they also consider the prospects of indigenous communities who are dependent on natural forests. Due to industrialization and the construction of dams, these communities are getting displaced without proper rehabilitation. Thus, they oppose a developmental model which, to them, is neither people friendly nor eco-friendly. These environmental groups have taken action in the form of the Chipko Andolan and Narmada Bachao Andolan, amongst others. A recent proposal of the government to link major rivers has also been criticized by various groups on the basis of its perceived harm to the environment and the population coming in the way of the project.

The following statements of the former prime minister Deve Gowda show the antagonism between the government and environment groups. He said:

Some people think that they are born only to protect the environment in this country and that God has sent them to this earth only to protect environment. ...  
...We want to see that the superhighways must be able to connect all major ports of the country. This is one of the major decisions, which we are going to take also with regard to certain legislation about acquiring land, which will ease the burden of the investors....



...Often people are being misled by environmentalists who tend to be anti development.<sup>7</sup>

### **India's Environmental Policies**

Beyond this debate the government of India has not been blind to environmental degradation. It has adopted a systematic environmental policy. However, laws and plans have not been very successful. On the failure of their implementation, the Indian Supreme Court commented that “if the mere enactment of laws relating to the protection of environment was to ensure a clean and pollution free environment, then India would perhaps be the least polluted country in the world.”<sup>8</sup>

During the preparation for the Stockholm Conference (1972), the UN General Assembly requested a report from each member country on the state of the environment. India constituted a Committee on the Human Environment to prepare India's report. This committee released three reports by May 1971:

- Some Aspects of Environmental Degradation and its Control in India
- Some Aspects of the Problems of Human Settlement in India

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<sup>7</sup> Special Report, “The Never Green Gowda”, *Down to Earth*, Vol.5, No.17, 31 January 1997, p.16.

<sup>8</sup> Jayanta Bandopadhyay, “Between Local and Global Responsibilities”. *Seminar*, Vol.516, August 2002, p. 22.

- Some Aspects of the Rational Management of Natural Resources<sup>9</sup>

With the help of these reports, the impact of the population explosion on the natural environment and the existing state of environmental problems were examined. A National Committee on Environmental Planning and Co-ordination (NCEPC) was established for better co-ordination between the environment and economic development. Ever since its establishment, the government has tried to involve this committee in all major industrial decisions so that environmental goals could be taken into consideration. In the late 1980's the Committee conveyed to the government that "poverty and underdevelopments, as opposed to development activities, had led to many of the country's environmental problems and that such problems could no longer be side stepped."<sup>10</sup>

Since 1991, under the influence of globalization and liberalization, the government has reduced industrial regulations, lowered investment barriers and encouraged export-oriented enterprise. A group of environmentalists fear that this liberalization process will increase environmental problems as well as inequality.<sup>11</sup> The Union Government rejected this suspicion and, in the policy for the abatement of pollution

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<sup>9</sup> Shyam Divan and Armin Rosencranz. *Environmental Law and Policy in India: Cases, Materials and Statutes* (New Delhi: Oxford University Press, 2001), p. 33.

<sup>10</sup> Ibid, p. 34.

<sup>11</sup> Ibid, p. 37.

(1992), declared as its objective to integrate environmental concerns into decision making at all levels. The statement notes:

The public must be aware in order to be able to make informed choices. A high government priority will be to educate citizens about environmental risks, the economic and health dangers of resource degradation and the real cost of national resources. Information about the environment will be published periodically. Affected citizens and non-governmental organizations play a role in environmental monitoring and therefore allowing them to supplement the regulatory system and recognizing their expertise where such exists and their commitment and vigilance, will also be cost effective. Access to information to enable public monitoring of environmental concerns, will be provided for.

Public interest litigation has successfully demonstrated that responsible non-governmental organizations and public-spirited individuals can bring about significant pressure on polluting units for adopting abatement measures. This commitment and expertise will be encouraged and their practical work supported.<sup>12</sup>

### **Debate on Global Environmental Issues and the Kyoto Protocol**

The above discussed environmental groups hardly address long-term global environmental issues like global warming, acid rain, depletion of the ozone layer and the threat to biodiversity. However, since the Rio Summit (1992) and more recently in the Kyoto Protocol, the common people have been exposed to the issue of global environmental governance. In this context, there has emerged an environmental discourse and public debate in India. It interprets all environmental issues in the global context of North-South relations. A link is considered between the environmental problems of the developing countries and the pattern of natural resource consumption

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<sup>12</sup> Ibid , p.36.

in the industrially developed countries. Intense industrialization and over-consumerism have been the main source of environmental pollution, and the Northern countries should be made responsible for that. The developing countries need development so as to deal with the basic problems of poverty and unemployment and to fulfill the needs of a growing population. Their pace of development cannot be hindered by imposing strict eco-friendly clauses. Since developing countries lack technology and capital, there is also the need for assistance from the developed countries in order to instal eco-friendly technologies of production. O.P. Dwivedi writes:

The international community must appreciate that the current culture of the West based on mass production, mass consumption and mass waste generation and disposal will have to change. The North must accept a two-fold commitment to life style and to provide assistance to developing nations for environmental conservation and production, not in the form of bilateral aid or multilateral loans but as a partnership grant between nations.<sup>13</sup>

The Kyoto Protocol is all about limiting the emissions level of greenhouse gases in the atmosphere. It provides legally binding targets for industrially developed countries whereas developing countries are left to follow voluntary norms under the United Nations Framework Convention on Climate Change. "Under the Kyoto framework developing countries are merely being asked to undertake measures that would help them to reduce their future carbon dioxide emissions with the financial help of

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<sup>13</sup> Dwivedi, op.cit., p.158.

industrialized countries so that the credit for these emissions reduction can go to the latter.”<sup>14</sup>

India being a developing country does not have any immediate target or obligations. Therefore, the Indian domestic debate on the Protocol is not as intense as in America. Indian environmentalists as well as the government have a positive attitude towards the Protocol based on the principle of “common but differentiated responsibilities”. India ratified the protocol before the COP-8 meeting in New Delhi. Indian ratification implies that India is ready to accept future negotiations under the Protocol. The environmentalists have overwhelmingly welcomed this decision. Sunita Narain, the Director of the Centre for Science and Environment, said that “India has sent a good signal by taking the lead in the region and showing that the multilateral approach is better than unilateral.”<sup>15</sup>

In India, there are no real proponents and opponents of the Kyoto Protocol. However, diverse views have come up supporting the protocol on some points and opposing it on some other points. The opponents’ views are less concerned with the impact of the protocol on the Indian economy or society but more concerned with its loopholes which the developed countries may exploit to bypass the obligations under the Kyoto Protocol. After its rejection by the United States, they are now more suspicious about the effectiveness and future of the Protocol.

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<sup>14</sup> Anil Agarwal, “Kyoto’s Ghost Will Return,” *Down to Earth*, Vol.6, No.16, 15 January 1998, p. 36.

<sup>15</sup> Sunita Narain, *op.cit.*, p. 16

## *Proponents*

India always supported the IPCC report and advocated a multilateral approach to solve this global problem. The Kyoto Protocol is the first of its kind to take some legally binding measures and thus Indian support was more or less likely. In his speech to the COP-8 meeting in New Delhi, the Indian Prime Minister Atal Bihari Vajpayee extended the country's full support to the climate change mitigation effort. He said:

Climate change has emerged as one of the most serious environmental concerns of our times. It is a global phenomenon with diverse local impacts....India has always agreed that strengthening of global co-operation is central to any effort to address global environmental problems. We ratified the convention in 1993. This year we took a step further by acceding to the Kyoto Protocol. And we feel privileged to be hosting this important conference, ten years after Rio.<sup>16</sup>

From the very beginning of global environmental negotiations, India has been demanding that the industrially developed countries that are mostly responsible for the present level of the greenhouse gases in the atmosphere take the lead. The Kyoto Protocol satisfies this demand by providing for binding commitments on only the developed countries. The developing countries have been assigned a role of assisting developed countries to meet their target commitments in a cheap way. This is to be carried out through market based flexible mechanisms. In the operation of

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<sup>16</sup> Facsimile, "Statement of the Prime Minister of India and President of COP8", UNFCCC secretariat, 30 October 2002.

the flexible mechanisms, developing countries are going to be benefited by the aid and technology to be transferred by the developed countries.

India believes that developing countries have strong incentives to get the Kyoto norms implemented properly, because the impact of climate change is projected to be more severe in developing countries, where more people are tied to climate-dependent work like agriculture and fisheries and there are fewer resources to help people adapt to the new circumstances. “Major developing countries have clearly indicated their willingness to do their part as long as industrialized countries deliver on their promise to lead and responsibilities are shared equitably.”<sup>17</sup> However, developing countries cannot be expected to deliver too much. What Mrs. Indira Gandhi said before the Stockholm Conference is still relevant. She said:

The developing countries are as much concerned about the urgent need to protect the environment as any other states, if not more, but when issues of global environmental protection are competing for scarce resources needed to address the very means of improving living conditions, of providing food, water, sanitation and shelter, the developing countries are hard pressed to pay much attention to environmental issue. How can we speak to those who live in villages and in slums about keeping the oceans rivers and the air clean when their own lives are contaminated at the source?<sup>18</sup>

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<sup>17</sup> UN Press Release, “Setting the Record Straight: The UN and Climate Change”, United Nations Department of Public Information, 7 November 1997.

<sup>18</sup> Kilaparty Ramkrishna, “North-South Issues, The Common Heritage of Mankind and Global Environmental Change”, in Ian H. Rowlands, ed., *Global Environmental change and International Relations* (London: Macmillan Press, 1992), p. 45.

## *Opponents*

Opponents basically point out loopholes in the Kyoto Protocol. First, According to the opponents, the strategy outlined in the Kyoto Protocol enjoins the Annex I countries to meet their commitments without assigning any responsibility of reducing greenhouse gases emissions at home. Industrially developed countries would be able to meet their commitments by merely investing in the developing countries or by borrowing emissions reductions from other countries where emissions reductions have already taken place. Therefore, it may not lead to a real stabilization of the greenhouse gas concentration worldwide at a safe level.<sup>19</sup>

Secondly, the reduction in the emissions of carbon dioxide as agreed to by the industrialized countries in the Kyoto Protocol is like a drop in the ocean. The proposed cut down was not reached according to needs but on the basis of bargaining between various groups. The European Union proposed 15% cuts in major greenhouse gases by the year 2010. Japan proposed a reduction of 5% by 2008-2012 taken as an average over these years. The Alliance of Small Island States (AOSIS) wanted a 20% rollback by 2005.<sup>20</sup> Although the US did not make anything clear, it tried for the minimum target. Finally, the target of reduction was fixed at 5% compared

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<sup>19</sup> Narottam Gaan, "Politics of Governance of Global Climate Change: Not on Equity But on North's Interests", *India Quarterly*, Vol. 58, No.4, pp. 93-94

<sup>20</sup> UN Press Kit "Governments to Seek Greenhouse Gas Cuts at Kyoto Climate Talks", UN Department Of Public Information, 15 November 1997, p. 2.



to the 1990 levels by the period 2008-2012. If this target is seen in the light of the Intergovernmental Panel on Climate Change (IPCC) report, it seems to be a half-hearted response to the severity of the problems concerned with global warming. According to the IPCC, a 60% reduction in carbon dioxide emissions is necessary to bring levels in the atmosphere down to twice the pre-industrial level.<sup>21</sup> A study published in the journal, *Nature*, found that unless the world gets half its energy from non-carbon sources by 2018, the planet will experience four times more carbon concentration in the atmosphere by the end of the century.<sup>22</sup> Against this background, it will require a far more radical approach than is embodied in the current draft protocol. The Kyoto Protocol falls short of its goal of climate stabilization.

A third criticism is that after the US rejection of the Protocol, the Protocol is now merely a paper victory. The largest polluter is no longer a part of the agreement. The non-participation of the US will dramatically reduce the size of the clean development mechanism's potential market. The clean development mechanism, which seemed attractive to developing countries, is now hollow.<sup>23</sup> In place of the Protocol, the US revealed a new strategy and defined a parallel track based on intensity targets and bilateral deals. At the World Summit on Sustainable Development, the US criticized the multilateral process and justified bilateral, voluntary partnerships. A US

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<sup>21</sup> *Newsletter*, The Indian Network on Ethics and Climate Change (INECC), No. 12-13, July-December 2002, p. 15.

<sup>22</sup> Narottam Gaan, *op.cit.*, p. 94.

<sup>23</sup> Neelam Singh, "Deep Impact Shallow Response," *Down to Earth*, Vol.9, No.15, 31 December 2000, pp. 27-29.

Senator pointed out that multilateralism was an obstacle in the way of the world's superpower.<sup>24</sup>

Fourth, opponents note that the Kyoto Protocol makes no attempt to recognize the principle of equal rights. In place of an approach based on equal shares or rights for each individual, emission entitlements have been set on the basis of current national emissions. The Kyoto Protocol sets a target for industrialized countries to meet during the period 2008-2012 on the basis of their emissions level in 1990. That means the protocol gives a right to that level of emissions at least up to 2012. On the other side, the Protocol fails to acknowledge or set any emissions rights for developing countries. Thus, it denies present and future generations of the population of developing countries their fair share.<sup>25</sup> For a more equitable entitlement, the Centre for Science and Environment has devised an equitable mechanism for the calculation of emissions entitlement based on the principle of per capita entitlement. Developing countries including India and China have been advocating this mechanism. In his address to the COP-8 meeting in New Delhi, the Indian Prime Minister Atal Behari Vajpayee stressed this point by saying that “we do not believe that the ethos of democracy can support any norm other than equal per capita rights to global environmental resources.”<sup>26</sup>

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<sup>24</sup> Anju Sharma, Neelam Singh and Clifford Polycarp, “Nothings Brewing”, *Down to Earth*, Vol. 11, No. 13, 30 November 2002, p. 32.

<sup>25</sup> *Newsletter*, INECC, *op.cit.*, p.18.

<sup>26</sup> Anju Sharma et al., *op.cit.*, p. 31.

The late Anil Agarwal, a noted environmentalist and the founder editor of *Down to Earth* points out some loopholes in the Kyoto Protocol through which emission targets can be met without effort. These relate to:

- The bubble approach
- The hot air proposal
- A not so clean development mechanism
- Sinks and land use
- Six gases approach
- Aviation emissions
- Lack of compliance mechanism<sup>27</sup>

First, the bubble approach suggested by the European Union is unjust. In the bubble approach, the European Union has made an internal agreement to meet its 8 percent target by distributing different rates to its member states. The more developed countries like Germany would reduce their emissions and would let less developed countries like Portugal emit more. These targets range from a 28 percent reduction by Luxembourg and a 21 per cent cut by Denmark and Germany to a 25 percent increase by Greece and 27 percent for Portugal.<sup>28</sup>

Secondly, the provision of hot air trading among the industrially developed countries will make emission reductions a mere formality. The

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<sup>27</sup> Anil Agarwal, op.cit., p. 36-39

<sup>28</sup> *Understanding Climate Change: A Beginner's Guide to the UN Framework Convention and its Kyoto Protocol* (Geneva: Information Unit for Conservation, 1999), p. 27.

member countries of the JUSSCANNZ (Japan, United States, Switzerland, Canada, Norway and New Zealand) can meet their targets by trading emissions rights with Russia and the countries of Central and East Europe who have faced an economic collapse and are passing through a transitional economic phase. This is merely a paper transaction.<sup>29</sup>

Thirdly, according to Agarwal, clauses most opposed by the developing countries, i.e. trading between industrialized and developing countries, got a back-door entry in the form of the clean development mechanism. Under this provision industrialised countries can meet a part of their reduction commitments by carrying out certified emissions reduction activities in the developing countries. This would include planting trees in developing countries and would allow the developed countries to avoid emissions at source.<sup>30</sup>

Fourth, the Protocol allows for the use of afforestation as a sink, which reduces carbon dioxide levels in the atmosphere. Therefore, countries with afforestation programmes can get reduction certificates through sinks without doing much to reduce emissions from burning fossil fuels. Again, the Australian land use proposal has been accepted. Australia insisted that much of its 1990 emissions of carbon dioxide were due to forest clearing. Since it has now reduced the deforestation rate, its total emissions in 1996 have decreased. It is now less than that of 1990. Under this provision, the

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<sup>29</sup> Anil Agarwal, *op.cit.*, p. 36.

<sup>30</sup> *Ibid*, p. 36.

emissions from land use changes would be considered in calculating total greenhouse gas emissions.<sup>31</sup>

Fifth, the Kyoto Protocol has adopted the six-gas approach proposed by the US against the three-gas approach proposed by the European Union and the gas-by-gas target approach proposed by the G-77 countries. The six-gas approach allows reductions in a basket of six gases comprising carbon dioxide, nitrous oxide, methane, hydro fluorocarbons, per fluorocarbons and sulphur hexa-fluoride. This approach would give the developed countries an easy way out because they would meet their reduction commitments by reducing a gas other than carbon dioxide. The developing countries wanted a gas-by-gas approach, which might lead to a reduction in all gases.<sup>32</sup>

Sixth, initially the Protocol did not account for the emissions from fuel burnt in international aviation and marine transport. This constitutes around five to ten percent of the total world's emissions. However, later on such emissions have been included. It still exempts emissions from international military actions taken for self-defence or on behalf of the United Nations multilateral actions.<sup>33</sup> This clause may be misused by the developed countries, especially by the US.

Finally, any legally binding obligation needs some compliance mechanisms for its implementation. In the absence of proper compliance

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<sup>31</sup> Ibid, p. 37.

<sup>32</sup> Ibid, p. 37.

<sup>33</sup> Ibid, p. 37.

mechanisms, there is no difference between a legally binding commitment or voluntary commitments. The Kyoto Protocol has left the compliance mechanism to be developed in future negotiations. Environmental treaties like the Montreal Protocol and the Convention on Trade in Endangered Species (CITES) are governed by a compliance mechanism based on trade sanctions. Thus, countries who fail to comply with the provisions of the treaty face trade sanction. It is effective when an economically powerful country puts sanction against an economically less powerful country. However, in the case of the Kyoto Protocol, commitments have been made only by the most powerful nations of the world like the US, Japan, and the European Union. Undoubtedly, mechanisms based on economic sanctions are therefore not going to work: “Who can apply effective economic sanction against them? Surely not Bangladesh, India, Denmark, Costa Rica or Nauru.”<sup>34</sup>

## **Conclusion**

The Indian domestic debate on the Kyoto Protocol is the by-product of India's support to the Protocol. India wants a protocol that could make the industrially-advanced countries responsible for the present level of greenhouse gases in the atmosphere. Global warming due to climate change is more harmful for the developing countries whose economies depend upon agriculture and other primary products. Therefore, the developing countries are more concerned with strict regulations, while the developed

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<sup>34</sup> Anil Agarwal, *op. cit.*, p. 39.

countries are more concerned with the alternatives to meet the targets provided by the Kyoto Protocol. Thus, any loopholes in the Kyoto Protocol are the concern of developing countries. Indian proponents support the Kyoto Protocol because for the first time it binds developed countries with legally binding targets. On the other hand, opponents are not against the protocol but want a more efficient mechanism through which implementation can be effective. They point out various deficiencies of the protocol, which could allow countries to bypass the actual targets of the Protocol.

## CHAPTER – 4

### A COMPARATIVE ANALYSIS OF THE INDIAN AND THE US STAND ON THE KYOTO PROTOCOL

After more than six years, the Kyoto Protocol could not be ratified by the requisite number of countries and the entry into force is still awaited. So far, eight rounds of COP meetings have taken place, but mechanisms governing the protocol are yet to be finalized. Last in the series, the Delhi meeting of the COP in October-November 2002 could not make any significant progress. The main obstacle was the United States. The US has rejected the protocol and is adamant in its stand. It has proposed an alternative model to solve the environmental problem. This is based on voluntary bilateral activities in place of the Kyoto-type multilateral approach. On the other hand, India is enthusiastic about the Protocol. India ratified it and hosted the last COP meeting. In the COP, India asserted its firm commitment to the Protocol and tried to mobilize support from all countries, including the United States. This does not mean that the two countries have completely different understandings on the environment. The environmental policy of any country involves politics. Paul Wapner writes:

Environmental protection is not the only aim of societies and thus must be balanced with other social goals, such as economic well being, which, depending on how one thinks about it, can conflict with environmentally sound measures. To reorient human activities on such a scale and order of complexity entails employing a means of governance that can actually influence vast and diverse numbers of people. It requires ways to constrain and direct



activities, in a feasible manner, away from environmentally harmful practices and toward more environmentally sound ones. To put it in ordinary language, environmental concern fundamentally involves politics<sup>1</sup>

The contrasting approach of India and the United States can be understood in the light of domestic politics in both countries. The following seven factors affect the debate in India and the US and will be used in this chapter to discuss the approaches of the two countries:

- Nature of Environmentalism
- Nature of Commitment to the Kyoto Protocol
- Emissions level and Per Capita Consumption
- Dependence of Economy on Fossil Fuel
- Nature of the Kyoto Debate
- The North–South Divide
- The Attitude Towards Market-Based Flexible Mechanisms

### **Nature of Environmentalism**

The nature of environmentalism in India and the US has been different. The United States is considered to be the home of modern environmentalism. It has witnessed the growth of a healthy environmentalism. On the other hand, Indian environmentalism is in the primary stage and manifest in the form of a socio-ecological movement.

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<sup>1</sup> Cited in Glenn Sussman, Byron W. Daynes and Jonathan P. West, *American Politics and the Environment* (New York: Longman, 2002), p. 278.

The roots of US environmentalism are in the colonial period, when European migration, European technology, European economics and European values led to a dramatic transformation of the continent. The great demand for resources by the industrial revolution rapidly changed the land and the surroundings. The effects of sewage, unbearable air, mining waste, loss of forests and watersheds troubled citizens. Citizens organized locally to protect their surroundings and their health. However, modern environmentalism in the US emerged only in the 20<sup>th</sup> century.<sup>2</sup>

There are three waves of modern environmentalism in the US.<sup>3</sup> The first wave of environmentalism started with the establishment of various environmental groups like the Sierra Club, the National Audubon Society, the National Parks and Conservation Association, the Izaak Walton League of America, the Wilderness Society, and so on. They called for the preservation of national resources. However, they were elitist in nature and their adherents were affluent white Protestant males eager to protect wildlife for hunting and fishing and to preserve open space for aesthetics and recreation. This traditional conservation movement could not be very effective and the ecosystem continued to degrade. The country increasingly experienced the disappearance of wildlife, water pollution, air pollution, and soil erosion. These

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<sup>2</sup> Philip Shabecoff. *Earth Rising: American Environmentalism in the 21<sup>st</sup> Century* (Washington, D.C.: Islands Press, 2000), pp. 3.

<sup>3</sup> *Ibid.*, p. 5.

developments led to a growing people's consciousness of environmentalism. However, environmental dangers did not become a part of national politics.<sup>4</sup>

The second wave of environmentalism started in the US with a mass social movement. On the occasion of the first Earth Day in 1970, millions of Americans took to the streets to demonstrate their deep concern. They demanded that environmental problems be addressed by the government.<sup>5</sup> They drew the attention of the US government and were responded to by the Nixon administration. The Environmental Protection Agency (EPA) was created by an executive order. It became the sole tool for reducing pollution by corporations and municipalities and for doing the research and education needed to alert the American people to threats to their land, air, water and health. New environmental groups like the Environmental Defence Fund, Natural Resource Defence Council, Greenpeace, and Friends of the Earth came into existence. Their main tools were litigation, lobbying for legislation and making Americans alert to their environment. Unlike the older conservation groups, the focus was not on land and wildlife preservation but on pollution and toxic substances in the environment and their effects on human health. This period in the US is famously

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<sup>4</sup> Ibid, p. 3-11.

<sup>5</sup> Ibid, p. 6.

known as the golden age of environmentalism.<sup>6</sup> It was not only a period of legislative and political gains but also saw environmental quality become an issue in democratic politics. Various constructive steps were taken resulting in a net improvement in the state of the environment.

The golden age of environmentalism suddenly came to an end in 1980 when Ronald Reagan entered the White House. According to him, “the environmental regulations had become an unacceptably heavy burden to market capitalism and to the individual freedom of Americans.”<sup>7</sup> He removed environmental regulatory requirements from industry. The effective resistance of the corporate world against the emerging militant environmentalism in the 1970’s accompanied Reagan’s policy. Reagan’s policy reflected pro-business beliefs. Neil Harrison presents Reagan’s policy in the following words:

Reflecting pro-business beliefs, the Administration opposed further domestic regulation of CFCs and in 1982 the Environmental Protection Agency (EPA) formally cancelled plans to regulate certain non-aerosol uses of CFCs. It also refused to press for international action, calling instead for more research, monitoring, and information exchange as blocking measures. While the issue remained heterogeneous, and public concern was minimal, the hawkish Reagan administration could actively oppose international mitigation policy.<sup>8</sup>

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<sup>6</sup> Jacqueline Vaughn Switzer, *Green Backlash: The History and Politics of Environmental Opposition in the US* (London: Lynne Rienner Publishers, 1997), p.8

<sup>7</sup> Neil J. Harrison, “From the Inside Out: Domestic Influences on Global Environmental Policy”, in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martins Press, 2000), p. 95.

<sup>8</sup> Shabecoff, op. cit, p. 8.

The collision between the second wave of environmentalism and the protest of corporate groups gave rise to a number of new environmental groups who sought to develop new skills and tactics to cope with the environmental degradation. They constituted the third wave of environmentalism<sup>9</sup>. Instead of attacking industry, the third wave of environmentalists advocate negotiated settlements to pollution problems. According to them, market forces could be used as a tool for protecting the environment in place of regulatory mechanisms. The system of tradable air pollution is favoured by the third wave of environmentalists.

On the other hand, Indian environmentalism mainly emerged in the form of protests against deforestation, construction of dams, destruction of wildlife and growing pollution. The environmental groups were less concerned with the degrading quality of the environment and more concerned with the lives of the population dependent on natural resources. Defining Indian environmentalism, Jayanta Bandyopadhyay writes:

Environmentalism in India like in most parts of South Asia, began mainly as an integral part of local level activism for broad social justice. The spontaneous resistance and protests by the affected parties, when and where the lives or livelihoods of a number of people or communities were threatened by the environmental

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<sup>9</sup> Ibid, p. 6.

impacts of activities initiated by others, came to be identified as environmentalism.<sup>10</sup>

Thus, Indian environmentalism is different from its US counterpart, where the concept of 'protectionist conservatism' prevails. It is all about environmental management. The Indian environmental movement is based on 'utilitarian conservatism', where preservation of the environment means the preservation of dependent human communities.<sup>11</sup> It is directed against any activities which pose threats to the ecological balance and consequently to the related human community. Various developmental projects have been the centre of protests. The strongest environmental protests in India have centered on the construction of dams, which are perceived to destroy rich forest and to displace the indigenous people.

There has emerged a second stream of environmentalism in India through public interest litigation taken up by the judiciary. It was influenced by the first green judgment delivered by the Supreme Court in 1990. The Supreme Court declared that "the right to clean environment was superior to the right to livelihood, both emanating from Article 21 of the constitution"<sup>12</sup>. The intelligentsia and some environmentally conscious people have shown an interest in preserving

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<sup>10</sup> Jayanta Bandyopadhyay, "Between Local and Global Responsibilities", *Seminar*, Vol. 516, August 2002, p. 21.

<sup>11</sup> Sunita Narain, "Changing Environmentalism", *Seminar*, Vol. 516, August 2002, p. 67.

<sup>12</sup> Dunu Roy, "Environmentalism and Political Economy", *Seminar*, Vol. 516, August 2002, p. 67.

the environment and have drawn the attention of the government through judicial decisions. However, mass consciousness is still lacking. Pollution control is yet to become an electoral issue. The government's own companies and power stations are heavy polluters. There is lack of proper regulation. Thus, in comparison to the US. Indian environmentalism is in the early phases.

US environmentalism has passed through various stages, and in each stage it has been effective. Environmentalists successfully drew the attention of the government and, in the final stage, they have been ready to compromise with the corporate world. In place of strict regulations, they are now advocating the trading of air pollution. On the other hand, Indian environmentalism still involves developmental projects. Various groups of environmentalists are linked to different issues, and they hardly enjoy any support from the masses outside the concerned community. Issues taken up by the intelligentsia and environmentally conscious people through public interest litigation have been very limited, and there is scarcely any uniform policy that can be implemented throughout the country. Most people do not feel a stake in global environmental issues. However, they support the Indian government's approach on global issues including the Kyoto Protocol. The US environmentalists have a uniform policy on global issues. They believe that pollution can be controlled without disturbing the pace of

development with the help of high eco-friendly technology and tradeable mechanisms.

### **Nature of Commitment to the Kyoto Protocol**

Both India and the US have a different commitment to the Kyoto Protocol. Being an industrially developed country the US has been given a legally binding emissions reduction target of 7 per cent below its 1990 levels during the period 2008-2012. To meet this target the Kyoto Protocol provides some market-based flexible mechanisms like the clean development mechanism, joint implementation and emissions trading. The governing rules of these mechanisms were to be framed in the conference of parties (COP). However, after eight rounds of COP, these rules are yet to be finalized.<sup>13</sup>

On the other hand, being a developing country, India does not have any binding targets to meet in the first phase, i.e. between 2008-2012.<sup>14</sup> However, in the future, India might be subject to some binding targets. At the present, India only needs to help developed countries including the US in the implementation of flexible mechanisms. In this way, India could benefit from aid and technology transfers from the developed countries.

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<sup>13</sup> *Climate Change: Information Kit* (Bonn: Climate Change Secretariat, 2001), p.21.

<sup>14</sup> *Ibid*, p. 29.



Therefore, under the Kyoto provisions, US economic activities related to the green-house gas emissions are likely to be affected in the first phase whereas India will not be affected in the first phase.

### **Emission Levels and Per Capita Consumption**

Emission levels of greenhouse gases in the developed countries have been much higher than those in the developing countries. The Industrial Revolution in Europe and the US is responsible for the present level of greenhouse gases in the atmosphere. During the industrial revolution, the concentration of carbon dioxide in the atmosphere increased rapidly. In the pre-industrial phase concentrations of CO<sub>2</sub> were 280 ppm (parts per million), which increased by a rate of 1.5 ppm per year, and in 1998 it reached 365 ppm.<sup>15</sup> Although emissions in some of the leading developing countries are increasing very fast, they are still much less than in the developed countries. The United States is one of the leading emitters of greenhouse gases.

In 1998, twenty-five leading Annex I developed countries were responsible for 47 percent of the carbon dioxide emissions from fuel combustion<sup>16</sup>. The rest of the fourteen Annex I countries who are undergoing an economic transition were responsible for another 11

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<sup>15</sup> *Climate Change 2001: The Scientific Basis, Technical Summary of the Group I Report*, p. 38.

<sup>16</sup> Annex 1 of the UNFCCC includes all the countries having quantified emissions targets under the Kyoto Protocol.

percent of the carbon dioxide emissions. The remaining more than one hundred and fifty countries contributed just 38 percent of the world's total. The United States was itself responsible for 5410 million tons of carbon dioxide, which comes to around 24 percent of the world total. Further, the US emissions are increasing. Between 1990 and 1998, US emissions of greenhouse gases increased by 11.2 percent. In terms of per capita figures, the difference is more pertinent. Indian per capita emissions in 1998 were 1.1 metric tons while that of the US was 19.7 metric tons, almost eighteen times more.<sup>17</sup>

### **Dependence of the Economy on Fossil Fuel**

Energy is the main input of economic development. Out of the various sources of energy, fossil fuels are the most abundant and are mostly responsible for the emissions of greenhouse gases in the atmosphere. The Industrial Revolution was mostly coal-energy based. Although alternative modes of energy like natural gas, nuclear energy, wind energy or solar energy are increasing slowly, two main fossil fuels, coal and petroleum, are still the most important sources of energy. The United States, Russia, India and China have good deposits of coal. The whole Gulf economies depend upon their oil reserves. The US and India are both large importers of petroleum.

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<sup>17</sup> *Climate Change: Information Kit* (Bonn: Climate Change Secretariat, 2001), p.29-30

Indian energy dependency on coal has decreased in the last 40 years (between 1950 and 1990) from 80 percent to 39 percent, but the contribution of crude oil has increased from 0.63 percent to 6.1 percent. In 1950, coal and crude oil together constituted 30.63 percent of total energy. However, in 1990 their combined contribution went down to 45.1 per cent.<sup>18</sup> Similarly in the United States, the contribution of coal has decreased from 41.37 percent to 33.15 percent between 1950-1990, and the contribution of crude oil has decreased from 36.1 percent in 1950 to 26 percent in 1990. In 1950, coal and crude oil together constituted 77.47 percent of total energy sources, whereas in 1990 their combined contribution remained 59.21 percent.<sup>19</sup>

The trend in the two countries therefore is more or less similar. In both countries, although dependence on coal and crude oil has decreased, these are still the major sources of energy. This shows that decreasing emissions in both countries will be equally tough. However, India does not need to meet any targets in the first phase, and thus, there is hardly any debate in India over this aspect. On the other hand, it is much debated in the United States.

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<sup>18</sup> O.P. Dwivedi, *India's Environmental Policies, Programmes and Stewardship* (London: Macmillan Press, 1997), p. 15.

<sup>19</sup> *Environmental Quality: The Twenty Second Annual Report of the Council on Environmental Quality Together with the President's Message to Congress* (Washington, D.C.: US Government Printing Office, 1992), p. 239.

## **Nature of Debate**

The nature of debate on the Kyoto Protocol in India and the US is influenced by the nature of environmentalism and commitment to the Kyoto Protocol. The Kyoto Protocol satisfies the basic argument of India that developed countries should be made responsible in the first place because they have produced the present level of greenhouse gases in the atmosphere.

In India, both environmentalists and the government are on the same side in supporting the Kyoto Protocol. They want very strict regulations, which cannot be bypassed by the developed countries. Therefore, a group of environmentalists have criticized the Kyoto Protocol not for its objectives or its impact on the Indian economy and society but rather for loopholes, which, in their view, might be misused by the developed countries to meet their emission targets.

On the other hand, the direction of the US debate on the Kyoto Protocol is very different. The main cause of its rejection by the US government has been its impact on the US economy and society. During the Clinton administration the centre of debate was between the government and the various economic groups who would have been affected by the Kyoto provisions. The third wave of environmentalists had reached a compromise in which strict regulation had to compromise with an emissions trading regime. However, US economic groups eventually dominated and successfully opposed the Protocol on various

grounds. They were not even satisfied by the flexible mechanisms provided by the Protocol. When the Bush administration rejected the Kyoto Protocol, it was clear that the US Government and the corporate groups were once again aligned. Together they argue that the Kyoto provisions will have a harsh impact on the US economy, especially when leading developing countries have no immediate obligations under Kyoto.

Thus while the US debate on the Kyoto Protocol is more about a cost-benefit analysis, the Indian debate is about the just distribution of responsibilities in the international arena.

### **Market-Based Flexible Mechanisms**

The market-based flexible mechanisms provide some relatively easy ways out for the developed countries, including the US. In the course of implementation of the flexible mechanisms, the developing countries may be benefited from the transfer of aid and technology by the developed countries. However, the European Union and India have protested the very liquid flexible mechanism. The European Union regards the mechanism as a loophole. It has made clear that no country should be allowed to meet all its targets through flexible mechanisms without making any real cuts at home. India has taken a similar stand.<sup>20</sup>

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<sup>20</sup> Anil Agarwal, "Kyoto Ghost Will Return", *Down to Earth*, Vol. 6, No. 16, 15 January 1998, p. 36.

The US, by contrast, was determined to dilute the flexible mechanisms.

Andreas Missbach writes that:

The US accepted binding obligations for emissions reductions, but it nevertheless still tried to avoid diminishing emissions at the source. The mechanism for fulfilling obligations outside a country now had greater importance.... In the long term the United States strove to achieve global “emissions free trade.” The United States wanted easily achieved emissions credits from joint implementation projects and emissions trading.<sup>21</sup>

The US stand triumphed and, to an extent, the provisions were diluted to suit it. However, the US is still not satisfied with the present provisions and is now looking for an alternative bilateral model based on voluntary actions.

Therefore, while India wants to make the Kyoto provisions more stringent, the US is looking to dilute them.

### **North-South Divide**

There is a North–South divide on global environmental issues, which is evident in the Indian and US stand on the Kyoto Protocol. The divide became more or less the South versus the US when the European Union differed from the US’ stand. Even within the South, there is no unanimity. Due to their oil-based economies, the Gulf countries are opposed to a strict Kyoto. For them, the impact of greenhouse gases in the atmosphere has been exaggerated. On the other hand, the small

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<sup>21</sup> Andreas Missbach, ” Regulation Theory and Climate Change Policy “ in Paul G. Harris, ed., *Climate Change and American Foreign Policy* (New York: St. Martin’s Press, 2000), p. 139.

island states are advocating greater regulation of greenhouse gases in the atmosphere due to their extreme vulnerability.

Although the emission levels of some leading developing countries are increasing rapidly, they have entered this phase very recently. If we look at emission levels even in the present time, developed countries are far ahead. The Kyoto Protocol represents this viewpoint and makes binding provisions only for the developed countries. However, the South's immunity can be curtailed in further negotiations. Thus, India supports the idea behind the Kyoto Protocol. However, it is very suspicious about the loopholes in the Protocol.

On the other hand, in place of "common but differentiated responsibilities", the US advocates equal responsibility for all.<sup>22</sup> Thus the US is trying to transfer responsibilities to those developing countries that have never been responsible for the present level of greenhouse gases in the atmosphere. The US is less concerned with environmental hazards and the merits of the Kyoto Protocol. It is more concerned with economic costs and benefits. In place of counting the cost of environmental hazards, it is merely calculating the cost-benefit balance to the economy.

Thus, the US and India seems to have opposite stands on the Kyoto Protocol. While India wants a strict commitment by the developed countries, the US wants flexibility. However, this contrasting approach does

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<sup>22</sup> Ibid, p. 139.

not only reflect the North-South divide, especially when the attitude of the European Union and the Gulf countries are taken into account. If we keep aside the special case of the Gulf countries, whose life and death is oil, the Indian viewpoint represents that of the South. On the other hand, the US seems to represent the North when it stresses binding targets for the leading developing countries. However, the US' primary argument, namely, that the Kyoto provisions are a cost to the US economy, shows that the US stand is much more than a Northern view.

### **Conclusion**

Environmental preservation is equally important to India and the US. However, their approaches to the Kyoto Protocol have been different. Seen in the light of basic domestic constraints, which influence environmental decision-making, it is clear why they are different. The nature of environmentalism in the US is very mature. In place of simply criticizing activities which harm the environment, the third wave of environmentalists believe in creative solutions commensurate with the market. On the other hand, Indian environmentalism is more a socio-ecological movement. It is against any activity which is likely to disturb the ecological balance and concerned social groups. The nature of obligations in the Kyoto Protocol are also different for the two countries. While the US has been given a reductions target of 7 per cent, there is no such target for India. India only needs to help the developed countries meet their targets.



Emissions levels and per capita consumption of greenhouse gases are much higher in the US in comparison to India.

All these basics shape the nature of the domestic debate in both the countries. The central point of the Indian debate on the Kyoto Protocol is that the regulations should be implemented stringently, and this contention very much defined the Indian stand on the Kyoto Protocol. On the other hand, the US debates basically revolve around the impact of the Kyoto regulations on the US economy. Right since the pro-Kyoto attitude of the Clinton administration, various corporate groups have intensified their protests. And this is the central reason that the US rejected the protocol. Thus, in both cases, the nature of the domestic debate has played a central role in determining their respective stands on the Protocol.

## CONCLUSION

In spite of an overall consensus that environmental problems need to be addressed globally, global cooperation has not been as successful as is needed to mitigate the impact of environmental pollution in the near future. Various commissions were set up, a series of recommendations were made and a variety of agreements have been signed. However, these agreements were more visionary than real. The Kyoto Protocol was signed in 1997 but its governing principles are yet to be finalized. After eight rounds of the Conference of Parties (COP), differences between various groups could not be sorted out. The United States has walked out of the Kyoto Protocol while developing countries like India and China much enthusiastic about getting the Kyoto Protocol implemented.

One of the primary goals of US foreign policy in the environmental area has been to protect or promote the US economy. The United States wants to limit the scope of regulations within the country to protect US independence and limit harm to US businessmen. Thus, the United States advocates greater flexibility in meeting the targets. A very liquid flexible mechanism will allow the US to meet Kyoto targets outside the country. It also prefers that other countries act first or at least simultaneously so that international actions have the least negative impact on the US people, their lifestyles and their consumption patterns. Therefore, it wants similar targets for the leading developing countries under the Kyoto Protocol.

Further, US foreign policy always endeavours to protect US national interests, particularly the most vital ones. Most environmental issues have rarely presented acute evidence of immediate harm. Climate change mitigation policies will benefit the general population in the future in what ways is not very clear. However, the costs of mitigation are borne in the present by well-organized groups of industrial actors such as fossil fuel producers and automobile manufacturers. As a result, there has been a strong tendency to advocate more research on environmental problems and the potential impact of international regulations on the US economy. Even the moderate Kyoto targets have been taken by the US as harsh on the US economy.

Another aspect of US foreign environmental policy is the North-South difference. US foreign policy wants to promote environmental or commercial goals favourable to the United States, whereas the Southern countries have their goal of North-South equity. Southern countries want aid and transfers of technology from the North. The United States opposes international environmental agreements that require it to transfer funds to the developing countries.

Indian foreign policy on the Kyoto Protocol also has a North-South aspect. India supports the principle of “common but differentiated responsibilities” adopted by the Kyoto Protocol. There has been almost a consensus that the developed countries should be made responsible in the first place not only to take a leading role in climate change mitigation but

also to transfer aid and eco-friendly technology to the developing countries. This is an extension of the South's demand for a International Economic Order (NIEO). However, India forgets that there exists a North-South divide even within the country as far as consumption patterns are concerned. Therefore, while talking about environmentalism in India, unsustainable consumption patterns and environmental destruction should also be addressed.

If climate change is to be averted, all nations irrespective of their power and position have to reduce their per capita greenhouse gas emissions substantially. This needs the use of alternative energy sources which are less polluting. Such replacements take a long time and even if we want results in the next century, we have to act immediately. Whatever be the argument, it is true that greenhouse gas emissions in the developing countries are increasing rapidly. They justify it on the basis of their need of development. This promotes a form of environmental nationalism that allows us to sit quietly and blame environmental degradation on the countries of the North without assuming responsibility of taking remedial measures<sup>1</sup>.

Instead of this environmental nationalism, environmentalism in India very much needs to address long-term global issues like global climate change and biodiversity. However, while addressing global issues, the local

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<sup>1</sup> Jayanta Bandyopadhyay, "Between Local and Global Responsibilities", *Seminar*, Vol. 516, August 2002, p. 22.

environmental challenges related to the survival and well being of the ordinary people should not be ignored.

In the light of above discussions, it can be said that Indian foreign policy on environmental issues and the Kyoto Protocol is influenced by its notion of the North-South divide. In fact, internal activities related to environmental pollution are being justified on the basis of North-South debates. The Kyoto policy reflects an internal consensus rather than reflecting the severity of climate change.

Finally, it can be concluded that in spite of a wide range of differences in their respective foreign policies, one thing is common that both countries are constrained by their respective domestic politics.

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