



International Climate Change Regimes and Mitigation and Adaptation Strategies: A Cosmopolitan Response

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Paper Received:

10th May, 2021

Paper Accepted:

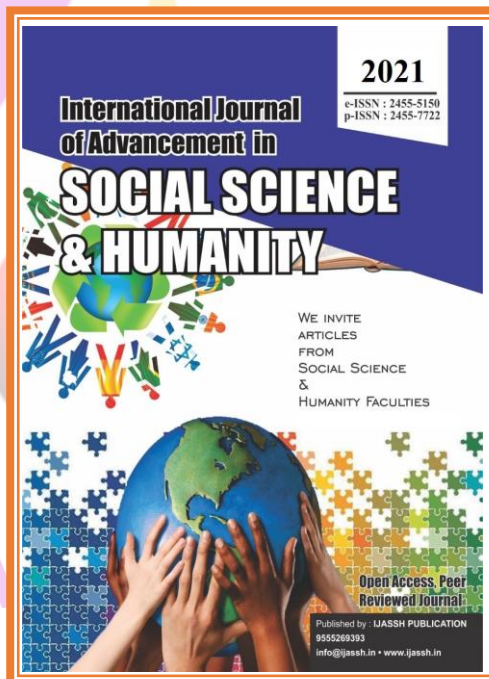
07th June, 2021

Paper Received After Correction:

10th June, 2021

Paper Published:

21st June, 2021



How to cite the article: Mannu Singh, International Climate Change Regimes and Mitigation and Adaptation Strategies: A Cosmopolitan Response, IJASSH, January-June 2021 Vol 1; 120-138

ABSTRACT

The North-South political differences and lack of consensus have serious implications for the climate change governance. This paper primarily explores—what are the cosmopolitan responses to the international climate change regimes? In addition, “How these responses aims at rectifying the mitigation and adaptation efforts of the international climate change regimes?” It also explores “Why the costs of ‘mitigation burdens’ and ‘adaptation burdens’ should be taken by international climate change regimes as cosmopolitan responsibility?” This chapter aims to discuss the institutional imperatives of cosmopolitan approach for an egalitarian distribution of burdens and benefits at the global level to mitigate climate change. In the last, to institutionalize cosmopolitan ideals, it also discusses the possible egalitarian model of environmental governance.

INTRODUCTION

Almost all the cosmopolitan philosophers and theorists, with some difference in their approach agree that there should be a global sharing of mitigation and adaptation burdens between the global north and the south. They argue that the sharing of burden should be taken as a cosmopolitan responsibility both by the individual and the institutions. The one point on which they at least all converge is that the faults lie in the approach and functioning of the international climate change regimes. Cosmopolitans such as Simon Caney argue that international climate change regimes have not adopted an egalitarian redistributive principle of burdens and benefits and due to this a huge global

inequality exists between the global North and South that violate the human rights of the distant poor people. Due to the failure of international climate change regimes at various fronts of adaptation and mitigation there had been adverse impact on the livelihood of the poor people in the global south. Darrell Moellendorf also adopts a cosmopolitan approach to deal with mitigation and adaptation problem concerning climate change. With some degree of differences in opinion cosmopolitans argue for working out a global framework that would deal with the cost of mitigation and adaptation burdens.

INTERNATIONAL CLIMATE CHANGE REGIMES: MITIGATION AND ADAPTATION STRATEGIES

In general global justice in relation to climate change argues that burden sharing should focus at the two levels: first, on the costs for reducing global emissions of greenhouse gases, and second, on the adaptation for offsetting the ill-effects of climate change. Polluter-Pays-Principle argues that the economic burdens should be proportional to the climate change caused by historical emission of the greenhouse gases. The formula of burdens sharing is central to the mitigation policy in international climate negotiations.

The burdens sharing raises two major questions of distributional fairness: first, “Which actors ‘ought to’ bear mitigation costs? “ And “what contributions would be considered as ‘fair shares’ to the total burden?” The international climate change regime such as the UNFCCC focuses on the first question and emphasizes that the industrialized countries should ‘go first’ in reducing greenhouse gases emissions. It further says that the developing countries should begin reducing greenhouse gases emission later. But, with regard to the second but serious question of fair sharing of mitigation costs the UNFCCC is not very clear. It says that the mitigation costs should be shared fairly and equally distributed

within the group of industrialized countries.¹ The United Nations Framework Convention on Climate Change (UNFCCC) highlights two fundamental response strategies: mitigation and adaptation to cope up with the ill-effects of climate change. Although both mitigation and adaptation measures must be followed to cope with climate change, but the international climate change regimes have given more attention to mitigation than adaptation. And the same has been followed both by the scientific community and the policy debate.

The UNFCCC Principles refer to ‘common but differentiated responsibilities and respective capacities’, but there is no agreement regarding what that means ‘the polluter pays principle’ and global per capita emissions rights and restrictions are also referred to. Another set of principles suggested for a global policy on climate change is constituted by effectiveness, efficiency and equity. Greenhouse gas (GHG) emissions should be cut significantly and quickly (effectiveness), this should be done in the most cost-effective manner (efficiency), and a global policy should recognize that climate changes hit poor countries hardest and that rich countries have the major responsibility for past emissions (equity). However, turning such principles into concrete policy action is

¹Ringius, Lasse (2002), “*Burden Sharing in the Context of Global Climate Change: A North-South Perspective*”, NERI Technical Report, No. 424.

hugely difficult, even without the interference of national interests unrelated to climate change. The difficulties of assessing past and current emissions, of evaluating their precise implications for current and future climate change, of relating climate change to economic costs, of setting reasonable baseline years, etc. all constitute issues of contention.²

The concern for adaptation has grown in the last few years with the IPCC's (Intergovernmental Panel on Climate Change) Third Assessment Report (TAR). Due to an accumulated amount of greenhouse gases in the atmosphere, no matter how efficient and robust mitigation measures will be taken, a certain degree of climate change is inevitable unless held by adaptation measure. On 9 May 1992, 154 countries joined the Convention to "cooperatively consider what they could do to limit average global temperature increases and the resulting climate change, and to cope with whatever impacts were, by then, inevitable." The UNFCCC sets an overall framework for international efforts to tackle the challenge of climate change. It states that the Convention's ultimate objective is to stabilize atmospheric concentrations of greenhouse gases at a level that would

prevent harm to the climate system. The Convention enjoys near universal membership; as of June, 2007, 191 countries have ratified it. These countries are referred to as Parties to the Convention and these party countries agreed to a number of commitments to address climate change. All Parties must develop and periodically submit special reports called national communications. These national communications must contain information on the greenhouse gas emissions of that Party and describe the steps it has taken and plans to take to implement the Convention. The Convention requires all Parties to implement national programs and measures to control greenhouse gas emissions and to adapt to the impacts of climate change. Parties also agree to promote the development and use of climate-friendly technologies; education and public awareness of climate change and its impacts; sustainable management of forests and other ecosystems that can remove greenhouse gas from the atmosphere, and to cooperate with other Parties in these matters. Industrialized countries, which are called Annex I Parties under the Convention, have additional commitments. These Parties initially agreed to undertake policies and measures with the specific aim of returning their greenhouse gas emissions to 1990 levels by 2000. Annex I Parties must also provide more frequent national

²Engberg-pedersen, Lars, "Climate Change Negotiations and their Implications for International Development Cooperation", DIIS Report 2011:07, p.16

communications and must separately provide yearly reports on their national greenhouse gas emissions. The wealthier developed countries (called Annex II Parties) must also promote and facilitate the transfer of climate friendly technologies to developing countries and to countries with economies in transition. They must also provide financial resources to help developing countries implement their commitments through the Global Environment Facility, which serves as the Convention's financial mechanism, and through bilateral or other multilateral channels.³

Since the 1992 drafting of the United Nations Framework Convention on Climate Change (UNFCCC) there has been an international consensus that: "human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind."⁴

The final clause of the UNFCCC affirms that the parties are "determined to protect the climate system for present and future generations." Article 2 of the

UNFCCC states the treaty's goal as the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." There is much that could be said about how to identify the threshold of danger. Climate experts have considered various temperature goals, nonetheless two considerations are sufficient to favour the goal of limiting warming to 2 degrees Celsius. One is *risk aversion*. The prospect of saving millions of people from the miseries of disease, drought, and flooding must weigh heavily in any judgment of the temperature goal. The second is that the 2 degrees limit has significant *international legitimacy*. This goal has been endorsed by the United Nations Development Programme (UNDP), the European Union, the International Confederation of Trade Unions (ITUC), and several large NGOs, such as Christian Aid and Greenpeace. None of the proposals before the June Bonn meeting of the Working Group included temperature goals above a 2 degree increase. Little that is practically relevant will be gained by moral arguments about proposals that do not fall within the range of a broad international consensus.⁵

The preamble to the UNFCCC affirms that "responses to climate

³ <http://www.un.org/wcm/content/site/climatechange/gateway/> accessed on 15/07/2013

⁴ Moellendorf Darrel (2009), "Treaty Norms and Climate Change Mitigation", *Ethics and International Affairs*, pp. 248-249

⁵ Moellendorf Darrel (2009), "Treaty Norms and Climate Change Mitigation", *Ethics and International Affairs*, p.249

change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty.” Furthermore, Article 3 states that “the Parties have a right to, and should, promote sustainable development.” Moellendorf calls this norm the right to development. Insofar as the UNFCCC is the framework in which an international climate change treaty must be negotiated, no proposal can be legitimate that fails to observe the right to development. This right limits the range of acceptable treaties to those that do not prohibit macroeconomic policies directed toward rapid economic growth or make them too costly to pursue.⁶

Three additional UNFCCC norms are important for the evaluation of the five principles of mitigation discussed below. These are equity and the requirements to recognize differentiated responsibilities and capabilities. Article 3 states that Parties must negotiate climate change policy “on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.” The language here is vague, but the distinction between responsibility

and capability seems to involve distinguishing between agents who bring about an outcome and agents with the resources required to remediate the outcome. These three UNFCCC norms require assigning differential burdens to address the problems of climate change. In particular, insofar as CO₂ emissions correlate with economic development, satisfying these requirements requires heavier burdens on industrialized developed countries.⁷

After two and a half years of intensive negotiations, a substantial extension to the Convention was adopted in Kyoto, Japan in December 1997. This Kyoto Protocol established legally binding emissions targets for industrialized countries, and created innovative mechanisms to assist these countries in meeting these targets. The Kyoto Protocol entered into force on 18 November 2004, after 55 Parties to the Convention had ratified it, including enough industrialized countries — who have specific targets — to encompass 55 per cent of that group’s carbon dioxide emissions in 1990.⁸ In the beginning, the United States lead the way ten years ago, the U.S. Administration under President Bill Clinton was a driving force in Kyoto, Japan, to negotiate the first

⁷ Ibid, p.250

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http://www.un.org/wcm/content/site/climatechange/gateway/accessed_on_15/07/2013

⁶ Moellendorf, Darrel (2009), “Treaty Norms and Climate Change Mitigation”, *Ethics and International Affairs*, p.250

international agreement to limit GHG emissions under the UNFCCC. Subsequently, the impetus for the Kyoto Protocol's market-based emissions-trading provisions came from the United States, which had to overcome stiff opposition from the European Union (EU). Yet, it is the EU that has since embraced emissions trading as the cornerstone of meeting its GHG emissions reduction targets. Ever since its passage and subsequent entry into force, critics of the Kyoto Protocol are quick to emphasize that one of its major flaws is that it does not require developing countries to limit their emissions. This issue has become central to the United States' formal rejection of the Kyoto forum Protocol and the Bush Administration's withdrawal from the negotiations without proposing an alternative international mechanism. Despite U.S. position, the world moved on, and the Kyoto Protocol came into force on February 16, 2005. As of October 2007, 175 signatory countries (also known as parties) have ratified the protocol. The ratifying countries represent 61.6% of 1990 GHG emissions of the so-called "Annex I countries."

The United States and Australia were the lone holdouts among the Annex I countries that did not ratify the protocol; however, Australia has changed course following its November 24, 2007, elections. The new Australian Premier grabbed

headlines at the most recent Conference of the Parties in Bali in December, when he announced Australia's ratification of the Kyoto Protocol. Since its entry into force, the international community has continued to negotiate many operational details for Kyoto compliance, while simultaneously starting to search for a way forward after the Kyoto Protocol expires. The goal of this new "post-Kyoto" regime would be to broaden the umbrella and engage the United States, as well as find a formula for assigning GHG reduction obligations to developing countries.⁹

The IPCC till now has published three assessment reports—in 1990, 1995 and 2001. However the key report is *The Third Assessment Report* published in 2001: This includes four volumes—Climate Change 2001: The Scientific Basis, Climate Change 2001: Impacts, Adaptation and Vulnerability, Climate Change 2001: Mitigation and a synthesis of all the three above reports, Climate Change 2001: Synthesis Report.

For both the environmental scientists and cosmopolitans, the post-Kyoto environmental governance is central to the climate change mitigation. Cosmopolitans focus on 'what regulatory framework is required to replace the Kyoto Protocol after

⁹ <http://www.environmental-expert.com/Files/6477/articles/31779/levon.pdf> accessed on 17/07/2016

2012. And the framework should also be able to enforce the rules to curb the emission of the greenhouse gases. In 2007 at a Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), participating government agreed on a roadmap including the establishment of two ad-hoc working groups.

COSMOPOLITAN CORRECTIONS TO INTERNATIONAL CLIMATE CHANGE REGIMES: BURDEN SHARING STRATEGIES

Having discussed the institutional implications of the international climate change regimes, cosmopolitans such as Moellendorf suggests five different ways as cosmopolitan corrective strands to mitigate climate change and they are: 1. Equal Burdens; 2. Polluter Pays; 3. Modified-Polluter-Pays; 4. Equal Shares; 5. Greenhouse Development Rights. I will discuss all the measures one by one. He argues that in order to evaluate those principles of mitigation three of the UNFCCC norms are important and required. The three norms are: equity, to recognize differentiated responsibilities and differentiated capabilities. Article 3 of UNFCCC, states that Parties must negotiate climate change policy "on the basis of equity and in accordance with their common but differentiated responsibilities and respective

capabilities." He argues that each UNFCCC norm requires assigning differential burdens to different countries in order to mitigate the problems of climate change. Pointing towards the correlation between the CO2 emission and economic development, he argues for placing heavier burdens on industrialized developed countries.

The following are the five principles of mitigation that Moellendorf suggests as cosmopolitan correction:

1. Equal Burdens: -- By equal burdens Moellendorf means that each state is required to reduce its emission according to their share in the global emissions that is equal to the burden of every other state. The mitigation burden of climate change depends upon the current level of emissions of a country. This principle involves picking up what Moellendorf calls 'historical baseline' for instance the 1990 baseline as fixed by the Kyoto protocol to make differential reductions in accordance with that baseline. He says that this approach is already endorsed by the developed countries and they argue that the protocol must be strengthened and expanded. A proposal made by Australia to the Working Group contains several principles, one of which draws on the Equal Burdens approach: "All Parties should aim to undertake a similar level of effort to others at a similar level of

development and with similar national circumstances.¹⁰

Moellendorf points that a version of Equal Burdens is defended by Martino Traxler, who argues that a treaty should equalize the burdens of emissions reductions—rather than the amount or percent of reductions—across states. Equalizing the burden is equivalent to equalizing the marginal disutility of compliance. Moellendorf argues that through this proposal Traxler maximizes utility, although he does not defend it on that ground. Traxler's account of the proposal is expressed in terms of equalizing the opportunity costs of compliance, which amounts to the same thing as equalizing its marginal disutility. Moellendorf argues that this seems to be an attractive idea. If parties must carry a burden, and are guided by the idea of equality, it seems reasonable that the burdens should be equalized, if all other things between parties are equal. The idea is that the opportunity that one party forgoes in sharing the burden should be no greater than the opportunity that another forgoes in sharing the burden.¹¹

Moellendorf shows how this proposal could practically work through a simple scenario. He argues that let's assume two people must share the burden of

repairing the building in which they live and the total cost of repair would come across \$20. According to Traxler, their contribution to the repair should be based on the opportunities that each must forgo by contributing and, in particular, these forgone opportunities should be equalized. Millie is rich with \$40 and Dolly is poor with \$10. Due to her poverty, Dolly would forgo significant opportunities if she contributes more than \$1. Suppose that the value to Dolly of her lost opportunities when she pays \$1 is about equal to the value to Millie of her lost opportunities when she pays \$19. Happily, then, they can agree to a distribution of burdens, which leaves Dolly with \$9 and Millie with \$21 after making the repairs. Such a distribution seems to respect the differentiated capacities of Millie and Dolly: From each according to her ability.

He also states that each country should pay according to her ability. Traxler argues that this principle is pragmatic in the sense that it gives each state "no stronger reason to defect from doing its (fair) share than it gives any other." Traxler argues that the proposal is also attractive on important pragmatic grounds because it gives each state "no stronger reason to defect from doing its (fair) share than it gives any other." According to Traxler, the principle equalizes reasons for defection, if the following three conditions are met: (1) it is publicly known

¹⁰ Moellendorf, Darrel (2009), "Treaty Norms and Climate Change Mitigation", *Ethics and International Affairs*, p. 251

¹¹ Moellendorf, Darrel (2009), "Treaty Norms and Climate Change Mitigation", *Ethics and International Affairs*, p. 251

that each state is carrying a burden identical to that of every other; (2) cooperation and defection can be publicly monitored; and (3) each state is satisfied that the burdens are equal. As long as the accounting between Millie and Dolly is clear and they understand the equality of their burdens, neither has more reason to complain than the other.¹²

2. Polluter Pays: -- Each state is required to reduce its emissions in proportion to its historic contribution to the global excess in emissions.¹³ Unlike the earlier principle of equal burden that focuses on ability of a person to pay for the cost of mitigation, the polluters pay principle assigns responsibility for emission reduction in proportion to the fault. This principle affirms that the reduction in emissions should be made on the basis of historical responsibility. However the fault based principle has certain plausibility in its application.

Polluter Pays, however, distributes the burden of emissions reductions without any distribution of permissions for emissions increases. Moellendorf argues that where there is no significant contribution to the problem, presumably emissions reductions would be zero—but there would be no positive allotment for emissions growth, either. With respect to

Equal Burdens, he argues that a principle that does not permit emissions growth in underdeveloped states is incompatible with the right to development. It, then, renders Polluter Pays unsatisfactory. Moellendorf argues that it is worth considering whether a modified version of Polluter Pays—one that provides permission for poor countries to emit in the process of development—might be more acceptable.¹⁴ He further discusses one of the variant of the Polluter-Pays-Pays principle which is known as Modified-Polluter-Pays.

3. Modified Polluter Pays: -- By modified polluter pays Moellendorf affirms that “each state that is required to reduce its emissions must reduce them in proportion to its historic contribution to the global excess in emissions, and the overall reduction required of each of these states is sufficient to offset emissions increases by poorer states.” The advantage of this principle is that it seems to confirm all the three norms of the United Nations Framework Conventions of Climate Change (UNFCCC). He explores whether there is any non-ad hoc ways to distinguish between the countries those must reduce the emission of the greenhouse gases and those whose emission may grow. The Kyoto Protocol has distinguished these countries by classifying them into Annex-I and non-Annex-II group of countries (as per the UNFCCC norms).

¹² Moellendorf, Darrel (2009), “Treaty Norms and Climate Change Mitigation”, *Ethics and International Affairs*, p.252

¹³ *Ibid*, p.254

¹⁴*Ibid*, p. 255

The countries of Annex-I are required to reduce the emission of greenhouse gases after they achieve threshold level of development. Confirming to the norms of UNFCCC, Modified-Polluter-Pays argues that those countries must reduce their emission of greenhouse gases whose level of per capita emission reaches the level defined by the Annex-I. But still there is a vague point such as- it is not very clear whether the Principle focuses on the threshold development and then allows certain relaxations for developing countries or simply focuses on the emission for the sake of emission.¹⁵

It seems unlikely that any principle that would distinguish the states that must reduce their emissions from those whose emissions may grow—in order to permit development—can survive the charge of being ad hoc if the point is to assign responsibility for reductions on the basis of fault. This has both moral and pragmatic implications. Insofar as the principle would assign development benefits and burdens arbitrarily, it contains an injustice. Moreover, insofar as it is reasonably suspected of doing this it will be unable to serve well as the basis of an international agreement among parties that are willing to accept burdens only if they are part of a just overall commitment to global reductions.

¹⁵ Moellendorf, Darrel (2009), “Treaty Norms and Climate Change Mitigation”, *Ethics and International Affairs*, pp. 255-256

Despite the initial promise of Modified Polluter Pays, the principle seems unlikely to be able to overcome the charge of being ad hoc when it comes to making its crucial distinction between those states that are allowed increase and those that are required to reduce them.¹⁶

4. Equal Share: -- it states, “Each state is required to reduce its emissions to the level that is attained by multiplying its 2050 forecasted population by the average per capita emission permissible given the global reduction required.”¹⁷ This principle has been supported by several NGOs, including the Centre for Science and the Environment and the Global Commons Institute. When assigning per capita emission burdens one can avoid the incentive for states to increase their populations in order to increase total emissions allotment by indexing the allotment to the population at a particular year.¹⁸

Moellendorf claims that this principle has pragmatic appeal and satisfies the norms of the UNFCCC. He says that assigning equal burdens on an equal per capita basis also confirms the idea of a common resource pool and he further argues for pre-existing individual entitlements over natural resources. Confirming the analysis of the Fourth Assessment Report of the

¹⁶ Moellendorf, Darrel (2009), “Treaty Norms and Climate Change Mitigation”, *Ethics and International Affairs*, pp. 256-257

¹⁷ *Ibid*, p. 257

¹⁸ *Ibid*, p.257

IPCC (2000 as the base year), he calculates that “the per capita amount is the product of halving the year 2000 total emissions and dividing that by the projected 2050 global population. This number is then multiplied by the projected population of a given state to get its total emissions allotment. The U.S. Census Bureau projects the global population in 2050 to be 9,538,988,263. Half the total CO₂ emission for 2000 is 11,875.51 mmt CO₂. Using these numbers, the 2050 average per capita CO₂ emissions should be 1.24 mt CO₂.”¹⁹

Moellendorf says that “Equal Share” principle can plausibly be seen as conforming to the norms of both differentiated responsibility and capability. It gives permission to increase emissions of greenhouse gases to states that are below the 2050 per capita emission requirements and also accommodates the right to development. Highlighting the advantages of this model, Moellendorf argues that Equal Shares is consistent with a market in emissions permits. States for which it would be more efficient to emit less than their target and sell the remaining entitlement could be permitted to do so to states for which it would be more cost-effective to purchase the entitlement than to cut emissions more. Since CO₂ dissipates uniformly in the atmosphere, it is appropriate to attend to meeting the *global*

¹⁹ Ibid, p.257

reduction target rather than the target of any individual state, and a trading scheme is consistent with that. For underdeveloped states with very low per capita emissions, such sales could be a major source of revenue.²⁰

5. Greenhouse Development Rights: -- states that “each state is assigned an emissions entitlement that is a function of both its responsibility (taken to be its total emissions minus the total of those arising from productive activity under a development threshold) and its capacity (understood as its aggregate income minus the aggregate of people below a development threshold).”

The chief virtue of Greenhouse Development Rights is that, by means of subtracting the development threshold from both the capacity and responsibility factors, it is capable of satisfying *both* the UNFCCC norm of the right to development and the 2 degree warming limit, even if the latter requires overall reductions larger than 50 percent. Of course, it accommodates both of these desiderata by requiring even larger emissions reductions in rich industrialized countries than Equal Shares requires. While China is allowed to increase its emissions nearly threefold above 1990 levels by 2030, and India nearly three-and one- half-fold, the United States is required to reduce its

²⁰ Moellendorf, Darrel (2009), “Treaty Norms and Climate Change Mitigation”, *Ethics and International Affairs*, p.258

emissions by 120 percent from its 1990 levels, and the European Union is required to reduce by nearly 140 percent. The practical force of the negative emissions requirement is that the United States and EU must steeply reduce their domestic emissions and contribute to emissions reductions in other countries in order to achieve their total emissions reductions requirements.²¹

JUSTICE AND ADAPTATION: COSMOPOLITAN IMPLICATIONS

For cosmopolitan philosophers such as Harris, conceptions on international justice often hold two philosophical positions. On the one hand, the *statist position* -- that belief national communities are moral ends which provides normative justification for the present international system and that carries obligations of 'justice as fairness' to the people of one's own community. And on other hand, the *cosmopolitan position*-- that rejects the moral significance of national membership and instead holds that moral obligations are universal. According to him, normative justification for the international sharing of burdens to adapt the ill-effects of climate

change is firmly grounded in cosmopolitan ethics.²²

The question about sharing of adaptation burdens to climate change often involves the issues of justice. Those people and states whose well-being and human rights are threatened by others are owed assistance and compensation from those who are most responsible for causing greenhouse gas emissions. The United Nations Framework Convention on Climate Change (UNFCCC) affirms that the developed countries parties to the UNFCCC must be committed '*to assist the developing countries parties that are particularly vulnerable to the adverse effects of climate change in meeting the cost of adaptation to those adverse effects*'.²³ However till date, developed countries have resisted moves to impose legal binding for damages, and there is no international agreement in place that can deliver adaptation assistance to the developing countries on a scale in proportionate with need. There are various adaptation funding mechanisms, such as *Special Climate Change Fund*, the *Least Developed Country Fund* and the *Kyoto Protocol Adaptation Fund* that are on voluntary basis and usually remained under resourced. Harris also highlights the *Copenhagen Accord* (UNFCCC December

²¹ Moellendorf, Darrel (2009), "Treaty Norms and Climate Change Mitigation", *Ethics and International Affairs*, p.260

²² Harris, Paul G. and Symons, J. (2010), "Justice in Adaptation to Climate Change: Cosmopolitan Implications for International Institutions", *Environmental Politics*, Vol. 19, No. 4, pp. 617-636

²³ United Nations Framework Convention on Climate Change (UNFCCC), 1992, Article 4.4

2009) which contains a pledge of an additional funding; promised funds climbs from an initial of US\$ 100 billion dollars during the period 2010-2012 towards a 'goal' of US\$ 100 billion dollars per annum by 2020. But this accord is not very clear about the funding proportion to the mitigation and adaptation policy and the sources of funding.²⁴ He also cites the example of adaptation funds estimated by the United Nations Development Programme (UNDP) and the World Bank. The UNDP estimates the annual costs of US\$ 86 billion dollars by 2015, while the World Bank estimates adaptation costs in the developing countries of US\$ 75-100 billion annually between 2010 and 2012.²⁵

Harris says that the debate is still on between the cosmopolitans and the statist regarding the duty to assist distant people to combat climate change. Regarding duty of justice and climate adaptation, Harris highlights certain basic but serious questions; first, "where burdens should fall?", and second, "which actors owe duties, and to whom?"²⁶ A clear distinction between cosmopolitan and statist philosophy emerges over the question of assisting disadvantaged of the developing countries irrespective of the culpability of others. He quotes Simon Caney where he argues that 'a

person has a right to X when X is a fundamental interest that is weighty enough to generate obligations on others.' Adaptation to climate change is linked to various vulnerabilities such as drought, crop failure, and extreme weather events etc. which are most grave impacts on those with limited food security, compromised health or inadequate shelter. The cosmopolitans are more concern with protection rather than compensation. They argue that the disadvantaged of the developing countries are entitled for protection from the negative consequences climate change and it encompasses both mitigation efforts and adaptation assistance.²⁷

Most cosmopolitans agree on the adaptation assistance and they argue that if the global poor have been harmed by actions of the rich of the developed nations, then they must follow the duty of justice to redress the loss. Following many cosmopolitans Harris argues that "Polluter-Pays-Principle" of compensation for harm must be supplemented by the "ability to pay." Among various cosmopolitan philosophers there is a consensus that the most disadvantaged victims of climate change deserve adaptation assistance even if there are disagreements regarding the principles of responsibility to pay.²⁸ In

²⁴ Harris, Paul G and Symons, J. (2010), "Justice in Adaptation to Climate Change: Cosmopolitan Implications for International Institutions", *Environmental Politics*, Vol. 19, No. 4, p. 619

²⁵ Ibid, p.620

²⁶ Ibid, p.622

²⁷ Harris, Paul G and Symons, J. (2010), "Justice in Adaptation to Climate Change: Cosmopolitan Implications for International Institutions", *Environmental Politics*, Vol. 19, No. 4, p.624

²⁸ Ibid, p. 626

Harris view “*if the goal of an international climate adaptation funding agreement is to address injustice between the people, rather than injustice between states then the type of adaptation will be the proper concern of the international agreement.*”²⁹ Examples of adaptation to climate change include expanded rainwater harvesting, water storage and conservation, improvements in irrigation efficiency, adjusting crop varieties and land management, creation of buffers against sea-level rise, emergency medical service provision, climate-sensitive disease control, improved sanitation, provision of safe water, redesign of road and rail infrastructure and improvement of energy distribution infrastructure.

According to Harris achieving an international agreement that justly distributes the costs and benefits of adaptation to climate change involves challenges of normative analysis and institutional design. He proposed that a just international institutional arrangement concerning climate change adaptation costs must be based on cosmopolitan principles. And he further argues that this kind of institutional arrangement will not only be more just but more stable, more feasible and

more successful in fostering egalitarian environmental governance.³⁰

EGALITARIAN ENVIRONMENTAL GOVERNANCE: A COSMOPOLITAN RESPONSE

Having discussed the limitations and advantages of existing international climate change regimes, Caney argues that the proper mitigation and adaptation of climate change needs robust environmental governance with egalitarian distribution of benefits and burdens at the global level.

Caney probes into the existing approaches for global institutions design in a detailed manner. While distinguishing between the ‘wholly democratic approach,’ on the one hand, and the ‘wholly instrumental approach,’ on the other, for institutional design and rejecting both of them as equally implausible, he favours a ‘mixed approach.’ Following the ‘mixed approach’ he argues that a system of international institutions should possess some properties such as (a) equalization of influence (b) facilitation of the participation of the vulnerable (c) ensuring of effective enforcement mechanisms that are equally available to all (d) provision of an international ombudsman, (e) peer accountability (f) transparency (g) public

²⁹ Ibid, p.631

³⁰ Harris, Paul G and Symons, J. (2010), “Justice in Adaptation to Climate Change: Cosmopolitan Implications for International Institutions”, *Environmental Politics*, Vol. 19, No. 4, p.633

justifiability and (h) democratic accountability.³¹

For Caney what is crucially at stake is an *impartial international climate change regimes* to address the issues of climate change. And for this, he argues that we need to address certain important questions: (a) “How to incorporate the voices from the powerless global south in international climate change regimes?” and (b) “What kind of institutional design do we need to deal with issues of non-compliance?” However, Caney attempts to argue for a robust international institutional arrangement to combat climate change but he fails to answer countless questions emerging from the global south regarding the policy formulation for environmental governance.

In this regard the Global South leadership must work collectively towards an alternative framework that deals with the

³¹ Caney, Simon (2006), “Cosmopolitan Justice and Institutional Design: An Egalitarian Liberal Conception of Global Governance”, *Social Theory and Practice*, Vol.32, No.4, pp. 745-750

principle(s) of burden sharing to mitigate and adapt climate change. They must focus on how to work upon the politics of redistribution of benefits and burdens to protect the human rights of the poor people of the global south. The alternative framework from the global south for international climate change regimes must focus on the protection of basic socio-economic human rights so that the poor people can lead minimum decent life and fight with the ill-effects of climate change. They should also mobilize collective action for such a design that advocates equal and fair global deliberation on the issues of burden sharing issues of adaptation costs. They should also bargain for the equal and differentiated responsibilities to curb emission of greenhouse gases to mitigate climate change. The primary focus of this design should be the equal and differentiated per capita greenhouses emission rights to protect the development of various developing and least developing countries. Some of the relatively economically efficient countries of the global south should take up the initiative to mobilize the global south collective action to counter the well-off institutional design to mitigate and adapt climate change. The negotiating forum should be at the centre of institutional design of climate change regimes and that forum for negotiation should bargain over who will bear the costs and benefits of to

deal with climate change and other environmental problems at the international level.

The grassroots mobilization in global south in terms of Civil Society initiatives, Social Movements, and Non-Governmental Organizations have failed to connect themselves across regions and so they lack collective voice at the global front. The lack of uniformity in their approach on global issues has considerably harmed the prospects of evolution of any alternative from global south to mitigate climate change. They should play a vibrant role in providing feedbacks to the concerned government regarding the probable ways to mobilize collective action. The global south should forget their political differences and form a coalition at the global level to affect the decision making concerning mitigation and adaptation policies.

Following the arguments of global justice, one thing is clear that those

countries that will be the most affected because of climate change should also be given priority to participate in the decision making to frame the global policies regarding the adaptation and mitigation. In this direction, the Alliances of Small Island States (AOSIS) in coalition with global south should bargain at the global level for binding framework to curb greenhouse gases emission. They should also mobilize global collective action for Adaptation Fund and policies.

Success in establishing an international climate change regime for mobilizing global collective action in response to climate change and other trans-boundary environmental problems will not be achieved on the basis of economic principles alone. But a cosmopolitan institutional approach is needed to provide logic to global collective action and that can connect legal, policy, and ethical principles, to provide an egalitarian foundation to regimes.

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