

# The role of world governance institutions in managing the climate crisis

**Bimal Prasad Singh**, Professor and Head

Department of Political Science, Patliputra University, Patna – 800020, India.

## **Abstract:**

The purpose of this essay is to show that the government's priorities have a big impact on how well climate change mitigation strategies are implemented. In the framework of sustainable development governance, climate change is a crucial concern and a significant challenge for human society in the twenty-first century. The possibility of overlap and interaction between the different components of institutions rises with the density of institutions in global climate governance. The current global climate governance problem is a complicated manifestation of a complex set of mechanisms rather than just a state-centric governance model.

In order to meet this unprecedented global challenge, three decades of effort to control climate change has resulted in a major evolution of actor networks, rulemaking processes, and norms from international to local levels of governance. However, greenhouse gas emissions around the world are still rising year. In order to successfully handle the grave climate catastrophe, this chapter offers an overview of climate change governance and proposes several ways to move beyond existing convention and practice. We will talk about this in this paper. The function of global governance organizations in handling the climate emergency

**Keywords:** World Governance Institutions, Climate Crisis, Climate Change Mitigation Policies, Global Climate Governance, Geographic, Political Borders, Climate Diplomacy, Intergovernmental Panel on Climate Change, Greenhouse Gas

## **Introduction:**

Countries can accomplish their climate goals with the support of effective climate change governance structures. Coordination between numerous governmental and nongovernmental groups is necessary to solve climate change. The ability to maintain a credible commitment to ambitious climate policy throughout several political cycles is necessary given the length of time that climate change takes to manifest. Institutions of governance can assist in resolving these issues. The difficult challenge of coordinating climate action among state and non-state actors can be made easier by coordination bodies. [1]

Climate diplomacy is a policy issue where fostering international collaboration and working together on the larger picture is both essential and particularly achievable since climate risks

transcend national and political boundaries. Social cohesiveness and the amicable resolution of conflicts resulting from climate-related changes are fostered by institutions.

By setting legally bound goals, climate change framework legislation can assist in addressing the problem of credible commitment. Independent climate advisory organizations can improve the body of evidence supporting climate policy and assist in coordinating it with long-term objectives.

Additionally, governance organizations convert climate policy into climate action. Public resources are coordinated with climate policy through planning, budgeting, public investment, procurement, and intergovernmental fiscal systems. Incentives for climate action in important areas like energy, transportation, and water can be created by strengthening the governance of state-owned businesses. The government is held responsible for its climate promises via stakeholder engagement and oversight organizations, such as auditors, legislatures, and courts. The Intergovernmental Panel on Climate Change (IPCC) has emphasized the potential contribution of governance to enhancing climate adaptation and mitigation over the years.

The broadest definition of governance, according to Kooiman, is "processes of interaction and decision-making among actors involved in a common problem." In this way, governance incorporates a range of actors and regimes at several levels, in contrast to the traditional governing model in which "collectively binding decisions are taken by elected representatives within parliaments and implemented by bureaucrats within public administrations." [2]

Since climate change is a common worldwide public issue, its governance process typically begins at the highest level—the global regime—and moves down from there. The UNFCCC was the first international agreement to address climate change issues. Its goal is to stabilize the concentration of greenhouse gases (GHGs) in the atmosphere in order to prevent "dangerous anthropogenic human-induced interference with the climate system." The world community invested a lot of resources in creating legally binding regulations to reduce global emissions over the next 20 years.

Many experts use the Conference of the Parties as the focus of their research; by monitoring the negotiation's progress and results, the global reaction to climate change following the agreement's implementation is examined to identify the difficulties and issues surrounding global climate governance.

### **Climate Change Impacts**

Global average temperatures are rising as a result of anthropogenic greenhouse gas emissions. By the end of the century, global temperatures might increase by up to 40C if nothing is done. There would be disastrous results from this. Even if we are successful in limiting the rise in temperatures to less than 20C, significant changes in climate and weather patterns are anticipated. Heatwaves, droughts, and storms will occur more frequently and with greater intensity due to climate change. Seasonal weather patterns will change as a result. Everywhere,

but especially in the northern latitudes, temperatures will climb. It will get drier in some places and wetter in others.

Ecosystems will be impacted by climate change, with some being destroyed and others becoming less productive. Tropical nations and small island economies will be most negatively impacted. Sea levels will increase as a result of climate change, endangering the majority of the world's biggest cities. By 2030, an additional 100 million people will live in poverty due to climate change. Relocating to cities and more productive locations will be necessary for many of those impacted. Conflict may be exacerbated by migration and declining living standards. [3]

### **Impact of the Regime Complexes of the Governance on Climate Change**

First, numerous players have a variety of governance alternatives thanks to the intricate systems that have developed around specific climate governance challenges. Since the political and practical national context in which climate change multi-stakeholder engagement is explored significantly limits the construction of a fully integrated and comprehensive regime, the differences and divergent preferences of various actors can only be satisfied within the regime complex. A more dispersed collection of mechanisms, or a complex of climate governance mechanisms, is the outcome of multilateral actors' active involvement in the field of institution building. One benefit for policymakers is that the mechanism complex itself can limit the extent of global climate change.

The flexibility of the challenges and the adaptability of time itself are the two main benefits of this complex. The former refers to the fact that different climate change provisions fall under different mechanisms, making the climate governance complex appropriate for a range of situations and challenges as well as for the active participation of many players.

Regarding the latter, it is primarily emphasized that decentralized connecting mechanisms may accommodate a variety of institutional experiments and that the global climate governance complex can be more logically adjusted to the intricate changes in legislation and behaviors. It is possible to create an external environment that fosters optimal policies since policy optimality cannot be ascertained.

The GCM complex's strength is derived from its policy-making framework, which can generate as much demand from stakeholders as possible to encourage other nations to join the global climate change governance team. Second, in order to better secure their survival and growth, the various mechanisms within the regime complex compete on a particular climate governance issue. As a result, the mechanisms themselves have an incentive to adapt or work with other mechanisms to govern in response to societal demands. Therefore, one may argue that a complex of climate governance mechanisms has the potential to improve collaboration amongst processes, increasing their connections and making it easier for further climate governance mechanisms to be implemented.

For instance, a variety of mechanisms could help implement a worldwide emissions trading strategy in the framework of global climate policy. Lastly, the climate governance regime complex offers a flexible and varied setting for global collaboration. In theory, a polycentric system of government, as opposed to a monocentric one, offers more chances to try out policies that can be refined over time. There is no monopoly on climate governance by a single mechanism in the field of climate governance due to the lack of formal hierarchical relationships within the complex mechanisms, and the overlap of functions between various mechanisms lessens the possibility of ignoring issues brought on by avoidance of responsibility. [4]

As small island republics disappear, coastal towns drown, and hundreds of millions of people are displaced due to sea level rise, severe storms, and ongoing drought, those in positions of authority could be found guilty of crimes against humanity, although in slow motion. We are ensnared in an economic paradigm that demands constant expansion of material consumption. In a globalized economy without global control, the pursuit of profit by multinational firms justifies any means. A smokescreen of national sovereignty conceals corrupt administrations. The current system's political and economic vested interests hold the levers of power and are doing all within their enormous capacity to thwart reform.

Civilization as we know it is under jeopardy from this fundamental dilemma. We have been subsisting on the inexpensive energy subsidies provided by fossil fuels for more than a century, and our ongoing huge emissions of greenhouse gases are causing a global disaster. Alternative energy technologies are available and have the potential to grow quickly, but we must change our constructed infrastructure, transportation networks, agricultural production, industrial processes, and personal lifestyles. Even if everyone was totally dedicated to implementing the necessary adjustments, this would still be a huge problem. We are not making progress when confronted with the obstacles of inertia, resistance, and denial.

All of this stem from the obvious reality that the climate catastrophe is a global issue that calls for global solutions rather than each sovereign nation tackling it on its own. Climate change transcends national boundaries, and harmful emissions from any one nation have an effect on the entire world. The case for global governance in the common interest is unambiguous.

In order to collectively respect global limitations, a global governance body would have to decide how to fairly distribute the reductions among nations.

This could involve taking into account past contributions to the issue, current emission levels, the financial ability to pay for investments in alternatives and emission reductions, the technical ability to plan and implement alternatives, the governance ability to oversee and enforce the transition, the projected costs of adaptation to ongoing changes that need to be budgeted for, vulnerable populations that need to be protected, and the local availability of renewable energy resources that could be developed. Determining the culpability of high-emitting nations for the harm their emissions are inflicting on other nations would also require some thought. Due to

historically high emitters' refusal to accept responsibility despite the financial repercussions, liability and compensation are highly politicized concerns.

The resulting allocations of emission reductions would need to be backed by legally enforceable international legislation, which would provide incentives for desirable new investments and penalties for nations, businesses, and other players who violate their allotted limits. This also entails the use of suitable dispute resolution and enforcement procedures.

It will be necessary to consider additional ethical and practical aspects of the shift to more sustainable industrial, food, and energy systems. It will be in everyone's best interest for nations with limited resources to get outside assistance. Alternatives must be found for communities and workers who have relied on harmful activities and emitting industries for jobs and income. Every change has winners and losers, and the latter will oppose the change if they are not given an alternative. The majority of economies will require significant reorientations. [5]

### **Review of Literature:**

The International Panel for Climate Change (IPCC) has identified appropriate decision-making, coordination processes, and structures as enabling conditions for responding to climate change (IPCC, 2022[3]). However, the systemic, long-term, and cross-border nature of climate change presents a distinct and complex challenge for traditional government practices. This task necessitates the capacity to use several strategies or methods of decision-making at various points in time. In order to increase political support, prevent inertia, and strike a balance between immediate and long-term goals and needs, governments have occasionally shifted toward more integrated, flexible, evidence-based, and cooperative policy action.

For example, in their national communications to the UNFCCC in 2005, nations emphasized "the need to improve the capabilities of national climate change coordinators and national institutions to manage and coordinate climate change programmes" and identified "improved coordination and cooperation between relevant institutions and agencies as key factors in facilitating the integration of climate change concerns into policymaking processes." [6] Environmental policies, institutional and legal frameworks, and implementation capacity all have an impact on sustainable development.

Although there is a need for improvement, in developing and transition nations, the basic legal and policy framework is frequently in place. The biggest obstacles are related to the framework's effective execution (Robertua, 2018; Robertua and Bainus, 2018). The implementation gap is the difference between what is agreed upon and what is done to enhance environmental results. At the subnational level, the implementation gap is particularly noticeable. [7]

This part develops the arguments for the testable hypotheses on governance, institutions, and environmental degradation based on the review of previous research. Asongu and Odhiambo (2021) claim that a growing number of crises, such as food insecurity, unequal distribution of

economic resources, water shortages, the loss of arable land, poverty, and environmental degradation, are associated with governance issues in Africa. [8]

### **Objectives:**

- To Study the Impact of the Regime Complexes of the Governance on Climate Change
- To Study the role of world governance institutions in managing the climate crisis
- To Explain India's Contribution to Green House Gases

### **Research Methodology:**

This work employs a case study methodology with qualitative research techniques. Secondary sources, such as literature reviews, serve as the foundation for data collection. The findings imply that in order to improve the efficacy of climate change mitigation programs, the government should concentrate more on different policy implementation procedures.

### **Result and Discussion:**

India's Share of Greenhouse Gases 6. According to the UN Emissions Gap Report (2020), India has the seventh-highest per capita emissions and the fourth-highest total emissions of greenhouse gases in 2019. India's energy, waste, industrial processes and product consumption, and agricultural sectors all contributed to 2,838, 889 Gg CO<sub>2</sub> equivalent emissions in 2016 (Third Biennial Update Report, 2021). The sector-by-sector breakdown of GHG contributions is displayed in Fig. 1. Fuel combustion processes and fugitive emissions are examples of energy. Minerals, chemicals, metal production, etc. are examples of industrial processes and products. Enteric fermentation, managing manure, growing rice, burning agricultural waste in the field, etc. are all included in agriculture. trash comprises treating wastewater and disposing of solid trash on land.

The land use, land-use change, and forestry (LULUCF) sector was a net sink, according to the Third Biennial Update Report 2021. [9]

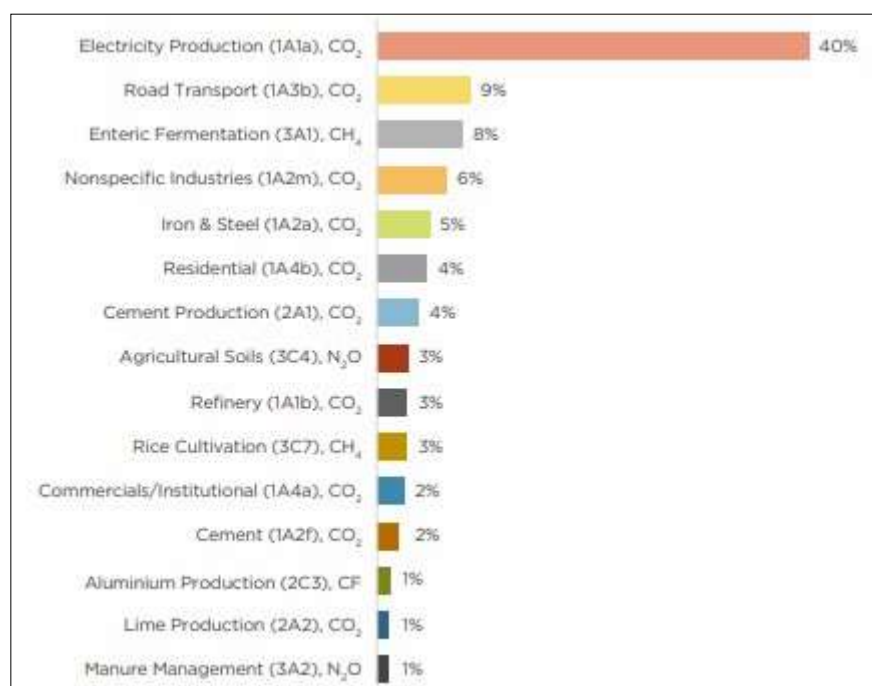


**Figure 1: Sector-wise National GHG emission in Gg for 2016**

*(Source: Third Biennial Update Report to The United Nations Framework*

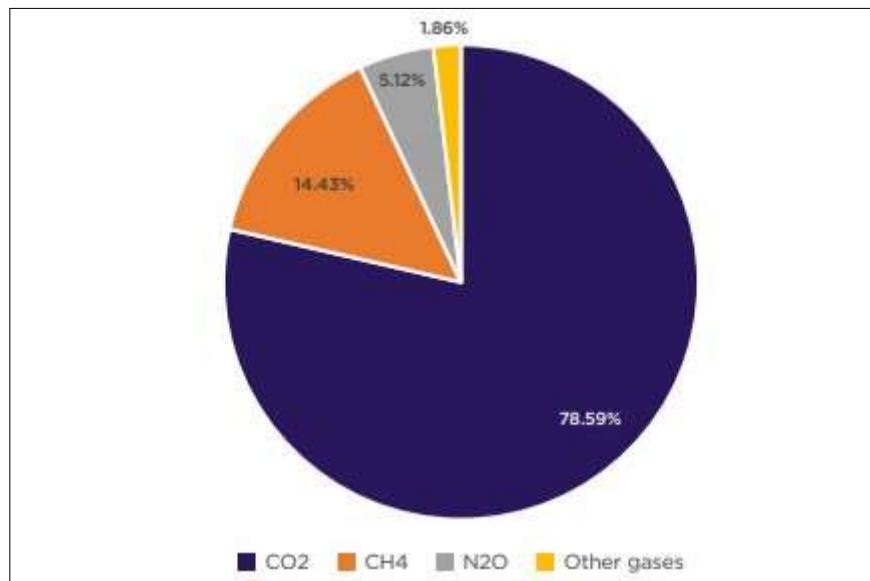
*Convention on Climate Change, 2021)*

The production of electricity accounted for 40% of the energy emissions, with manufacturing and production coming in second at 19%, transportation at 13%, and other sectors at 10%.



**Figure 2: Top 15 emission categories in terms of CO<sub>2</sub> equivalent**

(Source: *Third Biennial Update Report to The United Nations Framework Convention on Climate Change, 2021*)



**Figure 3: Convention on Climate Change**

(Source: *Third Biennial Update Report to The United Nations Framework Convention on Climate Change, 2021*)

### Challenges in Global Governance

Global governance in climate change confronts many obstacles despite its significance. The question of national sovereignty is among the most important. Countries are frequently hesitant to give international organizations authority over their policies and actions. Disagreements over financial obligations and emission reduction goals may result from this.

The varying degrees of responsibility and development present another difficulty. While underdeveloped nations are frequently more susceptible to the effects of climate change, developed nations have historically contributed more to greenhouse gas emissions. Negotiations over who should have the biggest responsibility for resolving the problem become tense as a result.

Another difficulty is the complexity of climate change. Solutions must be customized for particular situations because it is a worldwide issue with local effects. This necessitates a global governing strategy that is adaptable and agile.

Furthermore, the efficacy of international accords may be weakened by the absence of enforcement mechanisms. Although nations may make promises, it is frequently impossible to guarantee that they will fulfil those promises. [10]



**Conclusion:**

In its own project portfolio, the Governance Practice has pledged to raise its level of climate change participation and meet challenging goals. This necessitates that the practice makes sure that possible climate change co-benefits are considered in all Governance-mapped loan activities. In order to promote climate change action, the Governance practice will provide technical guidance on how to calculate the co-benefits of climate change and how to create governance interventions.

**References:**

1. See “16 Years of Scientific Assessment in Support of the Climate Convention.” IPCC, 2004.
2. WG III is the Working Group responsible for discussing the range of mitigation activities available to address climate change.
3. Adekunle, I. A. (2021). On the search for environmental sustainability in Africa: the role of governance. *Environ. Sci. Pollut. Res.* 28 (12), 14607–14620. doi:10.1007/s11356-020-11432-5
4. Flachslan, C. and Levi, S. (2021). Germany’s federal climate change act. *Environmental Politics*,
5. Jordan, A., et al., Eds., 2018. *Governing climate change: polycentricity in action?* Cambridge: Cambridge University Press.
6. IPCC (2022), AR6 Climate Change 2022: Impacts, Adaptation and Vulnerability — IPCC
7. Robertua, V., and Bainus, A. (2018). From Stockholm to rio: critical reading of global environmental governance. *AEGIS J. Int. Relat.* 2 (2). doi:10.33021/aegis. v2i2.429
8. Asongu, S. A., and Odhiambo, N. M. (2021). Enhancing governance for environmental sustainability in sub-Saharan Africa. *Energy Explor. Exploitation* 39 (1), 444–463. doi:10.1177/0144598719900657
9. Kooiman J. Sage Publications Ltd; London: 2003. *Governing and Governance*.
10. Bodansky, D., Brunnée, J. and Rajamani, L. (2017). *International Climate Change Law*. Oxford: Oxford University Press. Google Scholar