

Climate Change: Defining Adaptation and Resilience, with Implications for Policy

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DOI: https://doi.org/10.51244/IJRSI.2024.1109046

Received: 15 September 2024; Accepted: 28 September 2024; Published: 05 October 2024

ABSTRACT

The menace of Climate Change and its global implication for global survival has been a major source of concern to the various governments of the world, policymakers, and scientists, who have consistently pointed out the dangers inherent in climate change. Climate change causes harm that requires an adequate legal framework for addressing the harm caused by climate change. The United Nations Conference on Climate Change, Adaptation, and Resilience provides a framework for countries in the world to enact legislation and formulate policies that will halt climate change at the national level while cooperating with world leaders in addressing the issue of climate change and taking steps to enforce the protocols of Climate Change.

Keywords: Climate Change, Adaptation, Resilience, Public Policy, United Nations,

INTRODUCTION

The menace of Climate Change and its global implication for global survival has been a major source of concern to the various governments of the world, policymakers, and scientists, who have consistently pointed out the dangers inherent in Climate Change. Climate Change causes harm that requires an adequate legal framework for addressing the harm caused by Climate Change. The United Nations Conference on Climate Change, Adaptation, and Resilience provides a framework for countries in the world to enact legislation and formulate policies that will halt climate change at the national level while cooperating with world leaders in addressing the issue of climate change and taking steps to enforce the protocols of climate change.

It is imperative to note that many countries of the world, especially countries of the Northern Hemisphere are majorly the culprit when it comes to climate Change. Belsito (2022) maintains that the greatest threat to global security in today's world is the issue of climate change and what it portends. Different people have different views about climate change. The rise in sea levels portends serious threats to urban spaces in the future. Climate change causes harm that requires an adequate legal framework for addressing the harm caused by climate change.

The United States, being historically one of the world's largest pollutants and the biggest contributor to Carbon pollution is proposed as a candidate for repayment of damages occasioned by Carbon pollution (Belsito, 2022).

For analytical convenience, this paper is divided into sections. Section one deals with Climate Change, defining adaptation and resilience, with implications for public policy, Climate Change adaptation and resilience. Section two deals with Climate Change and resilience, the implications of climate adaptation and resilience for public policy, and then follows the conclusion.

Section One

Climate Change: Defining Adaptation and Resilience, with Implications for Policy

The United States Congress after several decades of inaction on climate change finally acted on climate change by enacting a law in 2022. The Inflation Reduction Act 2022 will help reduce America's carbon emissions by 40% by 2030. It doesn't reach the goal of a 50% reduction by 2030, but it gets the issue given the priority it deserves and goes ahead to provide incentives for clean energy and investments in green technology enforcing



compliance among manufacturers to meet the demand. The provision of clean energy will save American lives (VitalSigns, 2022).

Climate Change Adaptation and Resilience

A plethora of scholars have attempted to discuss the issue of adaptation concerning climate change. The United Nations Framework Convention on Climate maintains that Adaptation refers to adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects. It refers to changes in processes, practices, and structures to moderate potential damage or to benefit from opportunities associated with climate change. In simple terms, countries and communities need to develop adaptation solutions and implement actions to respond to current and future climate change impacts. (UNFCCC,2015). The UN also stated that Adaptation actions can take on many forms, depending on the unique context of a community, business, organization, country, or region. There is no 'one-size-fits-all-solution'—adaptation can range from building flood defences, setting up early warning systems for cyclones, switching to drought-resistant crops, to redesigning communication systems, business operations, and government policies. Many nations and communities are already taking steps to build resilient societies and economies. However, greater action and ambition will be needed to cost-effectively manage the risks, both now and in the future(UNFCCC, 2015).

Supporting the above, Matikinca, Njamakuru, and Shackleton (2024) assert that climate change adaptation (CCA) and disaster risk reduction (DRR) agendas converge in their priorities to reduce social vulnerability and enhance resilience in the face of climate change.

Davies et al (2020) maintain that the risk posed by global warming to the environment, communities, and international peace and security has drawn the attention of the international community. The failure of policy on climate has caused significant concern to be raised globally, sounding the alarm that the world may enter a warming war, which threatens life's ecosystem.

A plethora of treaties and agreements governing climate change brings to the fore the nexus of science and the dangers of global warming. Though international law prevents conflicts through the Judicial application of rules regulating the relationship of states, it has failed to address the impacts of climate change on armed conflict because treaties drawn as climate change policies failed to provide enforceable and dispute-resolution mechanisms.

A need for international law to establish judicial bodies with Jurisdiction for conflict resolution and response to warming war. The need to develop security measures that would be tailored at avoiding climate conflict risks from becoming violent and hard security issues, thus attracting the deployment of force by the UN Security Council. There is, therefore, the need to propose for the establishment of an International Court for the Environment(ICE) that would be able to enforce policies aimed at resolving climate-induced disputes (Davies et al, 2020).

The above-multifaceted dimensions of climate change adaptation and its global implications bring to the fore the need to understand that environmental problems require a strong collaboration that cuts across different sectors and levels (Herzog,2022).

Successful adaptation not only depends on governments but also the active and sustained engagement of stakeholders, including local communities, national, regional, multilateral, and international organizations, public and private sectors, civil society, and other relevant actors, as well as an effective management of knowledge. Parties to the UNFCCC and its Paris Agreement recognize that adaptation is a global challenge faced by all with local, subnational, national, regional, and international dimensions(UNFCCC, 2015).

Londono et al (2019) argue that there is a need to deploy a mathematical formula in establishing the variables that represent an adaptation to climate change. From the above, Wen et al (2024) assert that it is imperative to note that climate change has become increasingly a major challenge to sustainable socioeconomic



developments, and climate adaptation is a key issue that relevant research focuses on for regional sustainable development models.

They further argued that the digital economy has strengthened the green development effects of pilot policies for building climate adaptation cities. Policy intervention concerning climate change promotes green development by optimizing industrial development structure and enhancing economic growth efforts (Wen et al 2024).

Resnik (2022) argues that climate change is an environmental justice issue because it is likely to bring about untold harm to low-income countries and low-income populations in higher-income countries. While the mitigation of climate change and adaptation policies may be able to minimize these harms, they could make them worse unless they are developed and implemented to promote justice and fairness. He further asserts that those who view climate change as an environmental justice issue should be wary of endorsing policies that sound like they promote the cause of social and economic justice but do not.

While climate change policies may help mitigate climate change's effects on poor people, there is no guarantee that they will be just at the local level. national, or global levels. Those who care about global climate justice must remain actively engaged in policy formulation and implementation to ensure that justice does not get shortchanged in response to global warming (Resnik, 2022).

Suza et al (2024) argue that considering multifaceted dynamics link climate change adaption to conflict, it is of utmost importance to examine perceptions and responses to climate-induced stress, insecurity, and potential conflict. They argued that it is vital to prioritize social and political dynamics, alongside structural constraints in understanding the climate-conflict nexus.

Section Two

Climate Change and Resilience

The United Nations Office for Disaster Risk Reduction (UNDRR) defines Resilience as the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management (UNDRR, 2015). It is the ability to respond effectively to risks while maintaining a level of functionality. Communities will have to adapt even more to these stressful environmental conditions, through disaster risk reduction and resilience-building measures. This will especially impact least-developed countries and Small Island

Developing States. Chang and Bare (2024) assert that Government agencies at all levels should also seek to integrate perspectives from Indigenous Peoples, engage in co-management strategies, and provide equitable funding and support for Indigenous communities. Unity, resilience, and adaptation become attainable goals by joining communities in caring for the environment.

The Implications of Climate Change Adaptation and Resilience for Public Policy

There are several implications of Climate Change Adaptation and Resilience for Public Policy. While it can be argued that scientific data exist that establish the reality of Climate Change Adaptation and Resilience, Bird (2021) argues that the use of distorted scientific information and manipulation of sciences have been touted as having aided the formulation of public policy.

Disasters in recent times, issues of national importance such as immigration and other partisan issues have muddled up public policies due to the manipulation of scientific information and research. It is proven that some scientists falsify their own scientific findings for professional gains. This does not excuse lawmakers, who due to their own political interests often attempt to disrupt scientific initiatives that would have aided sound regulatory policy (Bird, 2021).



In public policy formulation, there is a need for policymakers to directly refer to the original scientific scholarship citation rather than through an information intermediary. Understanding of science-based knowledge is germane to effective public policy that is evidence-based.

CONCLUSION

We have attempted in this paper to discuss Climate Change, Adaptation, and Resilience. We defined the above words while bringing to the fore climate change adaptation and resilience and its implications for public policy. Lawmakers and policymakers must be well-informed enough with scientific knowledge to formulate policies that are factually based on science as with climate change.

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