International Journal of Scientific Research in Multidisciplinary Studies

Vol.11, Issue.1, pp.29-35, January 2025 E-ISSN: 2454-9312 P-ISSN: 2454-6143 Available online at: www.isroset.org



Research Article

The Role of the Ghana National Youth Policy in Promoting Youth Climate Justice amidst Systematic Challenges

Lord Offei-Darko¹

¹Institute for Environment and Sanitation Studies, University of Ghana, Legon, Ghana

*Corresponding Author: lordoffeidarko@gmail.com

Received: 25/Nov/2024; Accepted: 27/Dec/2024; Published: 31/Jan/2025

Abstract— Climate justice is a complex concept encompassing ethical, legal, and political dimensions, emphasizing the need to rectify environmental and social disparities exacerbated by climate change. The Ghana National Youth Policy (GNYP) serves as a foundational policy guide for governmental and non-governmental organizations working on youth-related climate change issues crucial to Ghana's development. The study utilized a descriptive review, drawing on secondary data sources such as books, articles, and journals to explore knowledge gaps regarding the recognition of climate justice within the GNYP. The findings reveal that the GNYP's methodologies inadequately address youth climate justice, focusing primarily on youth adaptation to climate change and coping strategies for climatic injustices, diverging from climate justice principles. While the core principles of the GNYP align with Ghana's development agenda and existing national policies and legislative frameworks, the paper underscores the necessity for reforms or adjustments to comprehensively address youth-related climate change issues within the policy. By evaluating the GNYP's role on promoting youth climate justice in Ghana, the study offers valuable insights to enhance policies and approaches aimed at promoting climate justice among the country's young population amidst challenges.

Keywords— Environmental governance, Youth policy, Climate Justice, Systemic exclusion, Intergenerational equity, Climate vulnerability, Youth empowerment

1. Introduction

Climate Change (CC) is a pressing global issue exacerbated by human activities, leading to far-reaching impacts on ecosystems and communities worldwide [5]. The unequal distribution of these impacts disproportionately affects vulnerable populations in the global south, who face heightened risks and challenges. Research by [1] underscores how climate change manifests in regions like the northern and coastal savannah areas of Ghana, where severe droughts are increasingly common due to declining annual rainfall. Rising temperatures across ecological zones poses challenges for agricultural productivity [2] and exacerbating poverty, particularly among marginalized groups such as women, youth, and children [8]. Moreover, the escalation of floods in recent years poses imminent threats to lives and livelihoods, particularly in impoverished communities and informal settlements [6]. It is evident that the adverse effects of CC resonate across critical sectors including infrastructure, agriculture, food security, and natural resource management [17], underscoring the urgent need for comprehensive adaptive responses and strategies to address multifaceted impacts of CC on communities at large.

Climate Justice (CJ) reframes climate change as an ethical and political issue that emphasizes justice, equality, and historical responsibility alongside environmental concerns [9]. CJ connects climate change impacts to environmental and social justice principles, revealing that marginalized communities disproportionately suffer from its effects despite their minimal contributions to its causes. The Ghana National Youth Policy (GNYP), established under the National Youth Authority Act 2016 (Act 939), defines 'youth' as individuals aged 15 to 35 years. This policy serves as a comprehensive roadmap (2022-2032) to guide the formulation and implementation of initiatives that empower Ghanaian youth, enabling them to actively engage in national development and global issues such as climate change. The GNYP recognizes that activities such as fossil fuel reliance, deforestation, unsustainable agriculture, urbanization, and mining significantly contribute to environmental degradation and climate change impacts. Recognizing interconnectedness of environmental sustainability and youth development, the policy document emphasizes that these detrimental human activities have far-reaching consequences on critical aspects such as water availability and food security, all of which directly impede the holistic development of young people in Ghana. The GNYP emphasizes the urgent need for sustainable practices, climate

resilience strategies, and youth empowerment programs to mitigate environmental degradation's effects while promoting the growth and active participation of young people in building a sustainable future for Ghana and the global community.

The impacts of CC extend far beyond immediate economic concerns, posing significant threats to social equity [18] and community stability. Vulnerable populations, particularly in low-income regions, bear the brunt of climate-related challenges, facing heightened risks that exacerbate existing inequalities. For instance, increased flooding not only disrupts livelihoods but also creates conditions conducive to the spread of waterborne diseases and vector-borne illnesses, such as malaria. These health crises disproportionately affect marginalized groups, including women, youth, and those with limited access to healthcare resources. As such, there is an urgent need for comprehensive adaptive responses that prioritize social equity while addressing the multifaceted impacts of climate change on communities. A holistic approach should not only focus on immediate mitigation efforts but also emphasize long-term resilience-building initiatives that empower vulnerable groups [20] to adapt effectively to changing climatic conditions. This includes ensuring that their voices are included in policy discussions and decision-making processes. By centering equity in climate action, we can create inclusive strategies that address systemic injustices and foster a more equitable society. Such an approach aligns with the principles of climate justice, which advocate for recognizing and rectifying the disparities in how climate change impacts different communities based on socio-economic status, race, and gender. Prioritizing social equity in climate responses will be essential for building resilient communities capable of withstanding the challenges posed by a changing climate [19]. The main objective of the study is to analyze the GNYP and its role in promoting youth climate justice in Ghana and provide possible approaches and recommendations of youth climate justice inclusion within the policy.

2. Related Work

The concept of Youth Climate Justice (YCJ) has gained significant traction in recent years, as young people increasingly mobilize to address the urgent challenges posed by climate change [21]. A pivotal study conducted by [22] highlights the radical and justice-oriented understandings that many young activists possess regarding climate change. This review notes that youth-led movements, particularly since 2018, have catalyzed a "watershed moment" in climate politics, with figures like Greta Thunberg spearheading initiatives such as Fridays for Future, which emphasizes organized school strikes for climate action. Literature indicates that these movements are not merely reactions to climate change but are deeply rooted in historical struggles for environmental justice, particularly among marginalized communities [23].

Research further illustrates that youth activism is often driven by a profound awareness of intergenerational and social injustices exacerbated by climate change. For instance, studies reveal that young climate activists frequently turn to peer networks and social media for information, as formal educational systems often fail to adequately address climate injustices [24]. This gap in education contributes to feelings of climate anxiety and despair among youth, highlighting the necessity for educational reforms that incorporate critical discussions around climate justice [25]. Moreover, the "Youth Climate Justice Handbook" developed by the World's Youth for Climate Justice outlines how legal frameworks can be leveraged to advocate for intergenerational equity and accountability from governments regarding their climate commitments. The handbook serves as a critical resource for youth seeking to engage with legal instruments to demand climate justice on a global scale.

Furthermore, studies have emphasized a need for a more inclusive approach to understanding youth activism. Much of the existing research has focused predominantly on youth in the Global North, often overlooking the experiences and contributions of young activists from marginalized communities in both the Global South and within diverse contexts in the Global North [26]. This oversight calls for a broader examination of how systemic inequalities shape engagement in climate justice movements. Furthermore, studies indicate that while youth activism fosters empowerment and self-efficacy among participants, it is crucial to recognize these young activists as legitimate political actors rather than merely "citizens-in-training" [27]. The call for recognizing youth as key stakeholders in climate policy is echoed across various studies, underscoring their potential to drive systemic transformations necessary for achieving meaningful climate justice.

The inclusion of Youth Climate Justice (YCJ) in Ghana's National Youth Policy (NYP) is a critical step towards ensuring that the voices and contributions of young people are recognized in climate action initiatives. The NYP, which spans from 2022 to 2032, emphasizes the need for youth participation in national development, explicitly stating that "the views of the youth and their participation in national development must be sought". This commitment aligns with international frameworks such as the African Youth Charter and the United Nations Framework Convention on Climate Change (UNFCCC), which advocate for the active involvement of youth in decision-making processes related to climate change. However, despite these commitments, there are significant gaps in actualizing youth participation in climate policy discussions and implementation. Reports indicate that young people have often been marginalized in these processes, leading to a disconnect between policy intentions and on-the-ground realities. The integration of climate justice action plans has seen significant progress in the United States from 2007 to 2020. According to a study by [28], 69% of climate action plans published during this period include some form of justice consideration as seen in Figure 1 below.

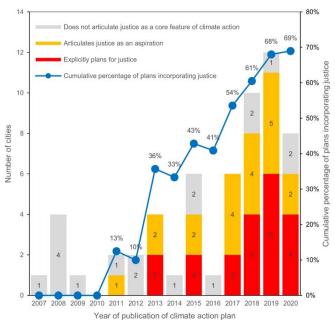


Figure 1: Engagement with climate justice over time

The incorporation of climate justice principles into youth policy frameworks is a crucial step towards addressing the pressing challenges of climate change and fostering a sustainable future. As evidenced by recent research, integrating YCJ principles ensures that young people are not only recognized but actively engaged as key stakeholders in climate action. This engagement is essential across various sectors, particularly in education, where reforms are necessary to equip youth with the knowledge and skills needed to navigate and combat climate injustices. By advocating for educational initiatives that incorporate climate justice, policies can empower young individuals to understand the systemic inequities exacerbated by climate change and to mobilize effectively within their communities. Furthermore, meaningful youth participation in climate governance can bridge the gap between policy intentions and actual outcomes, enabling young activists to influence decision-making processes at local, national, and global levels. This holistic approach not only amplifies the voices of marginalized youth but also fosters intergenerational equity by ensuring that their insights contribute to sustainable development goals. Embedding climate justice principles within youth policies creates a foundational baseline that can drive transformative actions across sectors, addressing both environmental and social dimensions of the climate crisis while fostering a more inclusive and equitable future for all generations.

3. Theoretical Framework and Analysis

Youth activists addressing climate justice internationally have highlighted struggles and systemic exclusion, pointing to the concept of 'adultism,' which is the perception that adults hold that youth lack the competency to advocate politically [10]. This perception is particularly evident in climate-vulnerable countries, where youth encounter difficulties in asserting their roles in international climate negotiations and criticize the

exclusivity of spaces that limit the participation of youth with marginalized backgrounds [3]. Despite contributing minimally to global greenhouse gas emissions, youth in Lowand Middle-Income Countries (LMICs) like Ghana bear the brunt of climate change consequences originating from More Developed Countries (MDCs). The abandonment of the 'polluter pays' principle exacerbates the disproportionate burden on youth, emphasizing the urgent need for climate justice. In this context, assessing the Ghana National Youth Policy (GNYP) and its role in promoting youth climate justice in Ghana is crucial to address the inequities and challenges faced by young people in promoting climate justice. As seen in Figure 2 below, the systems thinking diagram illustrates the intricate interrelationships among key challenges that youth face in achieving climate justice. This visual representation highlights how various factors—such as adultism, youth activism, systemic exclusion, and climate vulnerability —interconnect and influence one another.

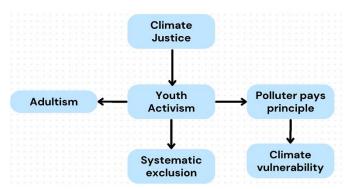


Figure 2: Interrelationships among key challenges faced by youth in achieving climate justice.

3.1 Assessing the Ghana National Youth Policy

In assessing the GNYP within the realm of youth climate justice, a comprehensive examination of its vision and strategic approaches is imperative. The core vision of the GNYP, "Empower Young Generation, Creating Sustainable Opportunities for Development," underscores a commitment to empowering youth and fostering sustainable pathways for development. The Government of Ghana's acknowledgement of climate change as integral to its youth development agenda highlights the imperative of integrating climate considerations across policies and sectors to drive sustainable national growth. The policy document identifies critical issues concerning climate change and youth, emphasizing the need for enhanced awareness among young individuals regarding climate change impacts and the deficiency in structures for nurturing "green" skills and climate-resilient innovations. The approaches intended to achieve climate change related aims is summarized as;

- 'Promotion of youth participation in climate action, environmental issues and "greening" of education, including TVET (Technical and Vocational Education and Training).'
- 'Collaboration with the Environmental Protection Agency (EPA) and other state institutions at the national, regional and district levels to implement projects and programmes that sensitize the young about climate change issues, environmental sustainability and development of "green" skills, technologies and innovations.'

Furthermore, the key principles that provide the basis for the GNYP direction for the national response to the climate change challenge in Ghana include;

- 'The Government of Ghana recognizes that sustainable development requires constantly improved human capital.'
- 'The Government of Ghana is aware that a well-disciplined and skilled youth is an asset for national development.'
- 'Since the youth of today are leaders of tomorrow, the state has the absolute obligation to equip them with the knowledge, skills, competence and leadership required to meet the development challenges of tomorrow.'
- 'That effective interventions are a shared responsibility of all stakeholders, that the youth, the prime beneficiaries of the policy must take maximum responsibility and interest in their success and totally support full implementation of interventions.'
- 'Globally, all countries are turning to the development of youth as a catalyst to sustain their development. Ghana cannot be left out of this global phenomenon.'

4. Methodology

The methodology employed in this study was meticulously designed to analyze the Ghana National Youth Policy (GNYP) (2022 – 2032) with a focus on evaluating the inclusion of youth climate justice principles. The research followed a structured, step-by-step approach to ensure a comprehensive understanding of how the policy addresses climate justice and its implications for youth through a descriptive review [4] of secondary data sources.

4.1 Data collection

The first step involved identifying relevant documents by title that pertain to youth climate justice, the GNYP, and broader climate change policies as seen in Table 1 below:

Table 1. Search criteria

	Table 1. Scarch efficia	-
Search platform	Search terms	Number of papers gathered
Google scholar	youth climate justice AND Ghana National Youth Policy AND climate change policies AND youth participation in climate action	38
ResearchGate	youth climate justice AND Ghana National Youth Policy AND climate change policies AND youth participation in climate action	23
Institutional websites (including the United Nations)	youth AND climate change AND development	16
Government of Ghana portals	youth AND climate change AND development	5
Total papers gathered		82

4.2 Data evaluation

Once the relevant documents were collected, a rigorous evaluation process was conducted to assess their quality and relevance [14]. Initially, each document underwent a methodology review to scrutinize the research practices employed in original studies or reports, ensuring that the findings were derived from sound methodologies. Following this, a recency check was performed to verify the publication dates of each document, confirming that the information reflected current trends and developments in climate policy and youth engagement. The content alignment analysis focused on how well each document contributed to understanding youth climate justice in the context of Ghana, assessing its relevance to the research objective. Additionally, documents that provided contextual insights into global and national approaches to youth climate justice were prioritized, particularly those that highlighted best practices for youth participation in policymaking processes.

4.3 Synthesis of findings

4.3.1 Identification of gaps

The synthesis aimed to highlight critical gaps in the GNYP regarding youth climate justice, barriers to effective implementation, and strategies for enhancing youth involvement in climate change initiatives. The first step was a thorough textual analysis of the GNYP to evaluate its alignment with youth climate justice principles. Key sections were examined to identify specific objectives related to climate change and youth engagement. This analysis was informed by comparism of existing literature on youth participation in climate action (UNDP's guidelines on meaningful youth engagement in climate governance) and the World's Youth for Climate Justice Youth Climate Justice (YCJ) handbook.

4.3.2 Recommendations development

After the identification of gaps, actionable recommendations were formulated. Each recommendation was tailored to specific stakeholder groups, including policymakers, civil society organizations, and youth-led initiatives. Furthermore, the recommendations were grounded in established frameworks such as the Kyoto Protocol which focuses on accountability [16] and could serve as a meaningful youth engagement strategy across all levels of climate governance as framework fosters a sense of environmental ownership [15]. This framework served as a guideline for developing strategies that address systemic barriers to achieving youth climate justice.

5. Results and Discussion

The Ghana National Youth Policy (GNYP) reflects a commitment to youth engagement in climate change activities, such as promoting green jobs. However, these measures often fall short of fully aligning with the vision of climate justice, indicating that the policy does not adequately encompass climate justice principles in its approaches to climate change. Despite this gap in comparism to the United Nations Development Programme (UNDP) youth climate governance guidelines and the World's Youth for Climate

Justice YCJ handbook, the foundational principles guiding the GNYP are consistent with broader development agendas and existing national policies, including the United Nations Sustainable Development Goals, the Ghana National Climate Change Policy (2013), and the Environmental Protection Agency Act of 1999 (Act 490).

The synthesis of findings from the analysis of the Ghana National Youth Policy (GNYP) in relation to youth climate justice highlighted critical gaps and barriers that hinder effective youth engagement in climate action. The findings reveal significant shortcomings in the GNYP, regarding the inclusion of youth voices, accountability measures, and capacity-building initiatives. Table 2 provides a comparative analysis of the Ghana National Youth Policy (GNYP) concerning existing literature on youth participation in climate action, specifically referencing the UNDP's guidelines on meaningful youth engagement and the World's Youth for Climate Justice YCJ handbook. It highlights key areas where the GNYP aligns or diverges from established best practices and frameworks aimed at enhancing youth climate justice.

Table 2. Comparative analysis of the GNYP					
Aspect	GNYP	UNDP guidelines	YCJ Handbook		
Youth Participation	Acknowledges the importance of youth participation in climate action but lacks specific strategies for engagement	Emphasizes the need for structured mechanisms to ensure youth are actively involved in decision-making processes	Advocates for inclusive participation, ensuring marginalized youth voices are heard in climate governance		
Capacity Building.	Limited focus on training and capacity-building initiatives for youth engagement in climate governance	Highlights the importance of training programs to equip youth with skills necessary for effective climate advocacy and participation	Stresses the need for empowerment through education and skill development to enable youth to lead climate initiatives		
Accountability Mechanisms.	Lacks robust accountability measures to monitor commitments and progress to youth inclusion	Recommends establishing clear accountability frameworks to track youth involvement and hold stakeholders accountable.	Calls for transparency in decision-making processes and accountability for commitments made to engage youth in climate action.		
Representation of diverse youth.	Insufficient emphasis on including diverse youth voices, particularly from marginalized communities, in policy processes	Encourages the inclusion of a wide range of youth perspectives, especially those from vulnerable backgrounds, in	Promotes the representation of marginalized groups within youth movements to ensure equitable participation in		

		climate discussions.	climate justice efforts.
Policy alignment	Does not explicitly detail how it integrates with international frameworks like the Kyoto protocol.	Advocates for alignment with international agreements and frameworks to enhance youth engagement in global climate governance	Emphasizes the importance of aligning local actions with global climate goals, ensuring that youth initiatives contribute to broader objectives.

5.1 Challenges in adopting youth climate justice

In the context of Ghana, the adoption of climate justice within youth policies encounters multifaceted challenges that impede effective implementation and impact. The prevalent inadequacies in emission accounting and reporting systems (although making progress), characterized by gaps in essential datasets, across various sectors, present a formidable barrier. This deficiency in robust data infrastructure not only complicates the understanding of the intricate dynamics and trajectories of climate change but also obstructs the formulation of well-informed decisions regarding optimal climate justice interventions such as enforcement of the polluter pays principle. Exclusion is compounded by systematic barriers, such as insufficient representation of young people with diverse backgrounds (e.g. indigenous) in governmental and non-governmental climate policy-making processes, which restricts access to resources and opportunities for advocacy and inclusion of their voices. Additionally, the enforcement of the polluter pays principle remains weak, allowing industries that contribute to environmental degradation to evade accountability for their actions. This lack of accountability not only perpetuates environmental harm but also diminishes the financial resources available for climate justice initiatives aimed at supporting vulnerable populations, including youth.

5.2 Approach to youth climate justice inclusion

5.2.1 Kyoto protocol approach

The Kyoto protocol, established in 1997 [7], serves as a pivotal international agreement designed to combat global climate change through the imposition of binding emission reduction targets on More Developed Countries (MDCs). The Kyoto Protocol approach highlights the principle of common but differentiated responsibilities, recognizing the historical contributions of industrialized nations to greenhouse gas emissions and stressing the need for collective action to address climate change impacts. Within the realm of youth climate justice, the Kyoto Protocol accentuates the concept of intergenerational equity in climate action, underscoring the obligation of present generations to preserve the environment for the benefit of both the current and future generations. Integrating the Kyoto Protocol principles into the Ghana National Youth Policy can provide a robust framework for promoting climate justice among youth, emphasizing the importance of equitable environmental stewardship and fostering a sense of responsibility towards sustainable development practices.

5.2.2 Carbon intensity approach

This approach centers on quantifying the volume of carbon dioxide emissions generated per unit of economic output or activity [11]. This metric holds critical importance in evaluating the environmental consequences of economic progress and pinpointing avenues for curbing greenhouse gas emissions while fostering sustainable development. Within the realm of youth climate justice, the carbon intensity assumes a pivotal role in advancing intergenerational equity and securing a sustainable future for upcoming generations through the application of the polluter pays principle [12]. By monitoring and curbing carbon intensity levels, policymakers can effectively address the detrimental impacts of climate change on youth demographics, who bear a disproportionate burden of environmental degradation and climate-induced mishaps. Integrating the carbon intensity approach into the Ghana National Youth Policy can offer a structured mechanism for promoting climate justice among youth, emphasizing the imperative of sustainable growth practices and safeguarding the well-being of future generations against the perils of climate change. Table 3. below summarizes the identified gaps in the Ghana National Youth Policy (GNYP) regarding climate justice, the possible barriers hindering its inclusion and proposed strategies to address the issues.

5.2.3 Accessible consultation platforms

Establishing accessible consultation platforms is essential for enhancing youth inclusion in climate justice within Ghana's National Youth Policy. Agencies like the National Youth Authority (NYA) and the Environmental Protection Agency (EPA) can play a crucial role in creating platforms such as Youth Sounding Boards, which would allow young people to voice their ideas, concerns, and solutions regarding climate change. By facilitating communication between youth and decision-makers, these platforms can ensure that young voices are heard in the development of climate policies. For instance, the Youth Climate Council in Ghana (YCCG) has successfully connected youth with government bodies, enabling them to participate in shaping policies that affect their future. These consultation platforms should be designed to be inclusive and easily accessible, encouraging participation from youth across different backgrounds, including those from marginalized communities. fostering open dialogue, providing training opportunities, and supporting youth-led projects, these platforms empower young people to take ownership of climate action while building their skills and confidence. This approach not only amplifies youth voices but also ensures that their unique perspectives are integrated into Ghana's climate strategies. Table 3 below gives a summary of gaps within the GNYP with challenges faced and solutions, within the context of youth climate justice.

Table 3. Strategies for youth climate justice inclusion

Gaps	Challenges	Solutions
Insufficient alignment with climate justice principles (polluter pays principle)	Inadequate emission accounting and reporting systems.	Integrate climate justice principles into GNYP and other national policies
Limited representation of diverse youth backgrounds in policymaking.	Systematic exclusion of youth voices in decision-making processes	Enhance youth participation through dedicated platforms for advocacy and decision-making.
Gaps in data infrastructure complicating informed decision-making.	Fragmented data collection across sectors leading to poor understanding of climate dynamics.	Develop robust data systems for emission tracking and reporting to inform policy decisions.
Limited financial resources for climate justice initiatives targeting youth.	Insufficient funding opportunities for youth-led climate initiatives and programs	Create funding mechanisms specifically aimed at supporting youth engagement in climate action and justice initiatives.

6. Conclusion and Future Scope

In conclusion, embedding Youth Climate Justice (YCJ) within the Ghana National Youth Policy (GNYP) is not only essential for addressing the unique challenges posed by climate change but also for empowering young people as key development. stakeholders in national Prioritizing institutional coordination and stakeholder engagement will facilitate a more coherent approach to climate change mitigation strategies, ensuring that the diverse perspectives of youth are integrated into policy-making processes. By actively involving youth climate advocates from various backgrounds, the GNYP can leverage their insights and expertise, fostering initiatives that resonate with the aspirations of the younger population. This inclusive approach will not only enhance the effectiveness of climate action in Ghana but also promote a sense of ownership and responsibility among young people, motivating them to become active participants in shaping their futures.

Reflecting on existing literature, it becomes evident that a structured climate justice framework in policies is necessary for fostering genuine youth participation. These guidelines advocate for creating spaces where youth can engage meaningfully with decision-makers, ensuring their voices are heard and valued. Similarly, the Worlds Youth for Climate Justice (WYCJ) youth climate justice handbook emphasizes the importance of equipping young people with the tools and knowledge needed to advocate for their rights and interests effectively. Both documents highlight the necessity of integrating youth perspectives into climate policies, underscoring a shared understanding that empowering young people is crucial for achieving sustainable development goals. As Ghana moves forward, it is essential to recognize that integrating youth perspectives into climate action not only

fulfils national and international commitments but also enriches the policy landscape with innovative solutions tailored to local contexts. By fostering an environment where youth can thrive and contribute actively to climate initiatives, Ghana can make significant strides toward achieving a sustainable and equitable future for all its citizens. In this way, the GNYP can evolve into a powerful tool for promoting youth climate justice, ensuring that young people are at the forefront of building resilience against climate change impacts in their communities.

Data Availability: None

Conflict of Interest

There is no conflict of interest

Funding Source: None

Authors' Contributions

Author-1 researched literature and conceived the study, did the textual analysis, wrote the first draft of the manuscript and also reviewed and edited the manuscript.

Acknowledgements: None

References

- Abdulai, Ibrahim Abu. "The effects of urbanisation pressures on smallholder staple food crop production at the fringes of African cities: Empirical evidence from Ghana," Cogent Social Sciences, Vol.8, Issue.1, 2022.
- [2] Ariko Joseph, D., Ikpe Elisha, and A. Sawa Bulus. "Analysis of Rainfall Trend and its Relationship with Sorghum Yield in Sudan Savanna Region of Nigeria." Int. J. Sci. Res. in Multidisciplinary Studies, Vol 10, Issue.3, 2024.
- [3] Grosse, Corrie, and Brigid Mark. "A colonized COP: Indigenous exclusion and youth climate justice activism at the United Nations climate change negotiations." From student strikes to the Extinction Rebellion. *Edward Elgar Publishing*, pp.146-170, 2020.
- [4] Guzzo, Richard, Susan Jackson, and Raymond Katzell. "Meta-analysis analysis." Research in organizational behavior Vol.9, Issue.1, pp.407-442, 1987.
- [5] Inbit, Mohammed Jabar Odah, et al. "The Impact of Human Activities on Environmental Sustainability." *Journal of Medical Genetics and Clinical Biology*, Vol.1, Issue.8, pp.119-141, 2024.
- [6] Okaka, Fredrick Okoth, and Beneah Odhiambo. "Households' perception of flood risk and health impact of exposure to flooding in flood-prone informal settlements in the coastal city of Mombasa." International Journal of Climate Change Strategies and Management, Vol.11, Issue.4, pp.592-606, 2019.
- [7] K. Protocol, "United Nations framework convention on climate change," *Kyoto Protocol*, Kyoto, pp.1-21, 1997.
- [8] Rao, Nitya, et al. "Gendered vulnerabilities to climate change: insights from the semi-arid regions of Africa and Asia." Climate and Development, Vol.11, Issue.1, pp.14-26, 2019.
- [9] Shaw, Christopher. "The role of rights, risks and responsibilities in the climate justice debate." *International Journal of Climate Change* Strategies and Management, Vol.8, Issue.4, pp.505-519, 2016.
- [10] Sloan Morgan, Onyx, et al. "Youth and climate justice: Representations of young people in action for sustainable futures." *The Geographical Journal*, Vol.190, Issue.1, pp.e12547, 2024.
- [11] Wang, Shaojian, et al. "Quantifying the relationship between urban development intensity and carbon dioxide emissions using a panel data analysis." *Ecological Indicators*, Vol.49, pp.121-131, 2015.
- [12] Wu and Zhang. "Willingness to Pay for Carbon Reduction Against Climate Change: A Social Survey in Beijing, China." Int. J. Sci. Res. in Multidisciplinary Studies, Vol.49, pp.121-131, 2015
- [13] Harlan, Sharon L., et al. "Climate justice and inequality." Climate

- change and society: Sociological perspectives, pp.127-163, 2015.
- [14] Xie, Iris, and Edward Benoit III. "Search result list evaluation versus document evaluation: similarities and differences." *Journal of Documentation*, Vol.69, Issue.1, pp.49-80, 2013.
- [15] Kwon, Soo Ah. "The politics of global youth participation." *Journal of Youth Studies*, Vol.22, Issue.7, pp.926-940, 2019.
- [16] Yamin, Farhana. "The Kyoto Protocol: Origins, assessment and future challenges." Rev. Eur. Comp. & Int'l Envtl. L., Vol.7, pp.113, 1998.
- [17] Bhandari, Medani P. The Nexus of Climate Change and Land-use-Global Scenario with Reference to Nepal. CRC Press, 2024.
- [18] Thaler, Thomas, et al. "Social justice in the context of adaptation to climate change—reflecting on different policy approaches to distribute and allocate flood risk management." *Regional Environmental Change*, Vol.18, pp.305-309, 2018.
- [19] Eriksen, Siri, et al. "When not every response to climate change is a good one: Identifying principles for sustainable adaptation." *Climate and development*, Vol.3, Issue.1, pp.7-20, 2011.
- [20] Offei-Darko, Lord, et al. "Lobbying strategies for climate-affected farmers in rural communities in Ghana: a case study of Klotekpo in the Volta region of Ghana." Multidisciplinary Adaptive Climate Insights, Vol.1, Issue.2, pp.40-45, 2024.
- [21] Martiskainen, Mari, et al. "Contextualizing climate justice activism: Knowledge, emotions, motivations, and actions among climate strikers in six cities." *Global Environmental Change*, Vol.65, pp.102180, 2020.
- [22] Neas, Sally, Ann Ward, and Benjamin Bowman. "Young people's climate activism: A review of the literature." Frontiers in Political Science, Vol.4, pp.940876, 2022.
- [23] Walker, Catherine, and Benjamin Bowman. Young people and climate activism. Oxford University Press, 2022.
- [24] Grewal, Rupinder Kaur, Ellen Field, and Paul Berger. "Bringing climate injustices to the forefront: Learning from the youth climate justice movement." Justice and Equity in Climate Change Education. Routledge, pp.41-70, 2022.
- [25] Marks, Elizabeth, et al. "Young people's voices on climate anxiety, government betrayal and moral injury: A global phenomenon." Government betrayal and moral injury: A global phenomenon, 2021.
- [26] Fisher, Dana R., and Sohana Nasrin. "Climate activism and its effects." Wiley Interdisciplinary Reviews: Climate Change, Vol.12, Issue.1, pp.e683, 2021.
- [27] Gordon, Hava Rachel. We fight to win: Inequality and the politics of youth activism. Rutgers University Press, 2009.
- [28] Diezmartínez, Claudia V., and Anne G. Short Gianotti. "US cities increasingly integrate justice into climate planning and create policy tools for climate justice." *Nature Communications*, Vol.13, Issue.1, pp.5763, 2022

AUTHORS PROFILE

Lord Offei-Darko earned his BSc. in Biology at the University of Ghana in 2022, where he graduated as a Global Undergraduate Award (GUA) winner in the earth and environmental sciences category - serving a pathway for his research career. He is currently pursuing a Master of Philosophy (MPhil) degree in



Environmental Science at the Institute for Environment and Sanitation Studies, University of Ghana. With considerable experience in environmental advocacy and research, he is currently serving as the national coordinator for UrbanBetter – an international data-driven advocacy movement, and learning platform for healthy sustainable development in African cities and doubles as the founder of Indigenous People Alliance (IPA) Ghana – a youth-led NGO that aims to promote social and climate equity amongst indigenous groups and communities. Over the years, Offei-Darko has been working to bridge the gaps between global issues such as climate change with the reality on the ground.