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The Nexus of Climate Change and Policing Guidelines to Improve Climate Change Governance

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Abstract: Climate change has far-reaching ramifications for society, and its consequences cross conventional boundaries and affect many facets of life. While climate change's environmental, economic, social, and health consequences have received considerable attention, an important but frequently overlooked aspect of dealing with this crisis is its intersection with public safety and security and how law enforcement must be prepared to deal with climate breakdown. Climate change impacts and other natural catastrophes create complicated problems for governments in implementing appropriate police governance, notably regarding disaster risk reduction and management. Rising temperatures, shifting weather patterns, catastrophic weather events, and sea-level rise are just a few of the global crisis manifestations causing havoc in these areas. Climate change has repercussions across society, affecting millions and jeopardizing their livelihoods. Drought, desertification, land degradation, water shortages, and food insecurity are some of the effects that are becoming increasingly prevalent with the rise in global temperatures. Climate change is viewed as a risk multiplier because it exacerbates many criminal and illicit activities. For example, human trafficking has several links to climate change. Furthermore, the disruption of migration patterns due to climate change is a particular concern, introducing an additional layer of complexity for law enforcement. The urgent necessity for comprehensive and context-specific solutions to improve law enforcement institutions' resilience and adaptive capabilities, particularly in developing courtiers, is emphasized. Law enforcement measures must be enhanced, as well as the formulation of community policing strategies and the promotion of inter and intra-service collaboration. This is not a hypothetical issue; it is a live reality that demands immediate attention, novel solutions, and cross-sector collaboration.

Keywords: Adaptation, Climate change, Community Policing, Inter / Intra Service Cooperation, Law enforcement



Introduction

As the planet struggles with the tremendous difficulties exacerbated by climate change, it has become clear that its consequences transcend traditional borders and impact many aspects of life. The implications of climate change on the environment, economy, and society have been widely discussed, yet one crucial aspect often overlooked is its intersection with law enforcement [1]. As climate change emerges as a significant threat to regional and global security, law enforcement agencies are expected to be at the forefront of the response [2]. To this end, the United Nations Police (UNPOL) has set up a Serious and Organized Crime Team at its headquarters. This team collaborates with various partners, including peace operation focal points, to facilitate information sharing, build capacity, enhance situational awareness, and develop early warning systems [2].

For some countries, the dangers of climate change may be a new experience. In developing nations, where the impacts of climate change are most pronounced, law enforcement strategies to mitigate these threats may be absent or just beginning to take shape. Climate change disproportionately negatively impacts low- and middle-income countries' economic growth and per capita income [3]. These low-income nations find it increasingly difficult to shield themselves from climate change, as their preventative measures are being overtaken by the escalating frequency and intensity of climate-related disasters [4]. The United Nations Environment Programme (UNEP) proposes that the global community can better adapt to the climate crisis by implementing early warning systems and restoring ecosystems [5]. The International Monetary Fund (IMF) further underscores the need for adaptation strategies that address the risks posed by climate change and extreme weather events, such as protecting agriculture, managing the consequences of rising sea levels, and enhancing infrastructure resilience [6].

Rising temperatures, altering weather patterns, catastrophic weather events, and sea-level rise are a few manifestations of global crises that are generating many troubles in these regions, particularly in African countries. In addition to grappling with the multifaceted challenges presented by climate change, nations also find themselves recurrently subjected to other natural calamities, including but not limited to tsunamis, volcanic eruptions, and earthquakes. These catastrophic events can cause significant loss of life and property, disrupt local economies, and exacerbate social unrest and economic inequalities.

The consequences of climate change, however, do not stop with environmental degradation and biodiversity loss; they ripple throughout society, harming millions of lives and threatening their livelihoods. Its consequences, including drought, desertification, land degradation, water shortages, and food insecurity, are becoming more common as global temperatures increase. The worsening of migratory patterns caused by climate change is of special concern, adding another complication for law enforcement agencies. For instance, those forced to leave the devastated areas typically compete with local communities for limited resources, creating the stage for inter-communal conflicts. At the same time, the loss of arable land and livelihoods exposes vulnerable young to recruitment and radicalization by armed groups, while organized criminals such as human traffickers take advantage of their desperation.

The combination of climate change impacts and other natural disasters presents a complex set of challenges for poor countries to adopt specific policing governance, particularly regarding disaster risk reduction and management. This underlines the urgent need for comprehensive and context-specific strategies to enhance law enforcement institutions' resilience and adaptive capacity.

Adaptation in law enforcement measures, the development of specific community policing plans, and the promotion of inter and intra-service cooperation are crucial areas that need to be improved if countries in the south can cope with the threats induced by climate change. Today, climate change threats are not a hypothetical problem; they are a living reality that requires prompt attention, new solutions, and cross-sector collaboration. Law enforcement agencies play a significant role in pre-empting and tackling environmental crimes, including those that impair the resilience of natural ecosystems to withstand climate change [7]. The International Initiative of Law Enforcement for Climate (I2LEC) has been launched as a platform to coordinate and enhance the relevant efforts of the global law enforcement community [7]. Additionally, community-based climate change adaptation action plans have been developed to support climate-resilient development in various regions [8]. These plans engage local stakeholders, build their capacities to design climate change adaptation projects, empower stakeholders to identify existing vulnerabilities and enhance climate resilience, and strengthen networks to facilitate information access and sharing [8]. International cooperation is vital to tackling contemporary challenges, including climate change [9], [10]. Most people want more global cooperation, not less, and believe in the power of working together to face the challenges of today and tomorrow [10].

Adaptation of Law Enforcement Measures

Modifying law enforcement methods is a pressing need for improving policing governance in relation to the consequences of climate change. It is essential to highlight that police tactics and structures in underdeveloped nations, which rely heavily on traditional approaches, could be unable, not to say insufficient, to handle the complex and unforeseen difficulties posed by climate change. Therefore, the need to modify law enforcement methods is urgent to improve policing governance in relation to the consequences of climate change.

Climate change is one of the most severe threats to regional and global security today, and the police will be on the frontlines as first responders [11]. The United Nations Police (UNPOL) has established a Serious and Organized Crime Team at Headquarters to coordinate with partners, including focal points in peace operations, to support information sharing, capacity-building, situational awareness, and early-warning mechanisms [11]. However, police tactics and structures in underdeveloped nations, which rely heavily on traditional approaches, may be unable to manage climate change's complex and unforeseen difficulties. There are many blind spots in law enforcement's approach to preparing for and responding to climate change, including a lack of awareness of risks and future challenges, preparedness for incidents, inadequate training, and interoperability [12].

Low-income countries are struggling to protect themselves against climate change, and their plans to prevent damage have already been outpaced by climate-induced disasters, which are intensifying and happening more regularly [13]. The negative synergy between the two crises threatens to undermine States and international security. In worst-case scenarios, climate change-related impacts could stress economic and social conditions, contributing to mass migration events or political crises, civil unrest, shifts in the regional balance of power, or even state failure [14],[15]. Climate-related challenges, including resource scarcity-driven conflicts and environmental disasters, are new challenges that will place a significant burden on police institutions. In truth, their measures must be modified, necessitating a fundamental shift in mindset, policy, and practice [15]. This changing landscape emphasizes the critical need for law enforcement to adapt to the challenges posed by climate change, acknowledging its significant impact on their mission.

A crucial part of climate change governance is assigning resources within law enforcement institutions to handle climate change-related issues. This covers financing, staff, and equipment supply. For example, the United States Department of Homeland Security (DHS) provides a guide that highlights many of its available resources, such as training and grant opportunities, to increase the nation's ability to prevent acts of violence and increase resilience to evolving threats, such as those related to climate change [16]. In the same line, Oxford Research Group [17] explores the probable linkages between climate change, its socioeconomic implications, and the potential security ramifications. It describes how expected consequences of climate change, such as catastrophic weather events, sea level rise, infrastructure destruction, resource shortages, and migration, would cause substantial changes in the policing and law enforcement environment. The guidelines offered by these references serve as a starting point for learning how law enforcement organizations deploy resources to address climate change-related concerns.

Efforts to train and build capacity are crucial for equipping law enforcement personnel to respond effectively to climate change-related hazards. The International Labour Organization's International Training Centre in Turin provides training courses in green jobs, climate change, and fair transition [18]. These courses are designed to help governments assess the possible effects of climate policy on employment. Similarly, the Federal Emergency Management Agency (FEMA) is the United States' national focal point for creating and delivering emergency management training [19]. This training improves the ability of federal, state, municipal, tribal, and territorial government officials, volunteer organizations, and the public and private sectors to mitigate the effects of catastrophes. Furthermore, the International Security and Law Enforcement College (I2LEC) in the UAE guides how to increase the ability of law enforcement authorities to prevent environmental crimes connected to climate change.

These guidelines, mentions I2LEC, are to:

- 1. Identify the challenges linked to climate change and develop a perspective on future climate scenarios,
- 2. Guide on enhancing the capacity of law enforcement agencies to prevent environmental crimes related to climate change,
- 3. enhance cooperation with relevant external stakeholders to raise awareness, increase prevention, and build relevant operational and research capacities,
- 4. Promote national, regional, and international cooperation and coordination among law enforcement agencies in addressing environmental crimes related to climate change and
- 5. Support developing and implementing relevant international and regional legal instruments to combat crimes that affect the environment and climate change. International Initiative of Law Enforcement for Climate [20].

Other guidelines to improve policing governance in relation to the effects of climate change are to provide procedures for continuing monitoring and review of climate change-related law enforcement initiatives. This allows them to measure their efficacy and make required changes. The United States General Services Administration (GSA) has a Climate Change Risk Management Plan that outlines methods to establish a robust and resilient capability to handle climate change risks [21]. Regarding research, (I2LEC) funds studies and analysis of environmental crime patterns and trends and the possible consequences of global climate change scenarios on law enforcement operations.

Climate change reaction and readiness may be improved using data and technology like Geographic Information Systems (GIS), remote sensing, and predictive policing models. I2LEC provides essential guidelines that promote the exchange of data and knowledge to educate better law enforcement policies, strategies, practices, and operations to prevent and combat environmental crimes.

"Police Training" and "Community Policing" are independent but interrelated ideas in law enforcement, both essential in improving law enforcement's ability to fight environmental changes. Police Training, conversely, refers to the education and training that law enforcement officials acquire to do their tasks efficiently. Training in community-oriented police methods, practical communication skills, and mental health response training can all be included [22]. In the context of environmental changes, police training may help officers become first responders to the global climate crisis, dealing with conflicts caused by drought, desertification, land degradation, water shortages, and food insecurity [11]. Community policing, on the other hand, is a policing method that focuses on developing relationships and working closely with people in the community [23]. To solve environmental management difficulties, such as minimizing e-waste burning at informal e-waste hubs, community policing might entail active community environmental policing models in the face of environmental changes [24].

Specific Community Policing Plans

Of paramount importance to the needed measures to improve climate change governance is the creation of community policing policies tailored to the unique problems faced by climate change. Community Oriented Policing Strategy has long been seen as a successful strategy for increasing trust, improving public safety, and encouraging collaboration between law enforcement agencies and the communities they serve [25]. Community policing becomes even more critical in the context of climate change [11]. Local communities are frequently the first to feel the effects of climate change, and they have essential information on regional vulnerabilities and resilience techniques.

Promoting community-based policing strategies that include neighborhood residents in readiness and response efforts for climate change is essential. For example, the UN News highlighted numerous small-scale community-driven initiatives that significantly impact people's lives and helping global warming efforts [26]. This method improves the efficacy of climate change mitigation initiatives and develops a sense of ownership and responsibility among community members.

Building on this, it is important to investigate law enforcement agencies' techniques to engage with local communities in climate change mitigation and adaptation activities, such as public awareness campaigns and community policing approaches [27]. Through this measure, law enforcement agencies ensure they can establish climate action plans through community involvement. This may enormously improve local knowledge and support collective action; such involvement can lead to more effective and sustainable climate change solutions.

However, while implementing these measures, we argue that law enforcement actions must be carried out in a way that respects human rights and social justice principles, especially when working with disadvantaged and vulnerable communities. In this context, we mention the fact sheet issued by the OHCHR on water rights, which outlines how climate change damages in many parts of the globe are translated into human rights violations as the concept of basic water requirements to meet fundamental human needs could violated [28]. In this sense, it is essential to highlight that climate change impacts can lead to human rights abuses, according to the Office of the United Nations High Commissioner for Human Rights (OHCHR) fact sheet on water rights [29]. Climate change, it says, exacerbates water shortage by making water more unpredictable and polluting, endangering sustainable development, biodiversity, and people's access to water and sanitation. Flooding and increasing sea levels have the potential to pollute land and water resources, resulting in harm to water and This can result in unequal water availability, depriving sanitation infrastructure [30]. households of the opportunity to gather the clean water required for effective handwashing and hygiene [30]. At the 1977 United Nations Water Conference, the idea of basic water requirements to support fundamental human needs was first developed. These essential human survival water needs include drinking, sanitation, and hygiene requirements, which total around 50 Liters per person per day [31], [32]. Breaches of these essential water

requirements due to climate change might thus be considered human rights breaches. Equally important, the Leiden Journal of International Law examines climate change litigation via international law, emphasizing obligations and rights strategies [33].

Accordingly, climate change litigation under international law employs two basic strategies: the obligations strategy and the rights strategy. The obligations strategy gives existing obligations for global environmental preservation an erga omnes character, giving standing to a non-injured party before international tribunals [33]. However, the framework of the United Nations Framework Convention on Climate Change (UNFCCC) makes bringing a claim against individual governments for their specific climate change mitigation measures tough [33].

The rights method, becoming more common in practice, entails seeking redress for environmental harms through the legal categories of human rights law in national and international tribunals [33]. This strategy strives to identify and express the rights of persons and communities affected by climate change, emphasizing governments' and other entities' obligations to preserve these rights [34]. Climate change litigation based on human rights is a rapidly developing trend, with an increasing number of lawsuits launched by young people on behalf of future generations [35].

Both strategies face challenges, such as establishing a causal link between a government's failure to act on climate change and the impact on human rights; whether or not a court has the jurisdiction to hear a claim about executive decisions on climate change; issues of eligibility to file a case in court; difficulties dealing with complex scientific evidence; and the fact that litigation is expensive, time-consuming, and fraught with resource and power imbalances.

Finally, it is vital to examine the legal framework under which law enforcement authorities operate in relation to climate change, including any particular legislation or rules. The Asian Development Bank (ADB) summarizes the present international legal framework addressing climate change. Understanding this paradigm is critical because it defines what law enforcement authorities may and cannot do in response to climate change [35]. It also serves as a foundation for holding these agencies responsible for climate-related activities or inactions.

Inter / Intra Service Cooperation

Finally, fostering inter- and intra-service collaboration among law enforcement organizations is a must for resolving the multiple difficulties associated with the climate-policing nexus. Climate change crosses regional and sectoral lines [36], and its consequences frequently necessitate coordinated responses from several stakeholders. When dealing with climaterelated issues, law enforcement cannot act in isolation [17].

Collaboration with other government agencies, non-governmental organizations, and international organizations is crucial for pooling resources, sharing knowledge, and developing comprehensive policies. Improving law enforcement's mission in relation to climate change is a complicated and multifaceted subject.

Law enforcement agencies are called to enhance their collaborative and coordinative efforts with other governmental entities in escalating climate change-induced security challenges. The intricate nexus between climate change and security necessitates coordinating policymaking efforts across local agencies. A pivotal strategy in strengthening resilience within the national security framework involves the establishment of a Joint Task Force, which comprises representatives from law enforcement, military, and environmental disaster management agencies. Their critical role is identifying climate change-related vulnerabilities, formulating effective mitigation strategies, and arranging reactions to climate-related security menaces.

Moreover, the facilitation of inter-agency coordination is paramount for the effective exchange of information, equitable distribution of resources, and enforcement of environmental regulations. For instance, the National Oceanic and Atmospheric Administration (NOAA) argues that Law enforcement agencies can benefit from training and toolkit programs (available at the toolkit.climate.gov) aimed at enhancing the capabilities and skills of their personnel [37]. Furthermore, these agencies can play a pivotal role in climate change mitigation efforts by designing comprehensive training programs. These programs, which focus on climate change risk assessment, disaster response strategies, and enforcing environmental regulations, equip law enforcement personnel with the necessary skills and contribute to the broader efforts to combat climate change. Lastly, the role of public awareness campaigns cannot be overlooked. Joint efforts in raising public awareness must be implemented to enlighten the community about the security implications of climate change hazards and the integral role of law enforcement in mitigating them.

Globally, it is important to consider international agreements, partnerships, or collaborations that may assist law enforcement efforts to address the effects of climate change. The Harvard Advanced Leadership Initiative Social Impact Review examines the difficulties and potential for international collaboration in combating climate change. Despite the meager gains gained from years of discussions aimed at decreasing greenhouse emissions, it emphasizes the necessity of international cooperation in addressing climate change [9]. In this framework, we cite the UAE Ministry of Interior's International Initiative of Law Enforcement for Climate (I2LEC), in collaboration with the United Nations Office on Drugs and Crime (UNODC), which serves as a platform to coordinate the global law enforcement community's response to environmental fallout [38]. This initiative fosters national, regional, and worldwide law enforcement cooperation and coordination in combating environmental crimes connected to climate change.

Conclusion

In conclusion, the interweaving of climate change and policing poses a severe combination of dangers and difficulties that must be addressed in the short run. Adapting law enforcement methods, developing community policing programs, and encouraging inter- and intra-service collaboration might improve governance and help handle security issues related to climate change. The vulnerability of law enforcement measures in addressing security issues arising from climate change highlights the pressing need to reassess and redefine the role and responsibilities of law enforcement agencies in the context of this emerging threat. As we learn more about the relationship between climate change-policing nexus, it becomes evident that a collaborative strategy is required to protect communities, guarantee public safety, and create resilience in a fast-changing environment.

The perspectives delineated in this article are intended to serve as a robust framework for reevaluating, scrutinizing, and fortifying law enforcement strategies, particularly in the face of climate change. Concentrating on these distinct principles will equip law enforcement agencies with a deeper understanding of addressing security issues associated with climate change and how they might conceptualize innovative approaches to enhance their preparedness, adaptation, and policing strategies.

Disclosures

None

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Dr. Mohamed Mliless holds a Ph.D. in Applied Linguistics. His scholarly endeavors are centered on environmental discourse and ecolinguistics. His profound insights and innovative research in this field have led to the publication of several influential books, articles, and book chapters. Moreover, he has been a pivotal presence in various high-profile conferences, where he shares his expertise and collaborates with fellow researchers to advance the discourse in environmental linguistics.

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Endnotes

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