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Non-Governmental Organisations (NGOs) Role in Driving Urban Climate Governance: The Case of CIKOD and GAYO in Ghana

Ama Kissiwah Boateng
Faculty of Public Governance and International Studies
University of Public Service, Budapest, Hungary

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Abstract

While cities are considered pivotal sources of global greenhouse gas emissions, they are also essential in urban climate governance. The role of NGOs in different contexts is increasing in terms of the mode of governance, but the empirical evidence of how they contribute to urban climate action in small and medium-sized cities, especially in developing countries is limited. Drawing evidence from Ghana, a case study research design was adopted and this facilitated an in-depth understanding of how NGOs contribute to urban climate governance in small and medium-sized cities in Ghana. The primary data collection methods included key informant interviews with two purposively selected NGOs: the Center for Indigenous Knowledge and Organisational Development (CIKOD) and the Green Africa Youth Organisation (GAYO), which is located in the Wa Municipality and the Cape Coast Metropolis respectively. Randomly selected residents made up of chiefs and assembly members, who are the representatives of the people in the municipality, were interviewed. All interviews were transcribed and analysed in generated themes. The study revealed that climate change adaptation actions included local empowerment through capacity building, climate advocacy, and waste management. As a result of the adaptation focus, the paper concludes that collaborations and partnerships among state and non-state actors will help generate greater resilience benefits for local

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communities. Climate change adaptation programmes, which are often initiated by NGOs, are also steered by local residents outside of administrative systems.

Keywords: Climate Change, Urban Climate Governance, Non-Governmental Oganisations, Small and Medium-Sized Cities, Ghana

Introduction

More people live in cities and urban areas than ever before and this phenomenon has created both challenges and opportunities. On one hand, cities are considered significant sources of greenhouse gas emissions due to intense energy consumption, buildings, and infrastructures (Bulkeley, 2010b; Castán Broto & Bulkeley, 2013b; Baker et al., 2012; Carter et al., 2015; Filho et al., 2019). On the other hand, cities play a very important role in adapting or mitigating the impacts of climate change. However, there is an empirical bias toward studies in developed countries (Klein et al., 2018; Wisner et al., 2015). This is because even though urban climate governance has been well researched, most scholars have focused on using case studies of developed countries as their units of analysis (Castán Broto & Bulkeley, 2013; Guyadeen et al., 2019; Reckien et al., 2018; van der Heijden, 2019). Additionally, while several good examples are available for large and megacities, few are available for small and medium-sized ones (SMCs) (Boehnke et al., 2019; Hoppe et al., 2016; Simon et al., 2021; Klein et al., 2018). As a result, Birkmann et al. (2016) argue that as the importance of the former is acknowledged, it is relevant to stress the latter since most of the world's population live in small and medium-sized cities. It is also widely recognised that they are more constrained in (fiscal) resources, staffing, 'critical mass', as well as organisation and leadership capacities within the regions in which they are situated.

In line with the Paris Agreement, which emphasises the role of sub-national climate action, the participation of non-state actors in urban climate governance has become essential due to its contribution in cities. This is partly because cities and urban areas play a vital role in building local adaptive capacities, especially among people already living at or close to the margins of survival (Musah-Surugu et al., 2019). Furthermore, the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) emphasises the importance of the private sector in urban climate action. Although research into the third sector is a growing academic field, the literature is quite limited in terms of the modes of governance used in steering climate action cities and urban areas. Globally, despite the increasing role of NGOs in different contexts, the empirical evidence of how they contribute to urban climate action in small and medium-sized cities, especially in developing countries is limited.

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Drawing evidence from Ghana, a case study research design was adopted and this facilitated an in-depth understanding of how NGOs contribute to urban climate governance in small and medium-sized cities in Ghana.

1. Methods

Research Design

A qualitative research strategy was considered appropriate for this study because it offers a naturalistic approach for conducting research that relies heavily on context, perception, and lived experiences about a phenomenon. The study's research design encompasses case studies of two major cities in Ghana. Like most case study research designs, each case was studied in-depth while focusing on a detailed description of the phenomena which is relevant to how NGOs are driving urban climate action in the small and medium-sized cities.

Case Study Selection

The cases that have been selected are based in Ghana. Within Ghana, the cities are Wa municipality in the Upper West Region and the Cape Coast Metro in the Central Region. The differences in vulnerability to climate change impacts between the two regions justified the decision for the selection (see Ghana's 3rd communication to the UNFCCC). For instance, the northern savannah ecological zone remains poorer than the other regions after years of implementing poverty reduction programs. As a result, the different vulnerability indexes offered a comprehensive view of NGOs' nuanced roles in urban (local) climate governance. Wa doubles as the regional capital of the Upper West Region, and the municipality lies in the Savannah high plains. According to Ghana's Population and Housing Census (2021), the Municipality has a population of about 200,672. The Municipality further lies in the Savannah high plains, which is gently undulating with an average height between 160m and 300m above sea level. The low-lying areas have further given rise to two main drainage systems: the Sing-Bakpong and its tributaries to the South and Billi and its tributaries to the North. The streams are seasonal and thus dry up during the long dry season, thereby reducing availailability of water for agriculture, domestic, industrial, and constructional uses. This implies the provision of dams, dugouts, and rainwater harvesting to provide adequate water to meet the domestic and agricultural needs of the increasing population in the area. The climate of the Wa Municipality is characterized by long, windy, and hot dry season followed by the short and stormy wet season. The northeastern trade winds from the Sahara Desert precipitates the cold harmattan winds between November and February which brings with it coughs, cold, and other respiratory diseases and skin diseases. The effect of climate change is becoming more manifest of late due to human activities in

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terms of bush burning, felling of trees, poor farming practices, and infrastructural activities. The rainfall pattern is erratic and punctuated by periods of long droughts and heavy downpours and floods. The most predominant means of transport is the use of motorcycles.

With its administrative capital at Cape Coast, the Cape Coast Metropolitan Area is one of the oldest districts in Ghana. According to Ghana's Population and Housing Census (2021), the Metropolis has a population of about 189,925. More so, the landscape of the Cape Coast Metropolis is generally undulating. Many of the minor streams end up in wetlands, with the largest draining into the Fosu Lagoon at Bakaano. The landscape in the northern parts of the Metropolis is however generally low-lying and is suitable for crop cultivation. The Cape Coast Metropolis experiences high temperatures throughout the year. The hottest months are February and March, just before the main rainy season, while the coolest months are June, July, and August. The variability in climate in the Metropolis is influenced more by rainfall than temperature. The Metropolis has a double maximal rainfall, with annual rainfall total between 750 and 1,000mm. The present vegetation of the Metropolis consists of shrubs of about 1.5 metres high, grasses, and a few scattered trees. The original vegetation of dense scrub, which is supported by the rainfall, has been replaced by secondary vegetation as a result of clearing for farming, charcoal burning, bush fires, and other human activities. Presently, trees are less dense in the area compared to the interior forest areas. The northern parts of the Metropolis are an exception to what has been described above. In these areas, secondary forest can be found and has survived mainly due to lower population densities and relatively little disturbance of the ecosystem. The maps of the two study areas are presented in Figures 1 and 2.

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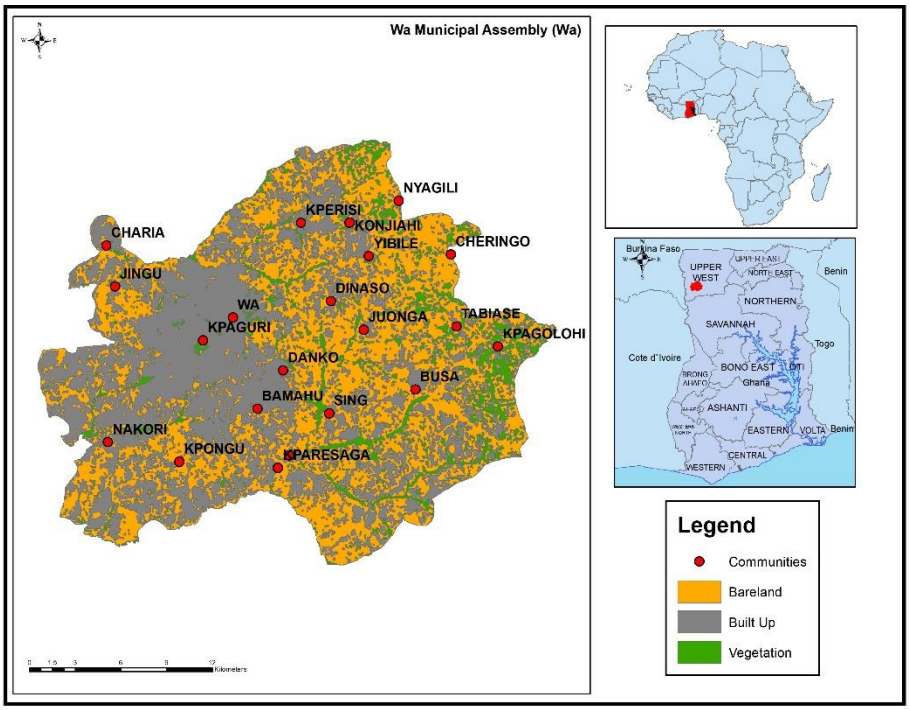

Figure 1. Map Showing the Wa Municipality

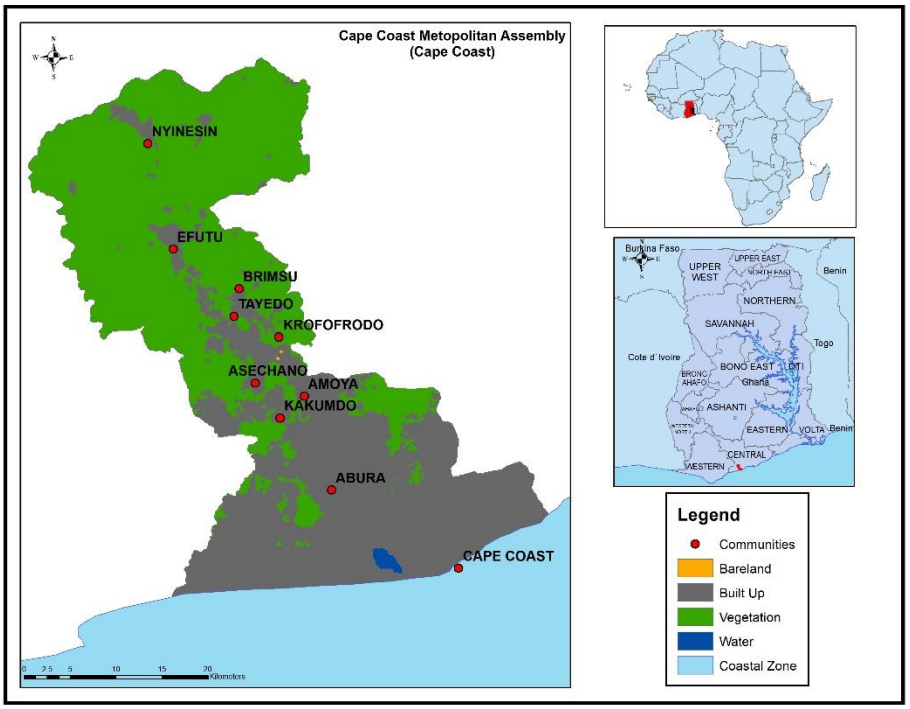

Figure 2. Map Showing the Cape Coast Metro

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Data Collection and Analysis

Data used in this study were mainly provided through semi-structured interviews. This method provided an exploratory discussion on the topic. At the organisational level, officials including the heads of the two NGOs in question were selected and interviewed. Subesequently, at the community level, this method was applied on randomly selected local residents made up of chiefs and assembly members who are the representatives of the people in the municipality. This sampling method is appropriate because each category of persons have the relevant information that was needed for this study. Interviews were conducted for each key informants and data was collected based on the knowledge of climate change impacts, climate change initiatives, and the perception of local residents on the initiatives undertaken. The selection involved using criteria on whether the persons could provide informative, in-depth, and reliable information on involvement in climate actions by their respective organisations. In the selection, the professional expert network of the author was used. Each interview lasted for at least 40 minutes. To identify any loopholes, recordings of interviews and field notes were immediately reviewed after each interview. In addition to the interviews, online written articles and documents were retrieved by the researcher. These included workshops on climate change, natural resource governance, and waste management organised by the NGOs. Major themes were identified and data was analysed by way of narrations and discussions.

2. Results

Knowledge of Climate Change Impacts

The depth of knowledge of climate change did not differ significantly among research participants from NGOs and local residents who were randomly selected for the study. Majority of the interviewees started by explaining the causes and impacts of climate change. Most of the research participants perceived climate change as the new weather conditions they are currently experiencing. Participants mentioned floods, drought, bush fires, and land degradation as some of the devastating impacts of climate change.
One of them remarked that,

> *"We don't get the rains when we expect it; the rainy and dry seasons are no longer consistent.*

Another interviewee added, *"these days, we are experiencing extreme dryness in the northern part of Ghana and it is very difficult for us to survive".*

He added that, " *it is terrible when we experience continuous rains".*

One of the fishermen from the Cape Coast Municipality also emphasized on how rising sea levels have affected the activities of fishermen in the municipality.

Climate Change Initiatives of the Center for Indigenous Knowledge and Organisational Development (CIKOD) and the Green Africa Youth Organisation (GAYO)

The Centre for Indigenous Knowledge and Organizational Development (CIKOD)

CIKOD is a Ghana-based non-profit organisation. Its objective is to transform indigenous institutions and local groups into vibrant grassroots civil society organisations that will improve rural communities' participation in their development processes. CIKOD aims to promote discussion about the role of indigenous knowledge and institutions in contemporary community development and empowerment. CIKOD has been working in many community development areas while focusing on building sustainable food systems, traditional health systems, natural resource management, and traditional women leadership in this environment. Since 2003, CIKOD has focused on strengthening chiefs and traditional women leaders in Ghana by allowing them to provide leadership at the community level to enhance community development efforts in the different disciplines listed above. In the Wa Municipality, CIKOD has been involved in various training programs aimed at strengthening the capacity of traditional leaders to provide effective leadership for their communities in natural resource management at the local level and the ability to articulate their views on poverty reduction. They collaborate with chiefs in the direction of the environment because they are the custodians of the land. For instance, they plant trees with chiefs and other government officials during festive occasions. Additionally, CIKOD engages with the local government (the Wa Municipality).

One of the interviewees stated,

> *"We advocate for the conservation of natural resources by promoting the use of appropriate indigenous knowledge adaptable to climate change".*

They also provide informal training to strengthen the capacities of traditional authorities, local government agents, grassroots civil society groups, and development facilitators to play more vital roles in the development process at the local level. This is done through workshops, seminars, and public lectures.

One of the interviewees mentioned,

> *"We use these platforms to sensitise the citizens about the impacts of climate change and what they can do to adapt".*

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Another added that,

> *"We organise training programs for the smallholder farmers in agroforestry, seed production, soil water conservation, soil fertility management, and prevention of bush fires".*

Participants also mentioned the construction of irrigation dams for farming and domestic use as an adaptation measure.

The Green Africa Youth Organisation (GAYO)

The Green Africa Youth Organization (GAYO) is a youth-led, gender-balanced advocacy group primarily concerned with environmental sustainability and community development. They work directly with local communities to reduce the vulnerability of groups at risk to climate impacts such as children, youth, and women who have a comparatively less adaptive capacity due to social and structural inequalities. In the Cape Coast Metropolis, the Sustainable Community Project was designed by GAYO to help manage household waste, especially in urban areas. Through household education on pit composting, the project seeks to eliminate inappropriate disposal of solid organic waste and provide nutritious organic food to families through organic farming. One of the interviewees mentioned that they intend to add more households in the future as the project is still in its early stages. Additionally, GAYO has worked with the Cape Coast Metro and other key stakeholders to render sustainable waste management services, which is a challenge that has diverse implications in cities and urban areas (beach cleaning exercise).

GAYO also recently launched the "campus eco-clubs initiative-University of Cape Coast Chapter," where they seek to educate and empower tertiary students to create public awareness of the need for environmental preservation and protection. Recently, GAYO and the Center for Coastal Management at the University of Cape Coast hosted a training program to raise public awareness about ocean conservation and resource management. They highlighted the importance of protecting the oceans for survival and the marine ecosystem.

Table 1. Summary of Climate Change Initiatives Undertaken by CIKOD and GAYO

Climate Change Initiatives/Programs	**CIKOD**	**GAYO**
Nature-based solutions and forest management	Manage the indiscriminate felling of trees by providing alternative livelihoods to local residents Engage in tree planting exercises	Active engagement in tree planting exercises (green Ghana Project)

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Awareness and education programmes in local communities, capacity building	organise durbars to sensitise and educate chiefs and the entire community on the need to conserve the environment	Building capacity for youth development
Waste management		Zero waste communities Dumpsite clean-up Plastic-free campus Beach cleanup with the Cape Coast Metropolitan Assembly

Local Residents' Perception of the Activities of the two NGOs Under Study

Interview participants from both the Wa Municipality and the Cape Coast Metropolis mentioned that the contribution of the NGOs cannot be over-emphasized. From the Cape Coast Municipality, the chief of the fisherfolks confirmed that there has been great improvement in terms of getting the right knowledge on when/how to build adaptive capacities as far as rising sea levels are concerned.

According to him, "most of the fisherfolks have come to terms with the impacts of climate change and they are doing everything possible to attend some of the sensitization workshops that are regularly organised in our local communities".

In the Wa Municipality, interview participants mentioned how the provision of alternative livelihoods have ensured the reduction of indiscriminate felling of trees in the past years.

One of them mentioned that *"most of the women are well-informed of how trees serve as carbon capture hence, the reason to adhere to saving them".*

3. Discussion

Interviews with research participants revealed that NGOs engage in various actions relating to climate change adaptation. Some identified initiatives included local empowerment through capacity building, climate advocacy, and waste management. For example, the capacity-building training program was evident in both cases. This is because most local communities in developing countries lack the needed capacity to adapt to the changing climate. As a result, the two NGOs under study seek to build adaptive capabilities for vulnerable people. This confirms the findings from the literature that most cities in developing countries focus on adaptation actions. It is also evident from the results that both NGOs have engaged in raising awareness of climate change because it is an essential step in adapting to climate change in local communities. This resonates with the findings of

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Musah-Surugu et al. (2019) that NGOs play lead roles in awareness creation at the local level in Ghana. Based on the findings of this study, NGOs can influence climate adaptation in small and medium-sized cities at a broader scale through collaboration and partnerships according to their capacities. This will further help in achieving resilience benefits since many developing countries prioritise development objectives, which is closely related to livelihoods. In line with the NGOs policy to address the impacts of climate change, local residents confirmed that in terms of strategies and interventions, awareness raising and sensitization on climate change is one of the adaptation measures against the impacts of climate change. The introduction of alternative livelihood strategies is also mentioned by local residents to help minimise climate change impacts in the study areas. However, the fragmented initiatives create room for minimal collaboration at the local level. According to Adu-Boateng (2015), climate change programmes at the local level are duplicated due to the diverse climate change programmes within each city. Additionally, several studies have reported similar constraints (political, institutional, attitudinal, financial or resources, communication, and awareness).

Conclusion

The analysis of NGOs role in urban climate governance in the two major small and medium-sized cities has shown that most interviewees were aware of how climate change impacts cities and metropolitan areas, and how they have developed a systematic approach to adapt to the impacts. Overall, most of the identified initiatives aimed to reduce the vulnerabilities of climate change. This is primarily because the planned measures undertaken by both NGOs focused on capacity-building programs, thereby indicating the importance of waste and natural resource management. A further potential implication of this finding indicates that if more small and medium-sized cities worldwide make progress on their adaptation processes over time, urban adaptation will increase. Although urban climate governance in small and medium-sized cities is still emerging, informal institutions through the engagement of chiefs can enhance collaboration at the local level. Building relevant partnerships among state and non-state actors could further improve local communities' adaptive capacity, especially in the global south. In addition, an inclusive approach could increase an integrated and coordinated climate action in local communities, particularly in small and intermediate cities with fewer than 100,000 inhabitants who often have very limited resources to identify local climate risks and build appropriate adaptation capacities. Climate change adaptation programs, which are often initiated by NGOs, are also steered by local residents outside of administrative systems.

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Conflicts of Interests:

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