



COMPREHENSIVE ACTION FOR CLIMATE CHANGE INITIATIVE

ANAPRI CACCI REPORT #6

***Ghana: Capacity Needs Assessment Report
for the Implementation of Nationally Determined
Contribution (NDC) and National Adaptation Plan (NAP)***

*Simon Bawakyillenuo, Andrew Agyei-Holmes, Richard Kwabi Ayisi, Richard
Akuoko, Philip Aniah and Ebenezer Offei-Ansah*

June 2024

Supported by



MICHIGAN STATE
UNIVERSITY

About ANAPRI CACCI Reports

ANAPRI CACCI Reports are publications stemming from implementation of the Comprehensive Action for Climate Change Initiative (CACCI) pilot project in Zambia and Ghana. CACCI is committed to expediting the implementation of Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs) by addressing the need for data and analytics and bolstering institutional and coordination capacities. In Africa, CACCI collaborates closely with the African Union Commission, the African Network of Agricultural Policy Research Institutes (ANAPRI), AKADEMIYA2063, and climate stakeholders in selected countries. This partnership aims to inform climate planning and enhance capacities for evidence-based policymaking, advancing progress toward climate-related objectives.

ANAPRI's involvement in the CACCI contributes to the provision of technical expertise, strengthening national, regional, and continental capacities for NDCs and NAPs implementation. In close collaboration with its two-member centers, the Indaba Agricultural Policy Research Institute (IAPRI) in Zambia and the Institute of Statistical Social and Economic Research (ISSER) in Ghana, ANAPRI, through CACCI, supported the Climate Change Technical Working Groups within respective countries and the ministries responsible for coordinating these working groups by offering data and analytical support.

Jointly published with ANAPRI member centers (IAPRI and ISSER) and the Country Climate Change Technical Working Group, the CACCI reports catalogue the key deliverables under the project. The data shared through these reports aim to provide evidence-based insights to practitioners and policymakers spearheading climate action in countries where CACCI is being implemented. CACCI is generously supported by the U.S. Agency for International Development (USAID) through the Feed the Future Innovation Lab for Food Security Policy Research, Capacity, and Influence (PRCI), led by Michigan State University (MSU). It is important to note that the views expressed in this publication do not necessarily reflect those of the funder but represent the perspectives of the authors.

These reports were generated in 2023 and have been in use in-country since that time. All information about policies, programs, and processes are up-to-date as of June, 2023.

About ANAPRI



The African Network of Agricultural Policy Research Institutes (ANAPRI) is a network that brings together various agricultural policy research institutes in Africa. It serves as a platform for collaboration, knowledge sharing, and collective action among its member institutes. ANAPRI works towards promoting evidence-based policy formulation and implementation to enhance agricultural development and food security across the African continent. Through research, policy analysis, capacity building, and advocacy, ANAPRI aims to contribute to sustainable agricultural and rural development in Africa.

About IAPRI



Established in 2011, the Indaba Agricultural Policy Research Institute (IAPRI) is Zambia's first indigenous policy research institute dedicated to policy analysis of the agricultural and environmental sectors. IAPRI is a non-profit company limited by guarantee and collaboratively works with public and private stakeholders. The institute's vision is "to be the Centre of Excellence for Agricultural Policy Research and Outreach in Zambia". IAPRI exists to carry out agricultural policy research and outreach activities, serving the agricultural sector in Zambia to achieve sustainable pro-poor agricultural development. IAPRI's mandate is to utilize empirical evidence to advise and guide the Government of Zambia and other stakeholders on agricultural investments and policies.

About ISSER



ISSER was established in 1962 as the Institute of Statistics to provide a programme of teaching and research in statistics. In 1969, it was reorganized and renamed the Institute of Statistical, Social, and Economic Research with an expanded mandate to conduct research in the social sciences to generate solutions for national development. ISSER currently serves as the research wing under the College of Humanities, University of Ghana, and engages in several policy-relevant research whose findings are intended to help policymakers on the best policy decisions to make for national development.

Suggested Citation: Simon Bawakyillenuo, Andrew Agyei-Holmes, Richard Kwabi Ayisi, Richard Akuoko, Philip Aniah and Ebenezer Offei-Ansah, 2024. *Ghana: Capacity Needs Assessment Report for the Implementation of Nationally Determined Contribution (NDC) and National Adaptation Plan (NAP)*. ANAPRI CACCI Report # 6, Accra, Ghana.

Authors: Simon Bawakyillenuo¹, Andrew Agyei-Holmes², Richard Kwabi Ayisi³, Richard Akuoko⁴, Philip Aniah⁵, Ebenezer Offei-Ansah⁶

¹ Associate Professor, Institute of Statistical, Social and Economic Research, University of Ghana

² Senior Research Fellow, Institute of Statistical, Social and Economic Research, University of Ghana

³ Senior Lecturer, Economics Department, University of Ghana

⁴ Richard Akuoko, Research Assistant, Institute of Statistical, Social and Economic Research, University of Ghana

⁵ Lecturer, University for Development Studies, Tamale, Ghana

⁶ Research Consultant, World Bank Country Office, Ghana

Table of Contents

List of Figures.....	v
Acknowledgment.....	vi
Acronyms	vii
1.0 Introduction	1
2.0 Research Design	1
2.1 Selection of MMDAs for Empirical Study	2
2.2 <i>Framework for the Data Collection</i>	3
3.0 Climate Governance and Institutional Context in Ghana	3
4.0 National Measurement, Reporting, and Verification (MRV) System	8
5.0. Source of Funds for Implementing the GH_NDCs.	9
6.0 Key Findings.....	9
7.0 Recommendations	13
References	14

List of Figures

Figure 1: Map of Selected MMDAs for Empirical Study	2
Figure 2: Empirical Data Collection Framework	3
Figure 3: Climate change management structure	4
Figure 4: Institutional Arrangement of NCCAS.....	5
Figure 5: Institutional arrangement in the implementation of the UNFCCC in Ghana.....	6
Figure 6: Ghana’s Institutional Arrangement for Implementing NAP	7
Figure 7: Institutional Arrangement for Implementing the GH_NDCs.....	8
Figure 8: Elements of the G-CARP system	8
Figure 9: Overall ranking of organizational capacity indicators at municipal level	10
Figure 10: Overall ranking of government support indicators at municipal level	11
Figure 11: Overall ranking of structural capacity indicators at municipal level	12
Figure 12: Overall ranking of collaboration/coordination capacity indicators at municipal level.....	13

Acknowledgments

The Africa Network of Agricultural Policy Research Institutes (ANAPRI) is a consortium of national agricultural and food systems policy research centers in Africa. Our primary goal is to generate high-quality evidence that supports policymaking across the continent. We are committed to developing the capacity of national agricultural research institutes and fostering dynamic collaborations. Through effective outreach, we provide balanced and non-partisan advice to stakeholders at the national, regional, and continental levels.

We would like to express our gratitude to the African Union Commission for initiating this program and to the United States Agency for International Development (USAID) for providing financial support through the Innovation Lab for Food Security Policy, Research, Capacity, and Influence (PRCI). We would also like to acknowledge the technical collaboration from the PRCI team at Michigan State University during the implementation of the Comprehensive Action for Climate Change Initiative (CACCI).

Additionally, we appreciate the support of the Zambian government, specifically the Ministry of Green Economy and Environment, and the Climate Change Technical Working Group members. We would also like to thank the Ghanaian Government, Policy Link, and other members of the CACCI Technical Working Group for partnering with us to implement the CACCI pilot in Ghana. This work would not have been possible without the hard work of our member research centers, IAPRI and ISSER in Zambia and Ghana, respectively. Lastly, we extend our gratitude to Akademiya 2063 for being a co-implementer of CACCI Africa in Rwanda and Senegal.

Please note that any views expressed or errors remaining are solely the responsibility of the authors. For comments and questions, please contact:

The Executive Director,

Africa Network of Agricultural Policy Research Institutes,
C/O Indaba Agricultural Policy Research Institute, 12 Serval Road, Kabulonga, Lusaka,
Zambia.

Telephone: +260 211 261194; Email: info@renapri.org

Acronyms

CACCI	Comprehensive Africa Climate Change Initiative
CSOs	Civil Society Organizations
DAEC	The District Assembly Environmental Committee
DCE	District Chief Executive
EPA	Environmental Protection Agency
FGDs	Focus Group Discussions
G-CARP	Ghana Climate Ambitious Reporting Programme
GEF	Global Environment Facility
GEF-UNDP	Global Environment Facility-United Nations Development Programme
IGF	Internal Generated Funds
IPCC	Intergovernmental Panel on Climate Change
MDAs	Ministries, Departments, and Agencies
MEST	Ministry of Science, Environment, and Technology
MESTI	Ministry of Environment, Science, Technology, and Innovation
MMDAs	Metropolitan, Municipal, and District Assemblies
MoFA	Ministry of Food and Agriculture
MPCU	Municipal Planning and Coordinating Unit
NADMO	National Disaster Management Organization
NAPS	National Adaptation Plans
NCCAS	National Climate Change Adaptation Strategy
NCCC	National Climate Change Committee (NCCC)
NCCP	National Climate Change Policy
NDCs	Nationally Determined Contributions
NDPC	National Development Planning Commission
NGOs	Non-Governmental Organizations
SSA	Sub-Saharan Africa
SWG	Steering Working Group
UNEP	The United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

1.0 Introduction

Climate change is a phenomenon across the globe that has been compelling based on its devastating effects. Nachmany *et al.*, (2019) show that about 170 countries have rated climate change as an important public policy subject, depicting a shared concern across the globe. While these variabilities affect the world at large, their impact on the global south remains dire. In retrospect, developing countries, particularly in Sub-Saharan Africa (SSA) are among the most vulnerable to the effects of climate change and hence, may not be able to meet the Sustainable Development Goals set by the United Nations (IPCC, 2021).

Ghana, like most countries in the SSA, has been buffeted by the effects of climate change. The World Bank Group climate risk profile on Ghana in 2021 reveals that the average annual mean temperature, average number of hot days, and the number of hot nights per year in Ghana have significantly increased (World Bank Group, 2021). To address the issue of climate change, the Government of Ghana joined the Paris Climate Accord in 2015 and ratified the agreement in 2016 at the United Nations Headquarters in New York (World Bank Group, 2022).

As part of its aims, the Comprehensive Africa Climate Change Initiative (CACCI) is desirous of understanding Ghana's country-level coordination capacity for climate change. This forms the basis of this capacity gaps study in Ghana which is here reported.

2.0 Research Design

This study sought to identify and assess the overall capacity issues of climate change governance in Ghana, particularly at the local level. To achieve this, four approaches were deployed. First, a desk review of national documents on the coordination architectures under which the implementation of the GH-NDCs and NAPs took place. The second approach involved review processes, independently and in a workshop setting by the CACCI-Ghana Steering Working Group (SWG). The third approach comprised Focus Group Discussions (FGDs) with the central administration personnel and heads of departments at the Metropolitan, Municipal, and District Assemblies (MMDAs) within the major ecological zones (Northern, Transition, and Coastal) of the country. Upon gathering the empirical data from the MMDAs stakeholders, a qualitative content analysis was used as the fourth approach after which the outcome was merged with the desk reviewed

output. The complete draft document was reviewed by the SWG, and emerging comments were appropriately addressed.

2.1 Selection of MMDAs for Empirical Study

Focused Group Discussions were centered on selected MMDAs in all the four ecological zones of Ghana, because of resource constraints. Thus, in the Northern zone, Tamale Metropolitan, Bolgatanga Municipality, and Wa West District were selected. In the Transition and Forest Zones, Kumasi Metropolitan, Techiman Municipality, and Tuobodom District were also selected. In the coastal zone, Cape Coast Metropolitan, Ellembelle Municipality, Keta Municipality, Awutu-Senya Municipality, Upper Denkyira East Municipality, and Shama District were selected (Figure 1). In summary, a total of 12 MMDAs were selected, although interviews could not take place in Kumasi Metropolis because efforts to interview them proved futile.

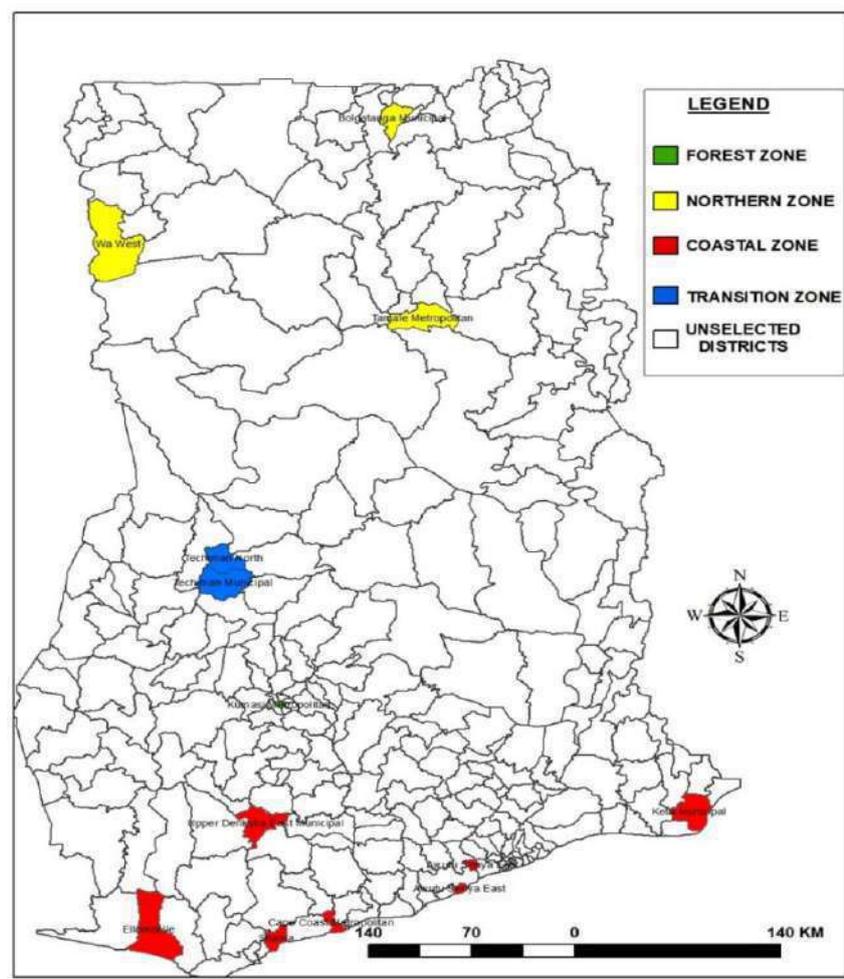


Figure 1: Map of Selected MMDAs for Empirical Study.

Source: ISSER CACCI Project, 2023

2.2 Framework for the Data Collection

Figure 2 displays the conceptualised framework to help elicit the empirical data.

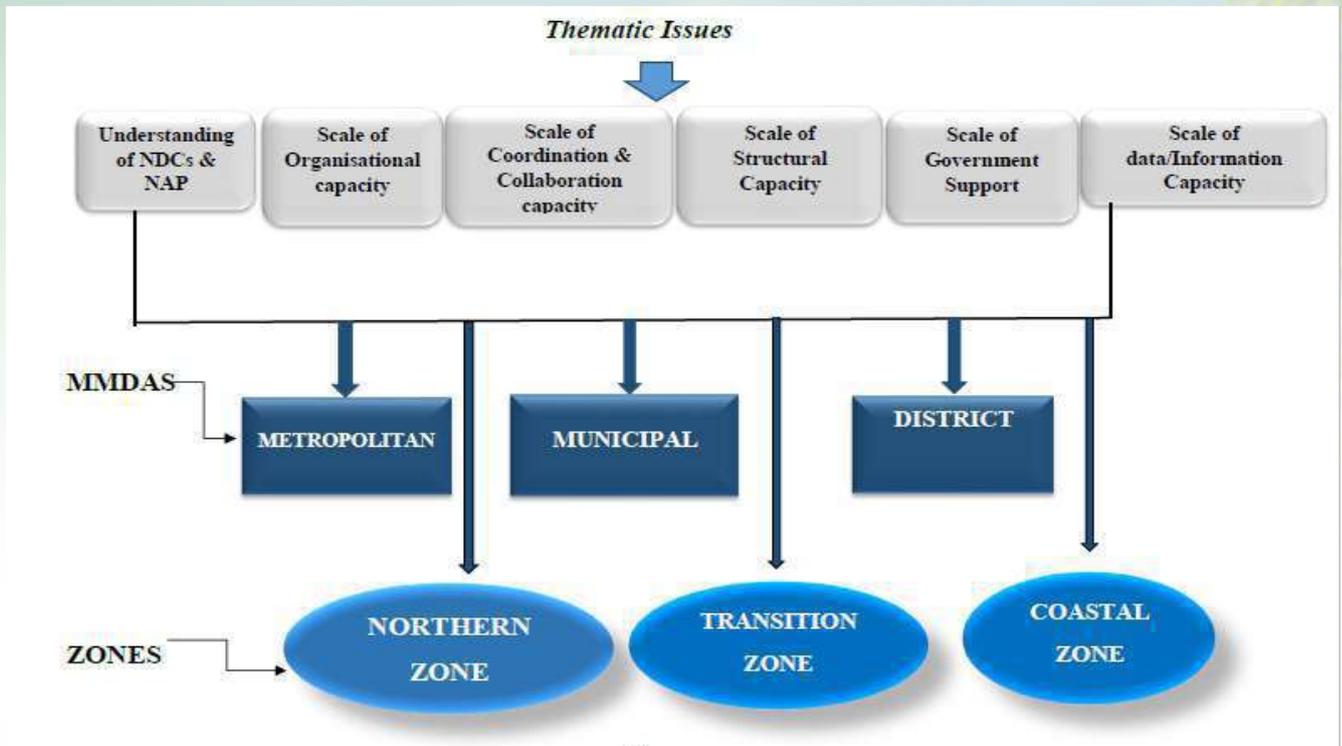


Figure 2: Empirical Data Collection Framework

Source: Authors' illustration

3.0 Climate Governance and Institutional Context in Ghana

Ghana's commitment to the subject of sustainability, the environment, and climate change has been crystallizing for years. In retrospect, Ghana has been a signatory to several International Treaties aimed at safeguarding the environment and mitigating or adapting to climate change. The Government of Ghana made commitments to three Rio conventions to stabilize greenhouse gases and environmental and ecosystem sustainability. Between 1996 and 2005, Ghana made significant strides in meeting some commitments under the UNFCCC, albeit the country had capacity constraints to fully fulfill its obligations. The Institutional arrangement is depicted in Figure 3.

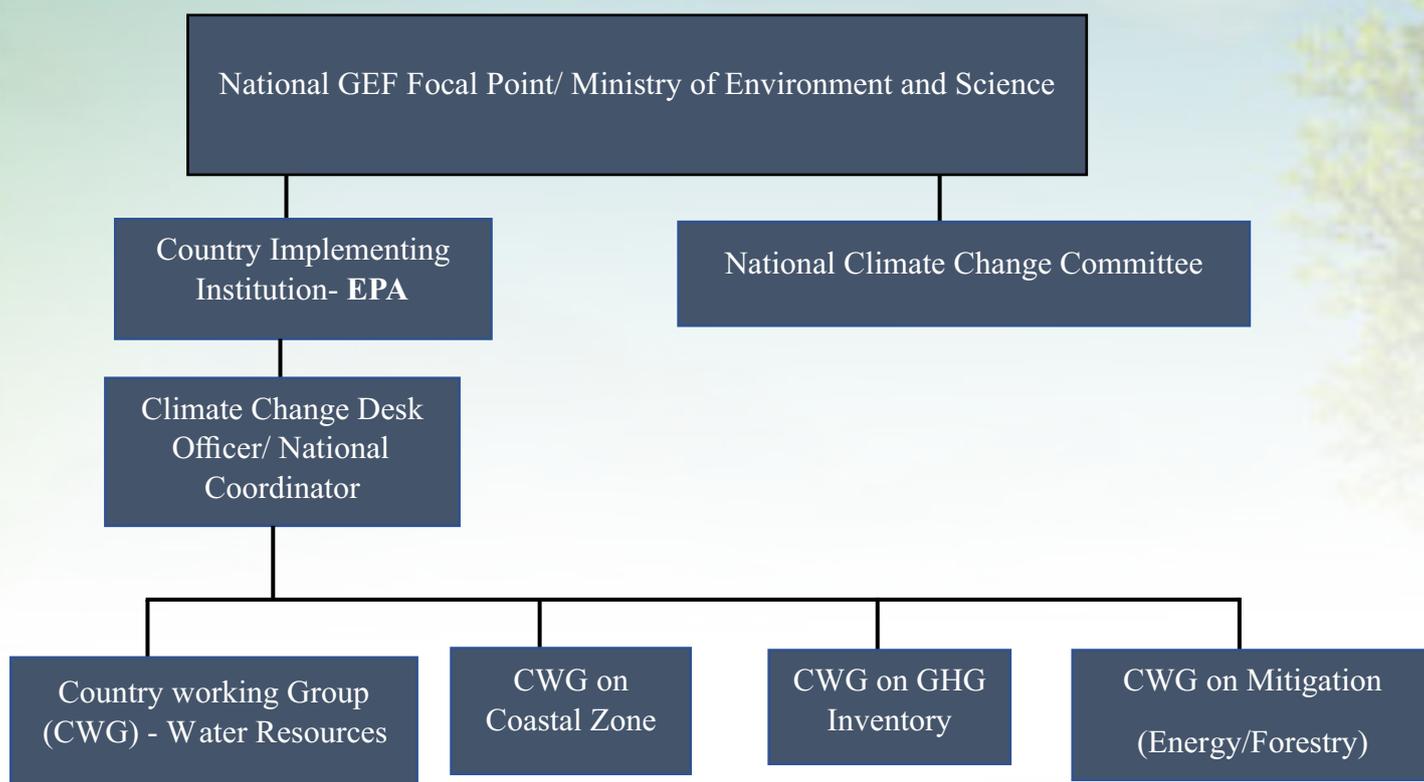


Figure 3: Climate change management structure

Source: Ghana National Capacity Self-Assessment Report, 2005

a. The National Climate Change Adaptation Strategy (NCCAS - 2012)

To depart from the reactionary form of response to climate change, the Government of Ghana developed the National Climate Change Adaptation Strategy in 2012 as a proactive approach to climate change issues (Figure 4). The NCCAS prioritized decentralization to ensure the successful implementation of its objectives. The institutional arrangements constituted the National, Sub-national, Regional, District, Community, and Civil Society Organizations (UNEP/UNDP, 2012).

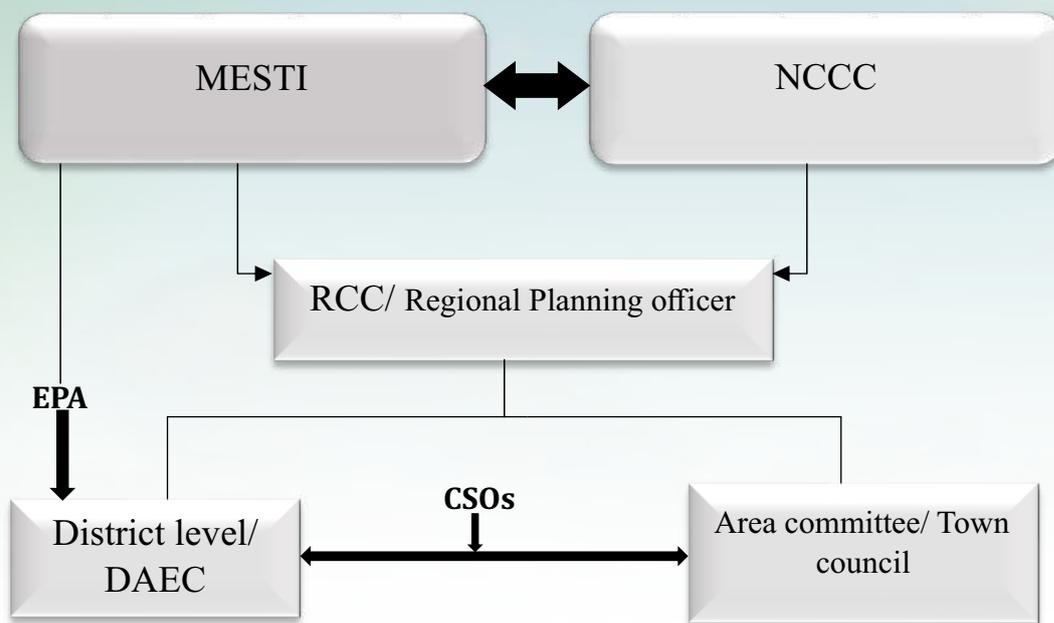


Figure 4: Institutional Arrangement of NCCAS

Source: Authors' illustration

b. National Climate Change Policy (NCCP) 2013 – 2020

Continuing its obligation under the UNFCCC, the Government of Ghana formulated the National Climate Change Policy (NCCP) as an integrated response to climate change. The three objectives of the NCCP comprise achieving effective adaptation, social development, and mitigation. The seven pillars of the NCCP were:

- Governance and coordination
- Capacity building
- Science, technology, and innovation
- Finance
- International corporation
- Information, communication, and education
- Monitoring and reporting

MESTI is the government's authority on the formulation of policies with an overall supervisory role in the implementation of agreements and its related protocol activities (Figure 5). The MESTI coordinates with a multi-sectoral body, the National Climate

Change Commission (NCCC). The NCCC facilitates the mainstreaming of policies set by MESTI to local governments (Regional, Municipals, Districts, and Communities), line ministries (MDAs), Research Institutions, Civil Societies, and the Private sector. The Ministry of Finance (MoF) is the focal point for the mobilization of funds for climate change (Clean Development Mechanism and Green Climate Fund) and as a member of the National Development Planning Committee, the MoF has a duty of infusing climate change into the National development plans. The Environment Protection Agency (EPA) is the country’s technical body for coordinating with other sector ministries, agencies, departments, municipalities, districts, and communities, for the implementation of climate programs. The Ministry of Local Government, Decentralization, and Rural Development is responsible for the spatial planning across districts, municipalities, and communities on climate resiliency.

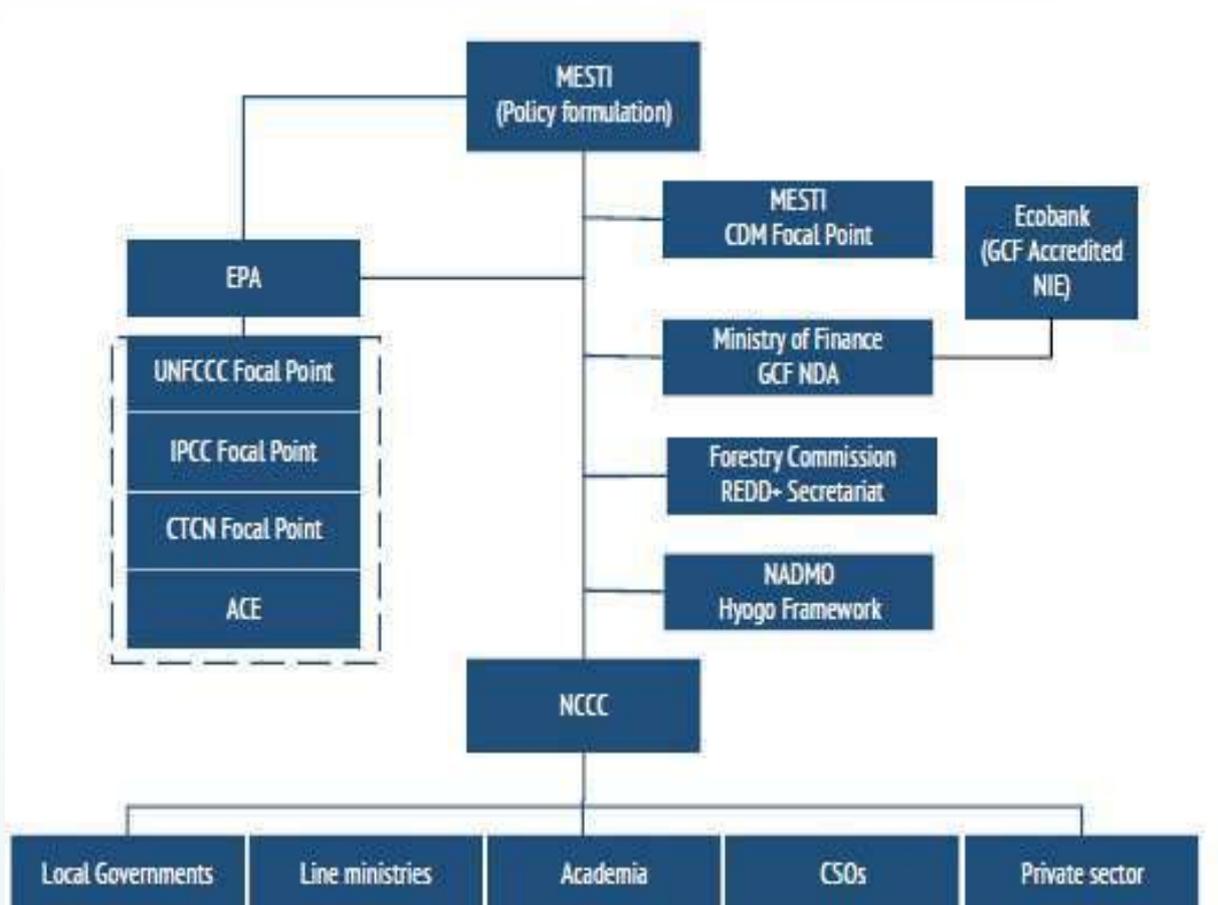


Figure 5: Institutional arrangement in the implementation of the UNFCCC in Ghana

Source: EPA, 2020.

c. Ghana National Adaptation Plan (GH-NAP)

The NAP works by firstly, fostering coordination among sector Ministries, and also between the government and other development partners. The institutional framework for the NAP includes the National Climate Change Committee and MESTI, EPA, NDA, MDAs/MMDAs, Development Partners, CSOs, Academia, Private Sector, etc. In operation, the MESTI has supervisory responsibility over the NAP process. Thus, the MESTI guides the Steering Committee responsible for the NAPs. Figure 6 depicts the institutional framework for implementing NAP projects in Ghana.

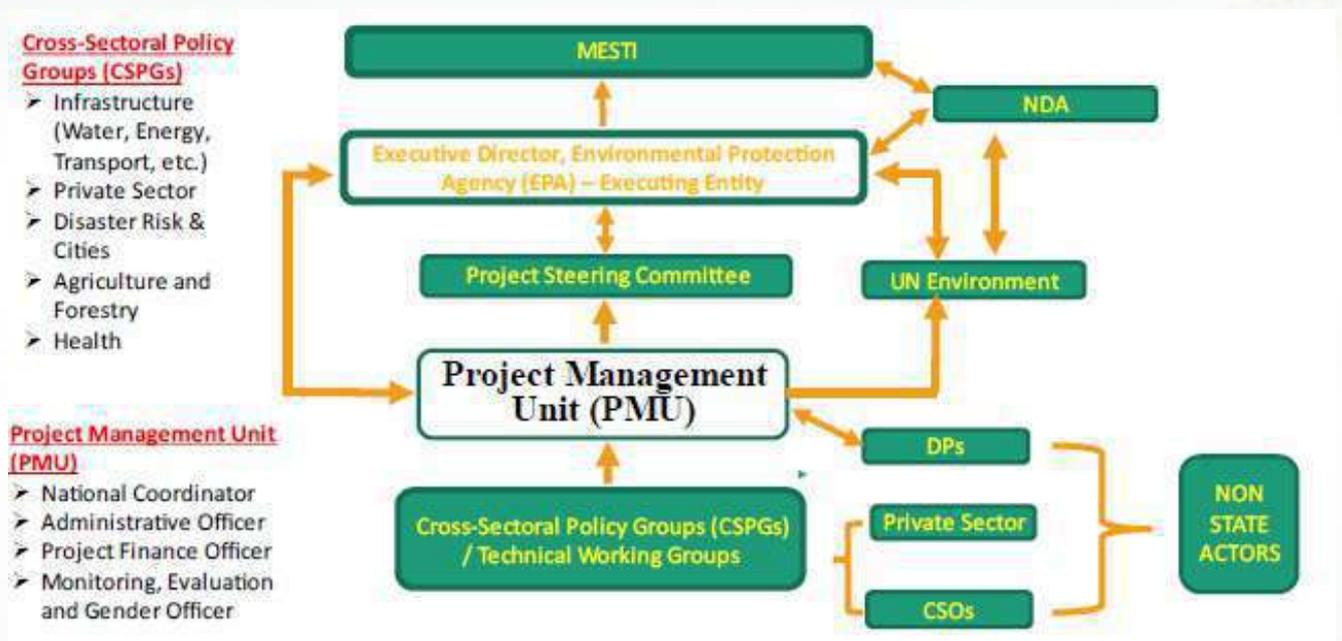


Figure 6: Ghana's Institutional Arrangement for Implementing NAP

Source: EPA & MESTI, 2021

d. Ghana Nationally Determined Contributions (GH-NDCs) (2020-2030)

Ghana updated its 2015 Nationally Determined Contributions (GH-NDC) which comprises 19 policy actions in 11 key areas (MESTI, 2021). The 19 policy actions metamorphose into 13 adaptation and 34 mitigation programs (Figure 7).

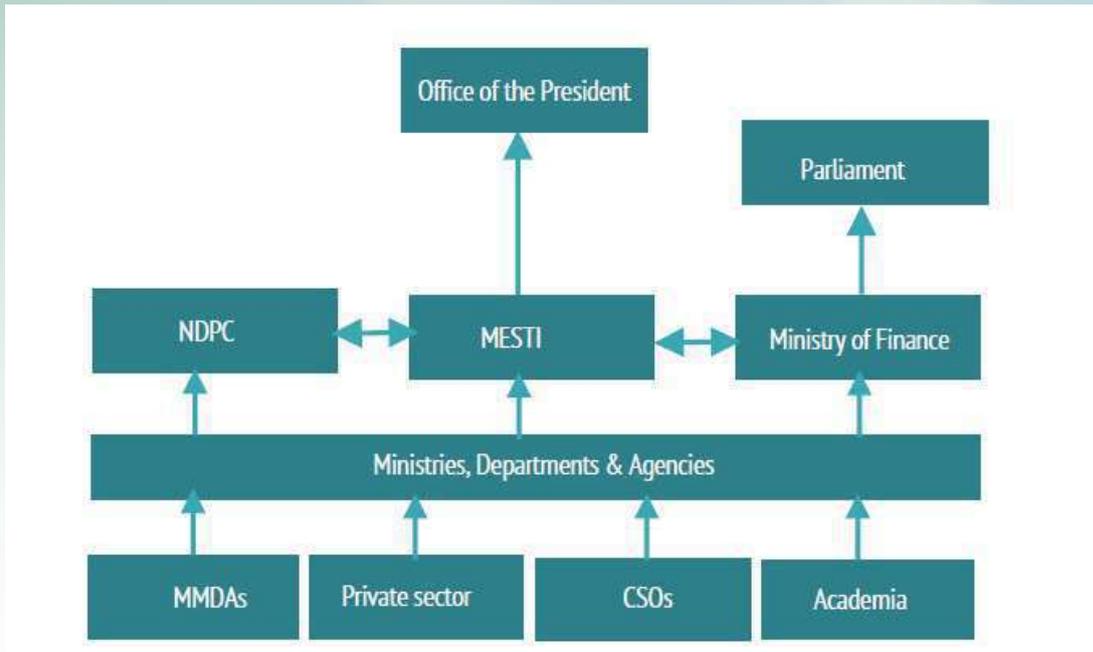


Figure 7: Institutional Arrangement for Implementing the GH_NDCs.

Source: MESTI, 2019

4.0 National Measurement, Reporting, and Verification (MRV) System

Ghana established the Ghana Climate Ambitious Reporting Program (G-CARP) in 2013 (Figure 8). aimed to help in the mobilization of climate data that would feed into the preparation of domestic and international reports.

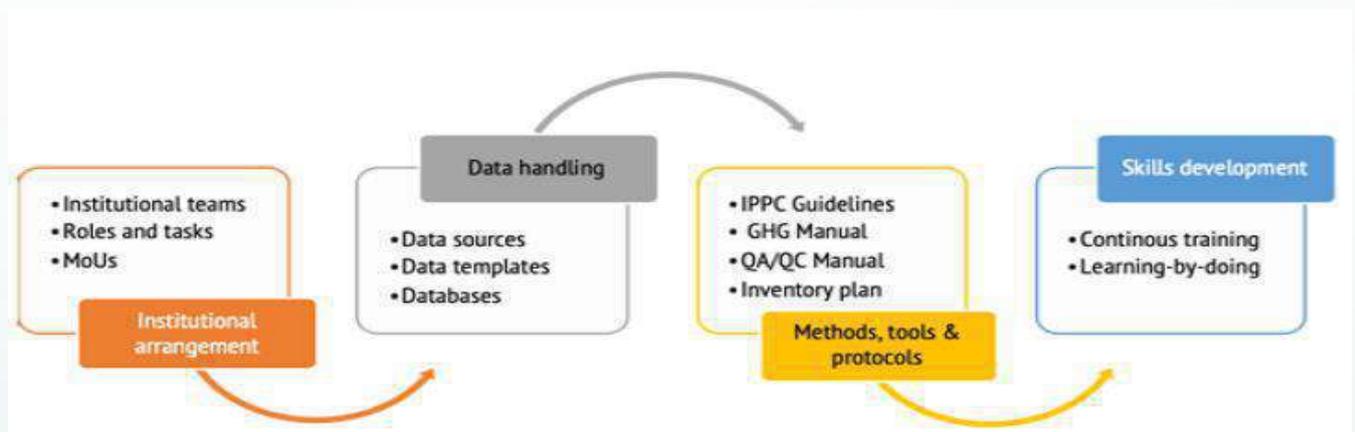


Figure 8: Elements of the G-CARP system

Source: MESTI, 2019

5.0. Source of Funds for Implementing the GH_NDCs.

It is estimated that Ghana would require about US\$ 22.6 billion to realize its GH-NDCs plans (2020-2030). Of this amount, 72% is expected to be funded by international donors while 28% will be raised domestically (MESTI, 2019). The government of Ghana has mostly not been able to fulfill its part of climate financing (World Bank Group, 2022). The challenge of domestic climate financing could be due to budget constraints, and the lack of active participation of both the private sector and financial institutions in climate-related programs (MESTI, 2019).

6.0 Key Findings

It is significant to note that there has been improvement in Ghana's approach to implementing climate policies. Over the years, new institutions have been included, and other existing MDAs mandates have been extended to include climate change. This reflects Ghana's determination to fulfill its climate ambitions. Nonetheless, critical gaps still existed which needed to be decisively addressed for substantial progress to be attained. Consequent upon the review of the various national documents and FGDs conducted, some identified gaps are listed below. During FGDs, overall ranking of capacity indicators at municipal level was done by discussants using a scale of 1-5 with the weakest score as 1 and the strongest as 5.

6.1 Weak participation of Local government in climate change governance : the country's climate policy is centered at the national level. Although Ghana has decentralized its climate change adaptation and mitigation governance, there's not much involvement of regional, municipal/district, or community authorities especially, at the formulation phase of climate policies.

6.2 Limited Institutional capacity profile at the Regional and Municipal level: As detailed in the Third and Fourth National Communication reports to the UNFCCC. The two reports highlighted the inability of the country to track capacity and technical assistance properly and actively at the regional and local levels. Figure 9 shows the overall organizational capacity ranking at Municipal level.

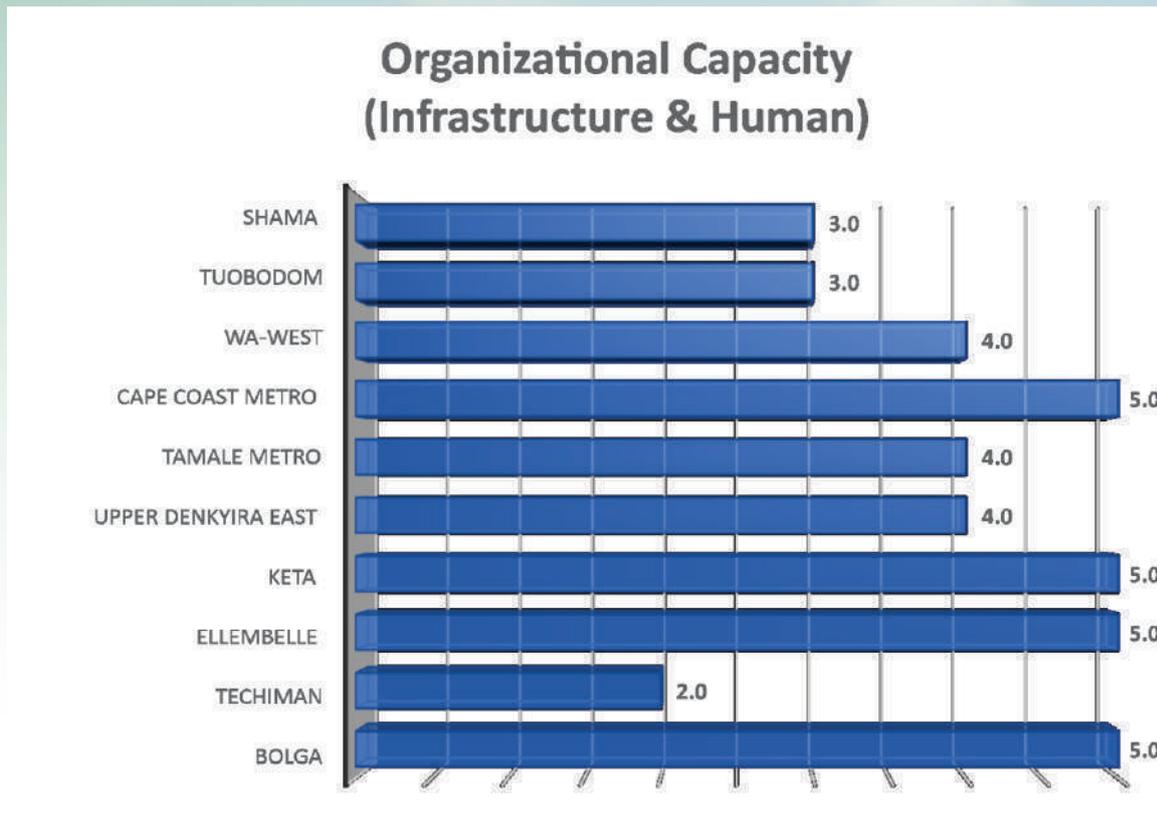


Figure 9: Overall ranking of organizational capacity indicators at municipal level

Source: Ghana CACCI Capacity Gaps Study, 2023

6.3 Limited Government support to the MDAs & MMDAs: Although Government is committed to achieving its climate ambitions, the support to MDAs and MMDAs is unimpressive. Findings from both desk review and empirical study strongly underscore this under-funding or non-funding situation. It emerged that dedicated budget lines are not established for climate change activities. According to Figure 10, Most MMDAs at Municipal levels rated government support poorly.

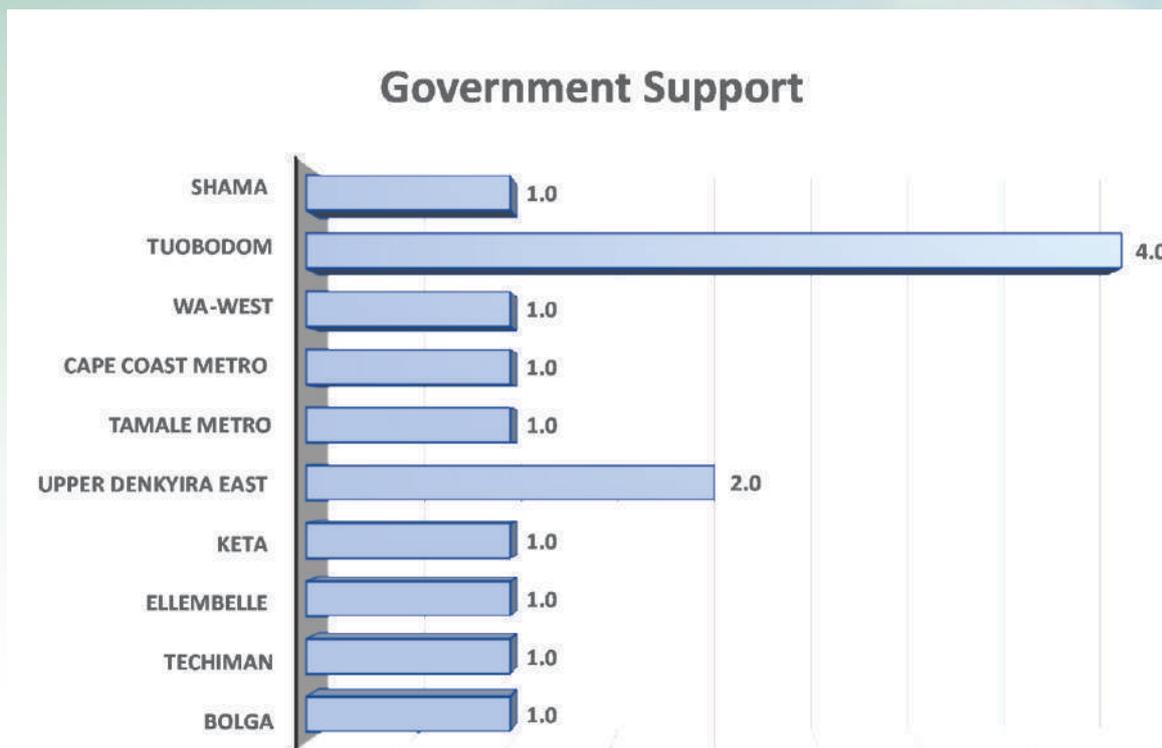


Figure 10: Overall ranking of government support indicators at municipal level

Source: Ghana CACCI Capacity Gaps Study, 2023

6.4 Undefined role of non-state actors in climate governance: The role of non-state actors such as civil society organizations, and independent research bodies, in climate governance are almost non-existent in Ghana.

6.5 Weak integration of Climate responsibilities in the existing framework: Sub-national institutions, agencies, or committees managing climate change at the local level are existing institutions whose mandates have only been extended to cover climate change. It is important not to leave climate-related issues in the hands of people who do not have the needed expertise. Figure 11 presents the overall ranking of structural capacity indicators at Municipal level. The study revealed that the heads of the various departments at the MMDAs have little to no knowledge on the Ghana Nationally Determined Contributions (GH-NDCs) and the National Adaptation Plans (NAPs).

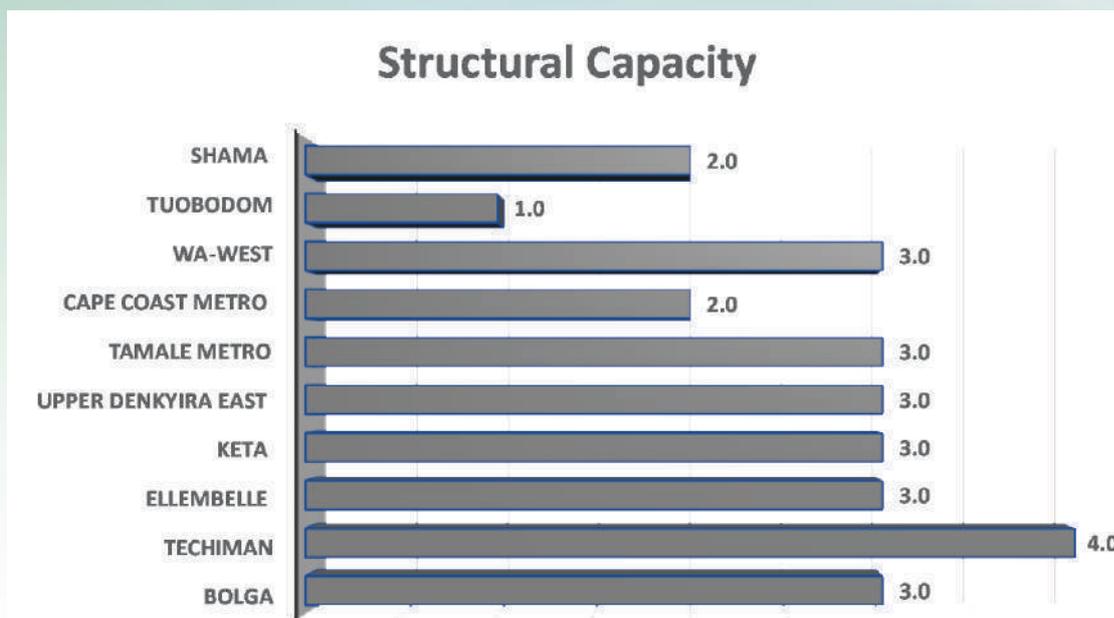


Figure 11: Overall ranking of structural capacity indicators at municipal level

Source: Ghana CACCI Capacity Gaps Study, 2023

6.6 Weak Coordination and Collaboration: There's a top-down relationship between MMDAs and the top climate national institutions such as MESTI, NCCC, NDPC, and EPA in the various national policy frameworks, while coordination between MMDAs and MDAs is not at its best and MMDAs are regarded as passive recipients of government policies. While Figure 12 shows the ranking of collaboration/coordination at the municipal level, same cannot be said between the MMDAs and the national institutions.

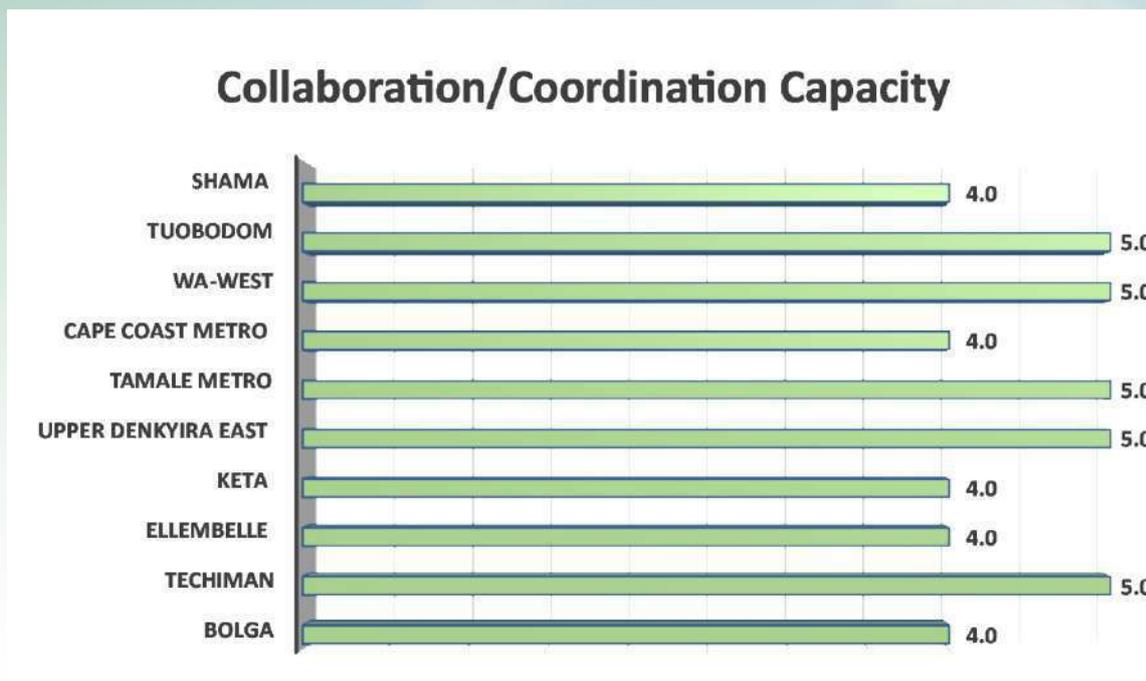


Figure 12: Overall ranking of collaboration/coordination capacity indicators at municipal level

Source: Ghana CACCI Capacity Gaps Study, 2023

7.0 Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. There is the need to establish climate change unit at the MMDAs which should be backed by law.
2. There is also the need for enhanced collaboration among national level agencies and MMDAs in climate change activities.
3. It is recommended that the Ghanaian government takes necessary steps to integrate climate change considerations into budgetary planning and resource allocation
4. There is the need for establishment of a National Climate Change Development Fund/ climate change levy to finance climate change activities.
5. There is the need for a broader sensitisation on the GH-NDCs and NAPs and a designated officer at the local government service or the Ministry of Local Government, and the Ministry of Finance dedicates a separate budget for MMDAs for climate change actions.

References

- IPCC, (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Chau, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In press, doi: <https://dx.doi.org/10.1017/9781009157896>
- MESTI (2019). National Measurement, Reporting and Verification (MRV) System Assessment Report.
- MESTI (2019). Multi-sectoral implementation plan for Ghana's Nationally Determined Contributions to the Paris Climate Agreement Report.
- MESTI. (2021). Ghana: Updated Nationally Determined Contribution under the Paris Agreement (2020 – 2030) Environmental Protection Agency, Ministry of Environment, Science, Technology and Innovation, Accra.
- Nachmany, M., Byrnes, R., & Surminski, S. (2019). National laws and policies on climate change adaptation: a global review. Policy Publication, Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London.
- UNEP/UNDP (2012). National Climate Adaptation Strategy. Accessed at https://www.adaptation-undp.org/sites/default/files/downloads/ghana_national_climate_change_adaptation_strategy_nccas.pdf
- World Bank Group (2021). Climate Risk Profile: Ghana.
- World Bank Group. (2022). Ghana: Country, climate and development report (October 2022). <https://reliefweb.int/report/ghana/ghana-country-climate-and-development-report-october-2022>

Africa Network of Agricultural Policy Research Institutes (ANAPRI) is a collaborative network comprising research institutions across Africa dedicated to advancing evidence-based agricultural and food systems policy. With centers spanning 15 countries and totalling 16 in number, ANAPRI conducts rigorous research and analysis to tackle critical challenges in agricultural development, including market dynamics, trade policies, and sustainable practices. By promoting knowledge exchange and collaboration among its members, ANAPRI generates valuable insights to guide policy decisions at national, regional, and continental levels.

Our centres



Contact us

 info@renapri.org
 www.renapri.org
 [ANAPRI_info](https://twitter.com/ANAPRI_info)

  [Africa Network of Agricultural Policy Research Institutes](#)