COMPREHENSIVE ACTION FOR CLIMATE CHANGE INITIATIVE

ANAPRI CACCI REPORT #2

Ghana: A Concise Country Profile

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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 outre ach 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.

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Ghana: A Concise Country Profile Report

ANAPRI/ISSER and Ghana CACCI Technical team

Country Overview

Environmental changes including erratic rainfall, droughts, warmer temperatures, and land degradation undermine efforts towards achieving sustainable development. Ghana is vulnerable to climate change because the economy largely depends on agriculture. Ghana's agriculture vulnerability to climate change is primarily driven by over-reliance on rain-fed agriculture, limited financial resources, infrastructure, and paucity of climate information. Ghana has implemented various adaptation and mitigation measures to address the impacts of climate change. These include promoting renewable energy, sustainable agriculture, afforestation, climate-resilient infrastructure, and climate-smart policies across different sectors.

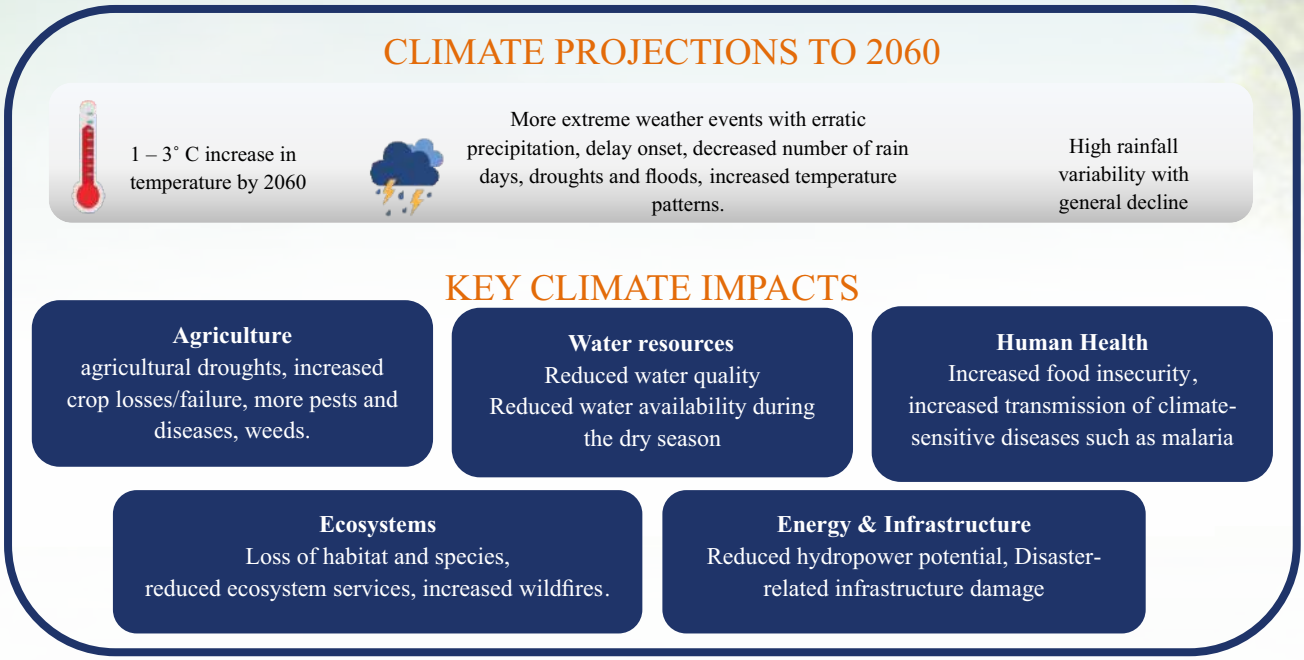
NDC Snapshot	Not available	Draft	Finalized
Frameworks			
Results Framework	☑	☐	☐
M&E framework	☐	☑	☐
MRV System	☐	☐	☑
Implementation and Coordination			
Long-term Implementation Strategy	☑	☐	☐
Climate Change Action Plan	☐	☐	☑
National CC Steering Committee (NCCSC)	☐	☐	☑

NCCSC Lead	Ministry of Environment, Science, Technology, and Innovation (MESTI)
NAP	Ghana's National Adaptation Plan Framework, National Climate Change Adaptation Strategy
NDC	Updated version of 2020

The country has also taken part in international climate agreements including the Paris Agreement, to enhance its climate action. This has led to the implementation of the NDCs and NAPs. The NDCs specify Ghana's contribution to the global fight against climate change to the UNFCCC. It specifically outlines Ghana's climate change ambitions, adaptation, and mitigation policies. While Ghana has developed a comprehensive set of policies and strategies to address climate change, the effectiveness and strategies of these policies are not yet fully known. The lack of an effective results framework for monitoring and evaluation presents a significant challenge to Ghana's ability to effectively implement its climate change ambitions, adaptation, and mitigation policies.

CLIMATE RISK

Ghana faces multiple climate risks, including increased temperature, changing rainfall patterns, sea-level rise, coastal erosion, and water scarcity. These risks impact agriculture, water resources, coastal communities, biodiversity, and public health. Droughts, floods, and heatwaves pose threats to food security, water availability, infrastructure, and human well-being. Adaptation measures, such as climate-resilient agriculture, sustainable water management, and coastal protection, are essential to address these risks and build resilience in Ghana's vulnerable sectors and communities.



GHANA'S NDCs AT A GLANCE

Commitment on CO_2 emissions	Conditional Commitment Reduce emission by 43% from the BAU of 73.3MtCO_2e • 44.3 ktCO_2e by 2025 • 41.7 ktCO_2e by 2030 Unconditional Commitment Reduce emission by 17% from the BAU of 73.3MtCO_2e • 52.5 ktCO_2e by 2025 • 60.7 ktCO_2e by 2030
Baseline-2016	42.2 ktCO_2e
Target year	2030
First submitted to UNCCC	2015
Last revision and submission to UNCCC	2020

Institutional Framework for Implementation

The Ministry of Environment, Science, Technology, and Innovation (MESTI) is responsible for overall coordination and implementation of the NDCs. Political leaders champion the NDCs at the cabinet level and advocate for adequate resource allocation. The MESTI also facilitates a mid-term evaluation of the performance of the NDCs, which is expected to contribute to the 2025 stock-taking exercise. The National Climate Change Steering Committee is the forum for the implementing Ministries to share experiences. The Environmental Protection Agency (EPA) is also assigned to facilitate the tracking of the implementation of the NDCs and publish an annual climate change progress report. The EPA also hosts all NDCs data on a special portal in the climate change data hub. The EPA facilitates the continuous compilation of national reports to the UNFCCC. The National Development Planning Commission (NDPC) and the Ministry of Finance (MoF) play a special role in monitoring, evaluating and mobilising finance.

The NDPC implements possible action steps from the Annual Progress Report (APR), which is the M&E system for the medium-term development policy framework. The NDPC and the Ministries, Departments and Agencies (MDAs), as well as the Metropolitan, Municipal, and District Assemblies (MMDAs), are to develop core indicators for tracking individual sector NDCs and report under the sector or national APR within a given timeframe. The MoF is to take the lead in mobilising finance within the government and among the development partners. The MDAs lead in the actual implementation of the NDCs in their respective sectors. In all, nine MDAs (Energy, Transport, Food and Agriculture, Water Resources and Sanitation, Gender, Ghana Health Service, Forestry Commission, The National Disaster Management Organization, and The Ghana Meteorological Agency) plan and implement specific NDCs.

Key Sectors and Priority Actions

The following key sectors have been prioritized in Ghana's NDCs and NAP for climate change adaptation and mitigation.

PRIORITY SECTORS AND ACTIONS	
Sector	**Actions**
Agriculture	Climate-smart agriculture Sustainable agriculture
Energy	Renewable energy and energy efficiency
Forestry and Other Land Use (FOLU)	Sustainable forest management
Transport	Sustainable mass transport
Waste	Alternative urban waste management
Water	Integrated water resources management
Health	Management of climate-induced health risk

Climate Policies, Programmes, and Investments – Progress and Gaps

Ghana, like many other countries, recognizes the importance of addressing climate change and has implemented various policies, programmes, regulations, and initiated investment strategies to mitigate its effects and promote adaptation. These policies, programmes, projects, regulations, and investments are strategically designed to contribute to the attainment of the country's NDCs. However, while the majority of these policies and initiatives are already in implementation some are at various levels of development.

Policies, programmes, regulations and investments	
Policies	• Updated NDC – 2020 • Coordinated Programme of Economic and Social Development Policies-2017 • National Medium-Term Development Policy Framework 2022-2025 • National Climate Change Adaptation Strategy (2018-2023) • National Climate Change Master Plan Action Programmes for Implementation: 2015–2020 • National energy transition framework (2022-2072) • Renewable Energy Act 2011 (Act 832)
Programmes and projects	• Planting for food and jobs (PFJ) • Cylinder Recirculation Module • Establishment of two new climate science Universities in Ghana (UENR in Sunyani and UESD in Somanya) https://citifmonline.com/2015/06/new-climate-change-university-will-help-solve-flooding-problem-mahama/#sthash.HEJLOc8i.dpuf • REDD+ Readiness framework - including a World Bank partnership program committing the forestry commission to deliver six million tonnes of greenhouse gas emissions reduction under the Ghana Cocoa in 2019 https://afripoli.org/projects/climate-adaptation/climate-change-adaptation-in-ghana-strategies-initiatives-and-practices#:~:text=Prominent%20programmes%20among%20Ghana's%20adaptation,National%20Climate%20Change%20Adaptation%20Strategy%20 • City-wide resilient infrastructure programme • Sea defence projects https://afripoli.org/projects/climate-adaptation/climate-change-adaptation-in-ghana-strategies-initiatives-and-practices#:~:text=Prominent%20programmes%20among%20Ghana's%20adaptation,National%20Climate%20Change%20Adaptation%20Strategy%20 • National Climate Change and Green Economy Learning Strategy • Ghana Climate Innovation Center (GCIC) • Climate Change Adaptation and Disaster Risk Reduction Project (CCADRRP) • Scaling-up Renewable Energy Program (SREP) • Forest Investment Program (FIP) • Ghana Shea Landscape Emission Reductions Project • National Climate Smart Agriculture and Food Security Action Plan
Regulations	• Renewable Energy Act (2011) This legislation promotes the development and use of renewable energy sources in Ghana. It establishes a legal framework for the feed-in tariff system, net metering, and other mechanisms to encourage renewable energy investments and reduce dependence on fossil fuels. • Ban on the use and importation of used and new but high energy-consuming electrical appliances. This is a new regulation on electrical appliances and renewable energy products (Energy Commission, 2022) http://www.energycom.gov.gh/files/Final_Public%20Notice%20on%20New%20Regulations.pdf • Ban on the use and importation of incandescent bulbs. The regulation is to promote energy efficiency

	http://www.energycom.gov.gh/files/LI_1932.pdf • Promulgating the Petroleum Exploration and Development Act, 2016 (Act 919). This is to restrict the flaring of gas in petroleum exploration and development. Specifically, the regulation will help to reduce GHG emission • Energy Efficiency Regulations, 2018 (LI 2388) These regulations aim to improve energy efficiency in Ghana by setting energy performance standards for appliances and equipment, implementing energy labeling requirements, and promoting energy efficiency practices.
Public/private investments	• Independent Power Producers (IPPs) in the energy/power sectors (Ministry of Energy, 2022) https://www.energymin.gov.gh/sites/default/files/2022-11/National%20Energy%20Transition%20Framework%20Abridged%20Version.pd • Investing more than US$ 100 million since 2016 in the northern drylands to build the resilience of smallholder farmers and the fragile ecosystem they depend on for a livelihood. https://afripoli.org/projects/climate-adaptation/climate-change-adaptation-in-ghana-strategies-initiatives-and-practices#:~:text=Prominent%20programmes%20among%20Ghana's%20adaptation,National%20Climate%20Change%20Adaptation%20Strategy%20 • Greater Accra Resilient Integrated Development Project. This is an investment worth US$ 200 million. https://afripoli.org/projects/climate-adaptation/climate-change-adaptation-in-ghana-strategies-initiatives-and-practices#:~:text=Prominent%20programmes%20among%20Ghana's%20adaptation,National%20Climate%20Change%20Adaptation%20Strategy%20 • Ghana has attracted significant investment in renewable energy projects, particularly in solar and wind power. The government has implemented policies and incentives to promote renewable energy investments, such as the Renewable Energy Act and the feed-in tariff system. Private sector companies, both local and international, have been involved in developing renewable energy infrastructure and power generation projects. • Investments in climate-smart agriculture practices and technologies have gained momentum in Ghana. Both public and private sector entities have been supporting initiatives related to sustainable agriculture, agroforestry, irrigation systems, and improved f arming techniques to enhance climate resilience and food security. • Investments in green infrastructure, including sustainable transportation, eco-friendly buildings, and waste management systems, have been increasing. The government has been encouraging private sector participation in the development of green infrastructure projects through various incentives and partnerships. • Investments in climate change adaptation and resilience projects have been focused on areas such as coastal protection, water resource management, flood control, and ecosystem restoration. These initiatives aim to build resilience to climate change impacts and reduce vulnerabilities in vulnerable communities. • Ghana has been exploring opportunities to access international climate finance through carbon markets and initiatives like REDD+ (Reducing Emissions from Deforestation and Forest Degradation). These mechanisms provide financial incentives for reducing greenhouse gas emissions and conserving forests, attracting investment in sustainable land use and forest conservation projects. • Ghana has established climate finance facilities and funds, such as the Green Climate Fund (GCF), to mobilize and channel climate finance to support climate-related projects and programmes. These funds provide resources for both public and private sector investments in climate change mitigation and adaptation

The prevailing institutional framework for the implementation of climate change mitigation and adaptation in Ghana is moderate. While the NCCSC exists, its mandate does not go beyond certain limits, hence, when the working groups do not function, the entire institutional architecture becomes a failure. Addressing these gaps has the potential to enhance the country's capacity.

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

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