

National WASH & CLIMATE CHANGE FORUM



NATIONAL CLIMATE CHANGE POLICY FRAMEWORK IN GHANA

Coconut Grove Hotel, Accra
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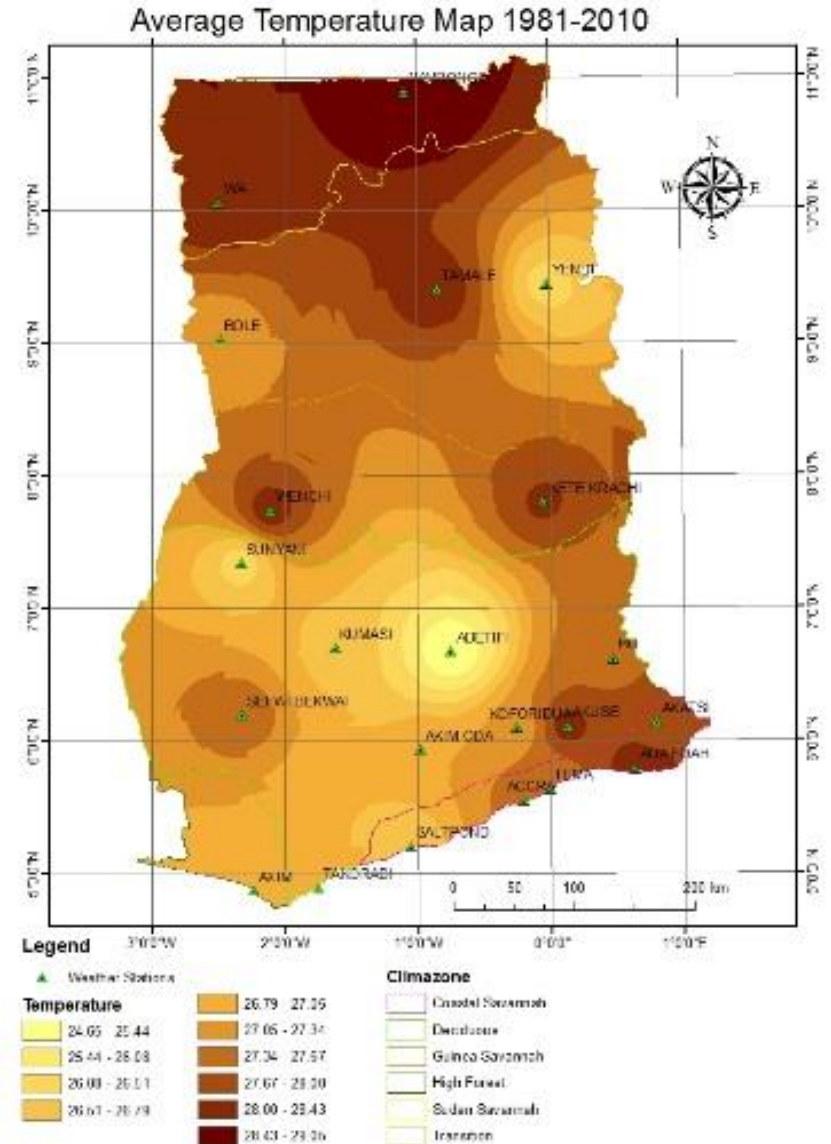
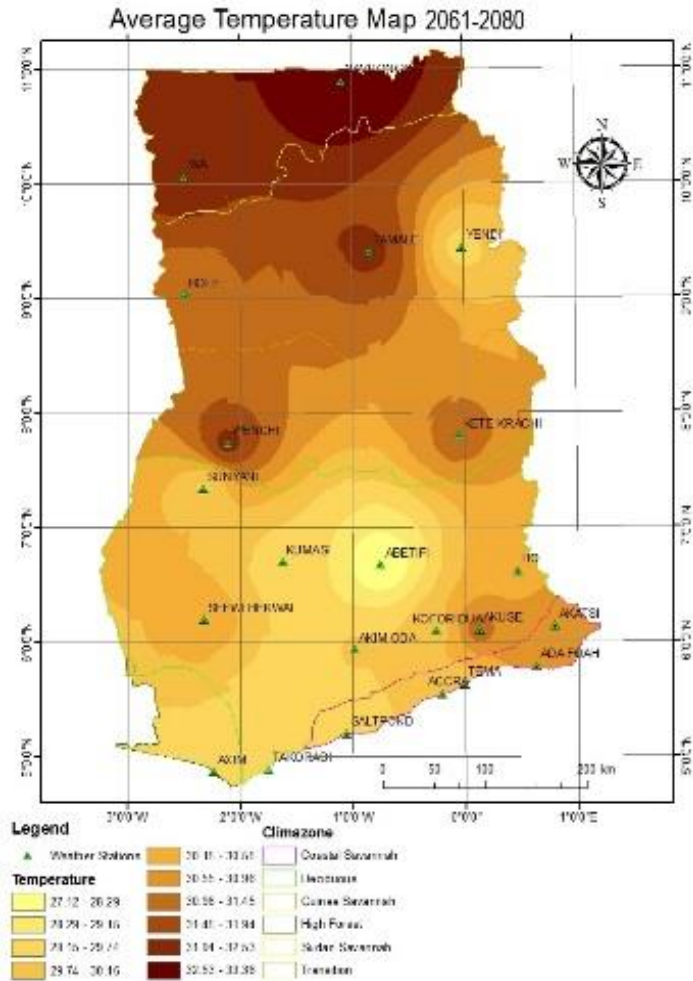
- Ghana as a party to UNFCCC
- Historical and projected climate
- Climate Change impact
- Climate Change Policy Response
 - GSGDA
 - NCCP
 - GH-NDC
- Linkages to WASH

GHANA AS A PARTY TO UNFCCC

- Ghana joined the global community by signing the UNFCCC in **June 1992** in Rio de Janeiro.
- Ghana ratified the Convention on **6 September 1995**
- Ghana also ratified the Kyoto Protocol on **26 November 2002** by Parliament and deposited the instruments for ratification in New York in March 2003
- Ratified Paris Agreement on Climate Change on **4th August 2016**

HISTORICAL AND PROJECTED CLIMATE CHANGE

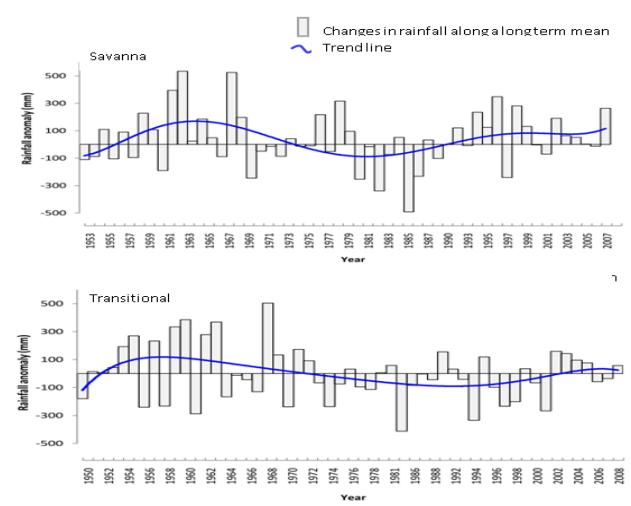
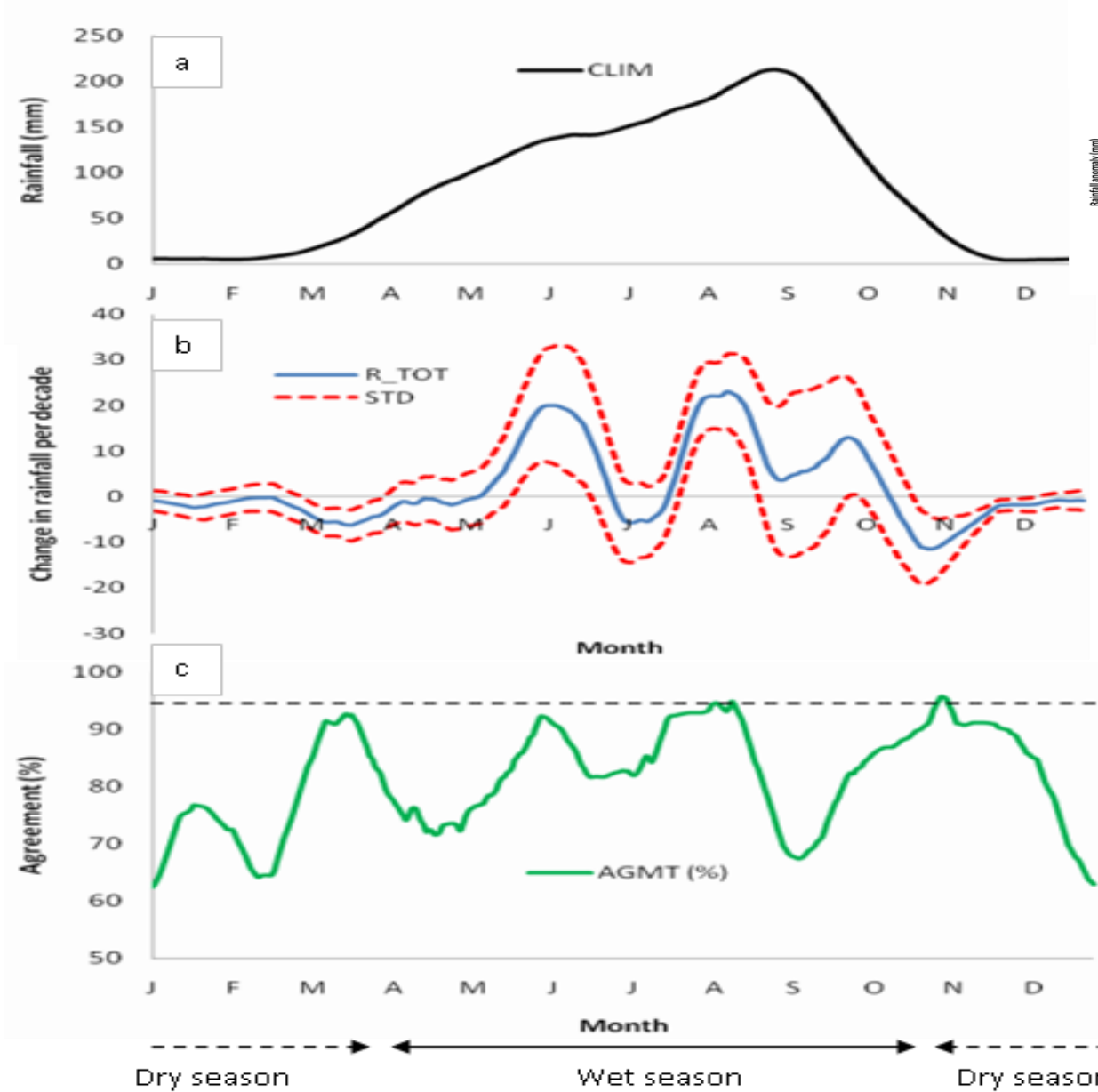
TEMPERATURE



Projected scenarios have indicated Northern Ghana, Transitional zone, East Coast, South Western parts of the country could be warmest

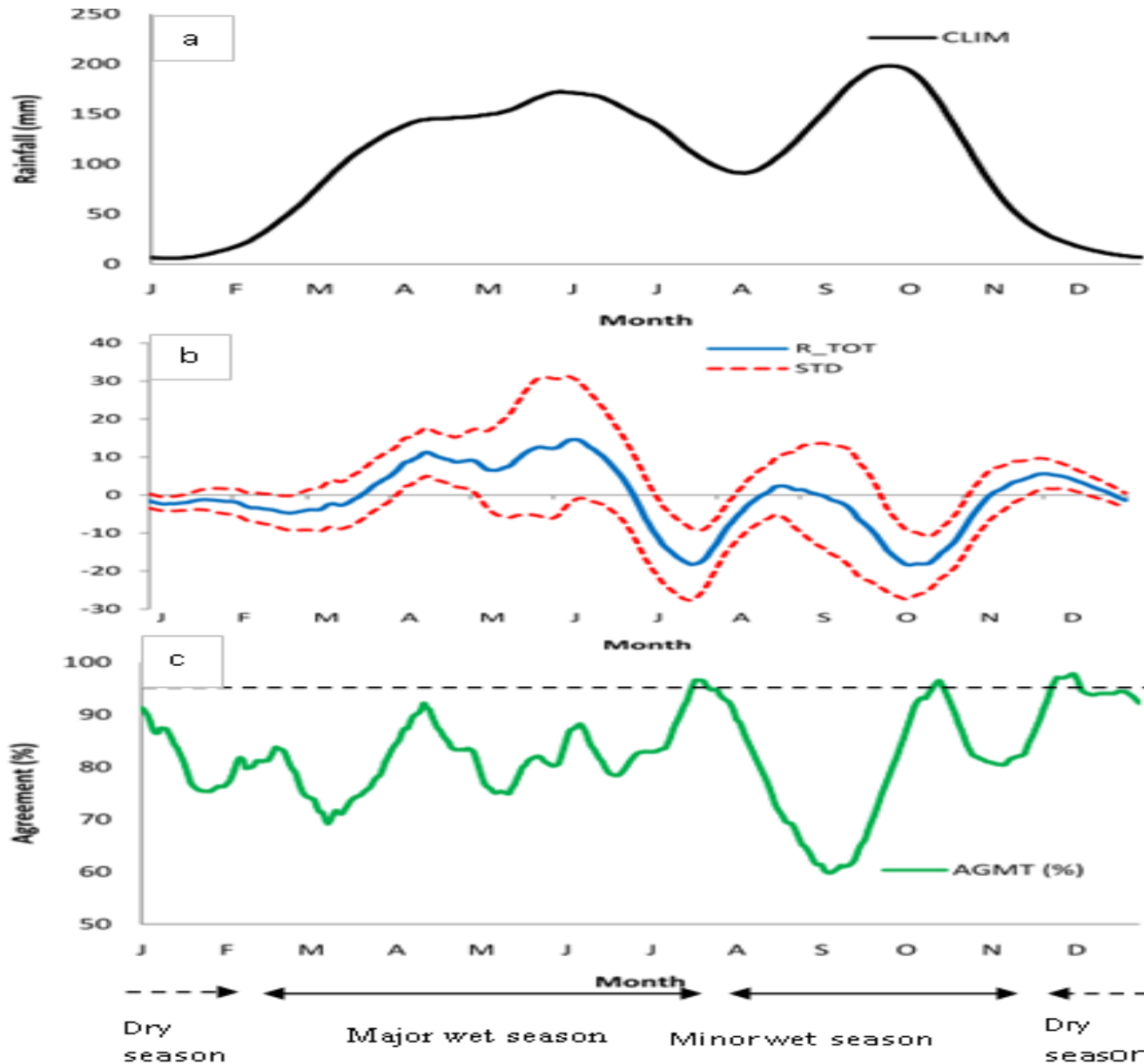
HISTORICAL VARIABILITY OF CLIMATE

RAINFALL – SAVANNA ZONE



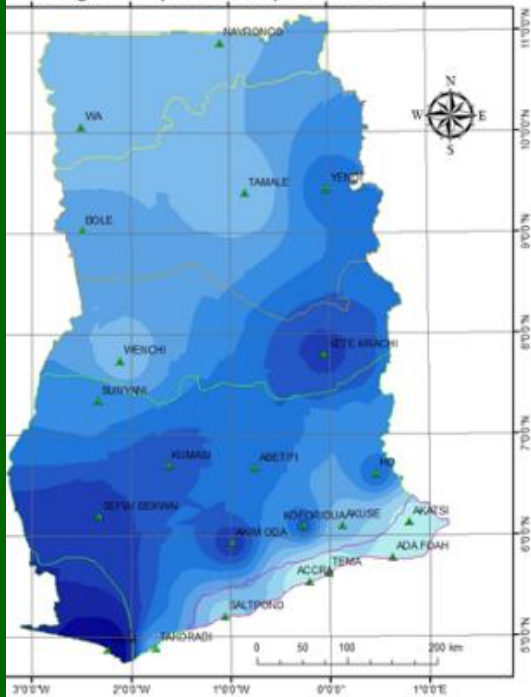
HISTORICAL OBSERVATION IN CLIMATE

RAINFALL - TRANSITIONAL ZONE

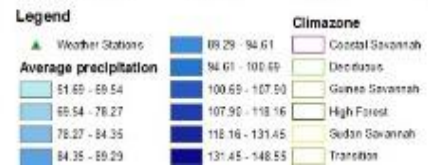
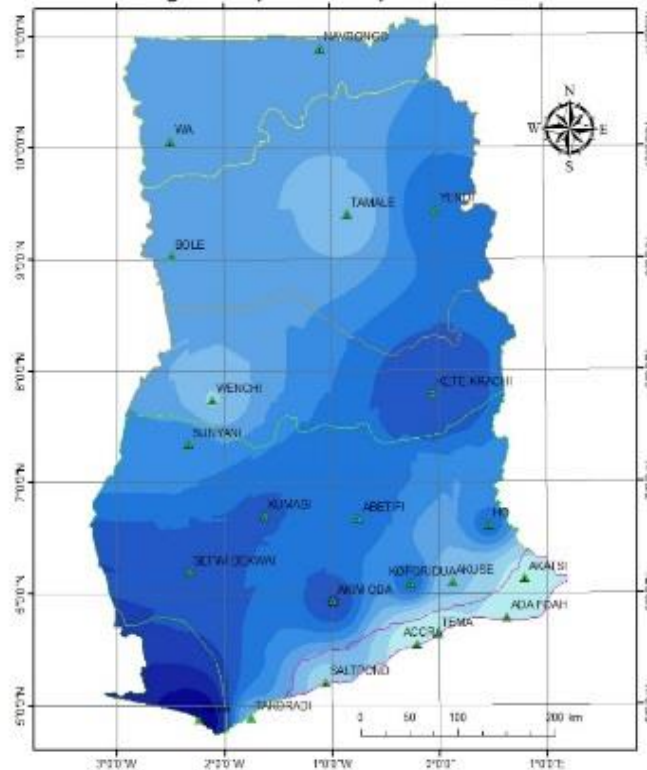


PROJECTED CLIMATE CHANGE – RAINFALL

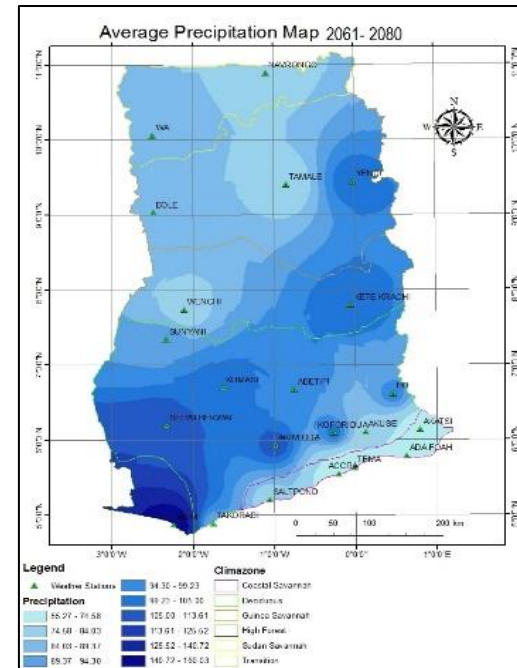
Average Precipitation Map 1981-2010



Average Precipitation Map 2011-2040



Average Precipitation Map 2061-2080



Uncertain rainfall scenarios into the future

CLIMATE CHANGE IMPACTS

SENSITIVE SECTORS OF THE ECONOMY

Agriculture

- Change in precipitation and temperature reduce yields

Water

- Variable precipitation increases water stress

Coastal areas

- Rising sea levels increase danger of flooding and coastal erosion



Health

- Changes increase risk of malnutrition, poor sanitation, diseases, and natural disasters

Energy

- Droughts endanger hydro power supply (60-70% of power)

Cities and infrastructure

- Floods and heat impact roads and buildings

Impacts and vulnerabilities in Ghana is generally influenced by geographical spread, gender, poverty levels, livelihoods, access to information etc.

Linkages of CC to Health and Water Sectors

Climate change is change in climate parameters, it is

- influenced by **social processes** that **relate to way of life**
- CC increase **Vulnerability** in the area
 - Water supply
 - Exposure to disease,
 - Sensitivity of livelihood activities
 - Access to basic resources & services
 - Knowledge
 - Health, migration and gender status

Adaptation practices vary according to

- **Livelihood capacity and**
- **Asset holding level.**
- Capability of social groups to **adapt or mitigate** to **CC impacts** depends:
 - Physical, **socioeconomic**, and **technological factors**

Climate Change impacts linkages

- Vector-borne and water related diseases (malaria and guinea worm)
- Airborne diseases
- Diarrhoeal diseases such as **cholera**
- Sanitation and unsafe water sources

Direct climate change impact

- Resulting in change of temperature, humidity,
- Proliferation of vectors, driven by poor sanitation
- Increases in frequency of raining & dry seasons
- Resulting in runoff into surface water sources
- Floods affect access to **safe water** by contaminating (heavy metals, defecation, fertilizers)
- Drought (limited water supplies) leading to use of **unsafe sources**
- Unavailability of water for **domestic use**, industrial applications

Indirect impacts

- Potential increases in **injuries**
- **hunger** and **malnutrition**

RESPONSE TO CC –How?

Seeks to protect its ***current levels of economic growth***;

Wary of economic impacts of both climate change; resulting in a focus on “***climate resilience***”.

Mitigation is not a priority, ***but synergy will help to reduce adaptation cost***

Sustainable Development and ***adaptation***

CLIMATE CHANGE RESPONSE – KEY POLICIES

Ghana Shared Growth Development Agenda (GSGDAI & II)
- Primary Development Planning Framework

Ample references to climate change
-Turn climate change impacts into opportunities
-Considers Climate change as development issue

Serves as the umbrella policy for the
-Ghana's National Climate Change Policy (NCCP)

NCCP vision:

“to ensure *a climate-resilient and climate compatible economy* while achieving SD through equitable low-carbon economic growth for Ghana”

Focus on the National Climate Change Policy

Provide strategic direction and co-ordinate issues of climate change in Ghana

Objectives: *Effective adaptation, social development and mitigation*

Seven systemic pillars (a) *governance and coordination*; (b) *capacity building*,

(c) *science, technology and innovation*, (d) *finance*,
(e) *international cooperation*

(f) *Information, communication and education* and
(g) *monitoring and reporting*

Fall for most part of society including the vulnerable:- poor, very often – women and children, the aged

Priority Areas of the NCCP

1. Agriculture and Food Security,
2. Disaster Preparedness and Response
3. Natural Resource Management,
4. Equitable Social Development
5. Energy, Industrial, and Infrastructural Development

Focus on National Climate Change Adaptation Strategy

(cross-sectoral impact planning and analysis)

Objectives: strengthen adaptive capacity, build resilience of the society and ecosystems, minimize vulnerability

10 programmes: (1) identifying and enhancing early warning systems; (2) Alternative livelihoods

(3) improved land use management (4) research and awareness creation (5) environmental sanitation

(6) Managing water resources (7) agricultural diversification (8) human health (9) national energy system (10) fisheries resource management

Policy Actions on Human Health

- Establish community health groups and develop capacity to identify health risks to **facilitate access to services** and **decision-making**
- Strengthen technical capacity to manage CC related health risks
- Strengthen disease surveillance systems through **early warning**
- Improve on data sharing and develop health information management systems for **diseases**
- Improve partnership with relevant ministries and other stakeholders to **improve access to potable water**
- Map disease incidence and identification of vulnerable groups for **climate-sensitive diseases**

Policy Actions on Human Health

- Strengthen existing units within the health delivery system to manage climate related epidemics
- Collaborate with relevant stakeholders to improve nutrition through increased food processing capacity, food banks, nutrition education, and food storage and quality control
- Improve surveillance systems for existing and new disease risks and ensure health systems to meet future demands
- Mainstream climate change health risks into decision-making at local and national health policy levels.
- Identify, document and incorporate climate-relevant traditional knowledge into health delivery systems and practices
- **Develop structures to effectively manage and disseminate information** on climate change health risk.

Policy Actions on Access to Water and Sanitation

- Develop rainwater harvesting and increased use of shallow wells, dugouts and dams for water use
- Make water accessible for **domestic, agricultural, industrial, and commercial use and energy production**
- Recycle of water for **domestic and industrial purposes**
- Develop efficient irrigation drainage systems to **increase returns flows**
- Build capacity in water resources management in **relevant sectors.**
- Promote water supply and sanitation delivery practices that **build resilience to climate change**
- Develop and introduce flood and drought monitoring and control systems
- Develop and implement environmental sanitation strategies to **adapt to climate change**

Policy Action on Gender & Climate Change Issues

- Ensure the integration of gender equality principles in all social policies such as education, health, water and sanitation.
- Generate gender-specific information including **sex disaggregated data, gender impacts of climate change**
- Develop effective gender and climate change goals and gender sensitive indicators
- Collaborate/Partner with CSOs, especially **women's rights organisations and coalitions** in climate change
- Build capacity of the relevant institutions to **mainstream gender into CC policy formulation, planning, monitoring and evaluation**
- Prepare and implement gender and climate change mainstreaming strategic plans by institutions, which would provide a **sound basis for evaluating the extent of gender Mainstreaming**

Policy Action on Gender & Climate Change Issues

- Identify and analyse gender-specific needs, impacts, protection and support measures of CC
- Promote gender equitable financing as a **means of responding to gender differential impacts** of CC
- Increase the resilience of vulnerable groups including **women and children**, through the **development of community-led adaptation, livelihood diversification, better access** to basic services and **social protection** (safety nets, insurance) and scaling up
- Integrated biomass strategies for **food, fuel, fodder, and other basic needs including income generation**
- Promote effective and equal participation of **men and women in climate change policy and decision-making processes**
- Strengthen the implementation of **gender responsiveness** in **disaster risk management**.

HISTORIC PARIS AGREEMENT - INDC?

Ghana Nationally Determined Contributions, GH-NDC

- **Global effort to reduce GHG emissions** which is causing the **global warming** and **climate change**
- Put the globe into **low carbon pathway** and **climate resilient future**
- **Propose National Actions** to deal with **climate change challenges**
- **1st time**, **each country** in the world has agreed to **take certain level of commitment** - **originally determined by the Country (Party)** as a **contribution to the global agreement** (based national circumstances and development Agenda);
- A **Global legally binding climate pact (2020-2030)** that the international community has sets out to **replace the Kyoto Protocol** after its **2nd Commitment period in 2020**

CONFERENCE OF PARTIES (COP)



Highlights of the Paris Agreement

- **Major breakthrough** following 20 years of frequent deadlocks in the negotiations;
- **Historic**, in that it is rare that all countries around the world has agreed to a single agreement;
- The **Agreement is balanced**, ambitious, inclusive approach, transparent, political will;
- All countries will take action to mitigate and adapt to climate change;
- **Review in every five years** to take care of progress and an opportunity to ramp up efforts;
- Holds global temperature well below 2°C, and 1.5 to our sight;
- Has high upscale of **adaptation actions** and **renewables**, placing emphasis on human right, low carbon, green and sustainable developments
- Support global community to move in one direction of **change from fossil fuel to renewable/clean energy** and sustainable development

Strategic Areas of the Adaptation Option

Sector	Strategic area	GH-NDC Policy Actions	No of Programme of Actions
Agriculture and food security	Sustainable Land Use	<u>Agriculture resilience building in climate <u>vulnerable</u> landscapes</u>	3
Sustainable forest resource management		<u>Value addition-based</u> utilization of forest resources	2
Resilient Infrastructure in built environment	Climate Resilient Strategic Infrastructure	<u>City-wide</u> resilient infrastructure planning	1
		<u>Early warning</u> and disaster prevention	1
Climate change and health	Equitable Social development	<u>Managing climate-induced health risk</u>	2
Water resources		<u>Integrated water resources management</u>	1
Gender and the vulnerable		Resilience for <u>Gender and the Vulnerable</u>	1

Mitigation Actions

Sector	Sub-sector	Actions	Investment requirement (million \$)
Waste	<p>Biogas in schools</p> <p>Waste to energy</p> <p>Waste to compost</p>	<p>1. <u>Improve</u> effectiveness of urban solid collection from <u>70% to 90% by 2030</u> and disposed all to an engineered landfills for <u>phase-out methane recovery</u> from <u>40%</u> in 2025 to <u>65% by 2030</u>.</p> <p>2. Scale up <u>200 institutional biogas in senior high schools</u> and prisons nation wide</p> <p>3. <u>Double</u> the current waste to compost installed capacity of <u>180,000</u> tonne/annum by 2030</p>	79.85

Adaptation Actions

<p>Increase <u>capacity of relevant sectors to manage climate related health risks</u> by improving disease surveillance through early warning systems targeting vulnerable communities in three Districts. [CONDITIONAL]↑</p>	<ul style="list-style-type: none"> i. Build capacity of health providers and groups to identify climate related health risks and facilitate access to services and decision makers. ii. <u>Improve disease surveillance and response systems</u> for the <u>prevention and control</u> of priority climate sensitive diseases at all levels of the health sector, develop emergency health preparedness and mainstream the health components of disaster risk reduction plans. iii. <u>Map disease incidence and identification</u> of vulnerable groups for climate-sensitive diseases iv. <u>Build capacities of key institutions</u> to ensure efficient delivery of sanitation services.
<p>Develop climate change informed <u>health information systems</u> including traditional knowledge on health risk management. [UNCONDITIONAL]</p>	<ul style="list-style-type: none"> i. Establish <u>long term scientific research on the health impacts</u> of climate change, social protection activities and improved access to healthcare e.g., National Health Insurance Scheme ii. <u>Integrate traditional knowledge into formal health processes</u> and adaptive capacities.

Adaptation Actions

Enhance governance systems that

strengthen

equitable

distribution and

access to water for

20% of the

population living in

areas at risk from

climate change (e.g.,

coastal areas, flood-

and drought-prone

areas) using climate

proof infrastructure.

[UNCONDITIONAL] ↓

- i. Develop **Integrated Water Resources Management** in health risk prone areas.
- ii. **Increase investment in social services and infrastructure**, which can also be supported by public-private partnership in service provision.
- iii. **Develop Drainage Development Plans (DDPs)** for all Regional and District Capitals including removal of sediments to create more paths for floodwater flows and design and construction of improved primary and secondary drains.

CC:LEARN PROGRAMME

- Aim to **Develop** and **Implement** National Climate Change & Green Economy Learning Strategy
- Consider the Learning Strategy as **Capacity Building Component** of the National Climate Change Master Plan (Strategy)
- In line with the 5 policy areas of the **National Climate Change Policy** and
- **As a tool to implement** the Ghana Nationally Determined Contribution (**GH-NDC**)

THE CC LEARNING STRATEGY

With the objective to:

- Foster systematic and **country-driven process** to enhance CC learning for national adaptation and mitigation actions and
- **Strengthen institutional capacity** for good governance, institutional coordination, science and innovation, accountable monitoring and reporting

13 Actions for Immediate Implementation

- 1. Train farmers and fishermen and present information on conservation agriculture, climate smart cropland management, and other climate smart agricultural and aquaculture practices in simple language for easy appreciation**
- 2. Train on the principles for the design, management and operation of climate-resilient infrastructure**
- 3. Institute Climate Change and Green Economy Festival / Week**
- 4. Develop manuals and train on gender and social inclusion on Climate change and Green Economy**
- 5. Initiate activities to incorporate climate change and green economy learning into the educational**
- 6. Establish Climate Information Centres to facilitate easy access to agro-met information and early warning system for disaster risk reduction**

7. Develop and implement climate change and health training programmes for clinical health workers , implementing a efficient health surveillance system at the district level

8. Train the general public linkages of climate change on water, sanitation and hygiene

9. Train business leaders on the challenges and opportunities associated with CC

10. Provide technical and financial assistance to businesses to undertake viable pilot initiatives.

11. Provide technical content and support for media campaigns and related activities designed to raise awareness among the general public

12. Train on public finance for funding the green economy transition for MoF staff

13. Provide introductory training on climate change and green economy concepts for relevant public institutions and officials

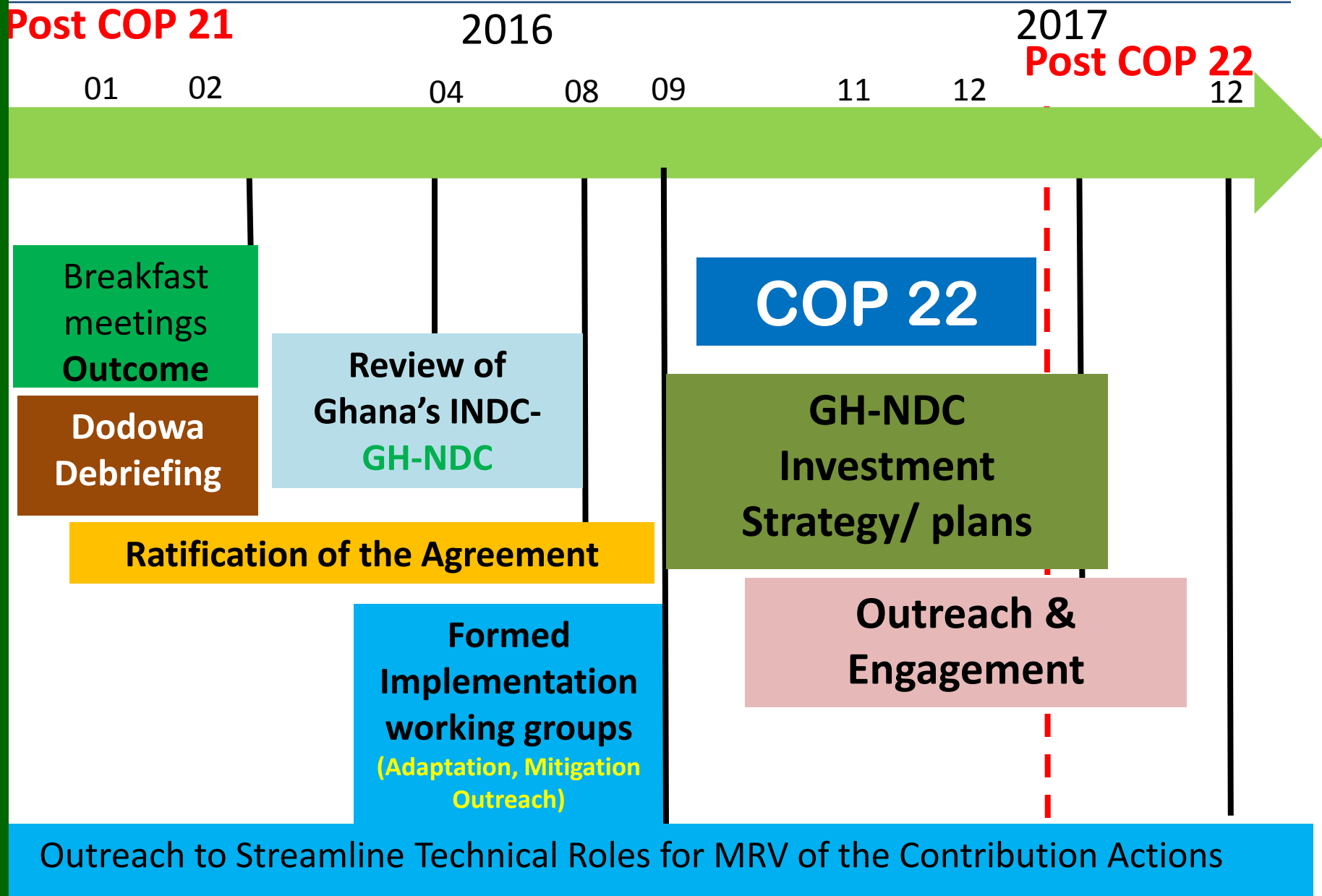
Financial Mechanism

- Green Climate Fund set to implement GH-NDC
- Ministry of Finance as National Designation Authority (NDA)
- Multilateral and National Implemental Entities being accredited – MIE & NIEs (EcoBank & SIF)
- GCF National Committee in place
- About 19 Applications processed

Monitoring Reporting & Verification

- MRV system forms an important part to ensuring the **successful delivery**;
- Ghana's MRV system is an integral part of the **existing national development monitoring and evaluation structures**.
- Deploy to track progress towards achieving national actions
- **National Development Planning Commission (NDPC)** periodically information review through **Annual Progress Report** (APR).

THE PROCESS OF GHANA'S NDC POST 21



Thank you for your
attention!

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