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*Economic Community Of West
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Climate change impacts and trends in the West African region- Key facts and Actions of the ECOWAS Commission

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OUTLINE OF THE PRESENTATION

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II~ CLIMATE CHANGE OVERVIEW IN WEST AFRICA

III~ CLIMATE CHANGE TRENDS

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V~ ECOWAS ACTIONS ON CLIMATE CHANGE

VI~ CONCLUSION



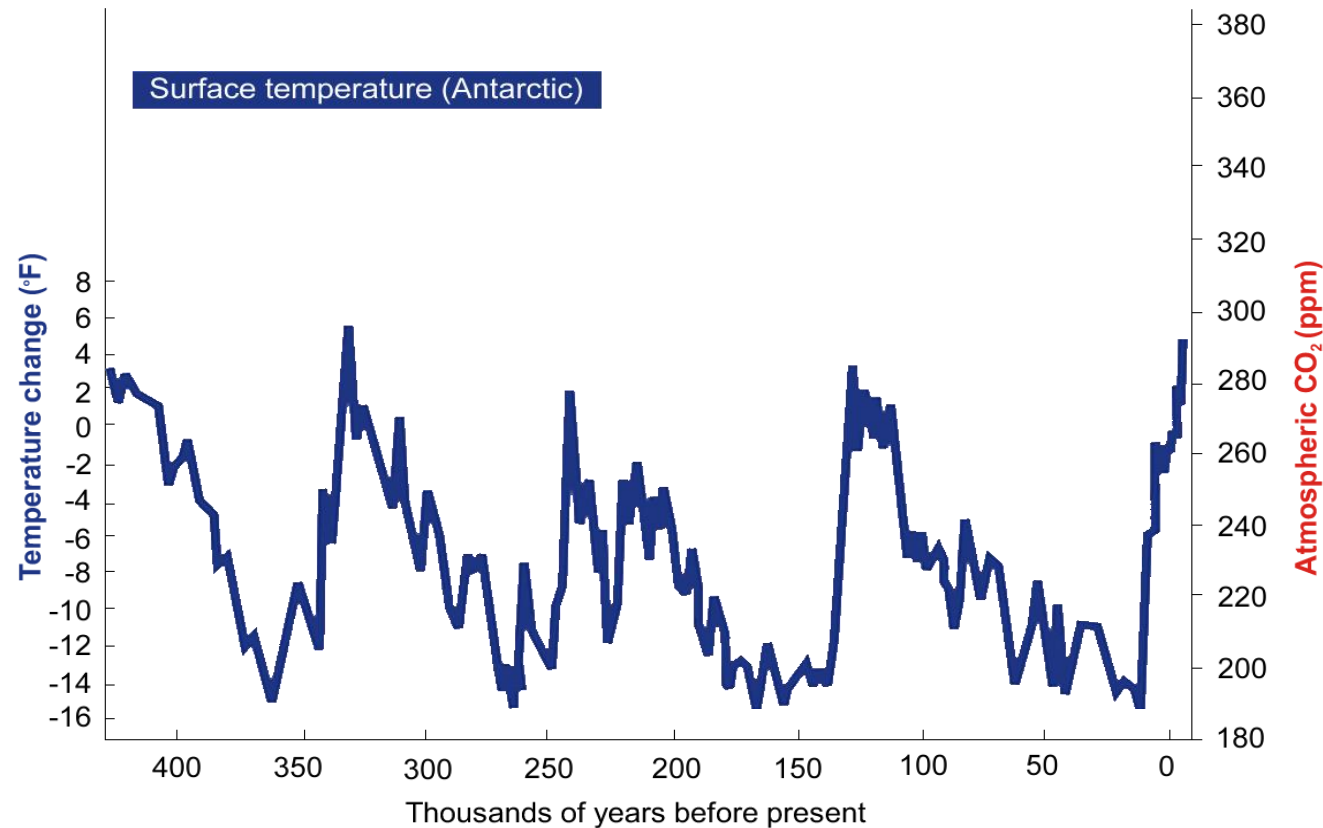
I- INTRODUCTION

- ❑ West Africa is one of the regions most vulnerable to climate change.
- ❑ These changes in climate caused impacts on natural and human systems on all development sectors in west African region.
- ❑ Given this situation West African region through ECOWAS Commission has developed some program and activities to tackle climate change effects



II- CLIMATE CHANGE OVERVIEW IN W. A.

Relationship between CO₂ and air temperature

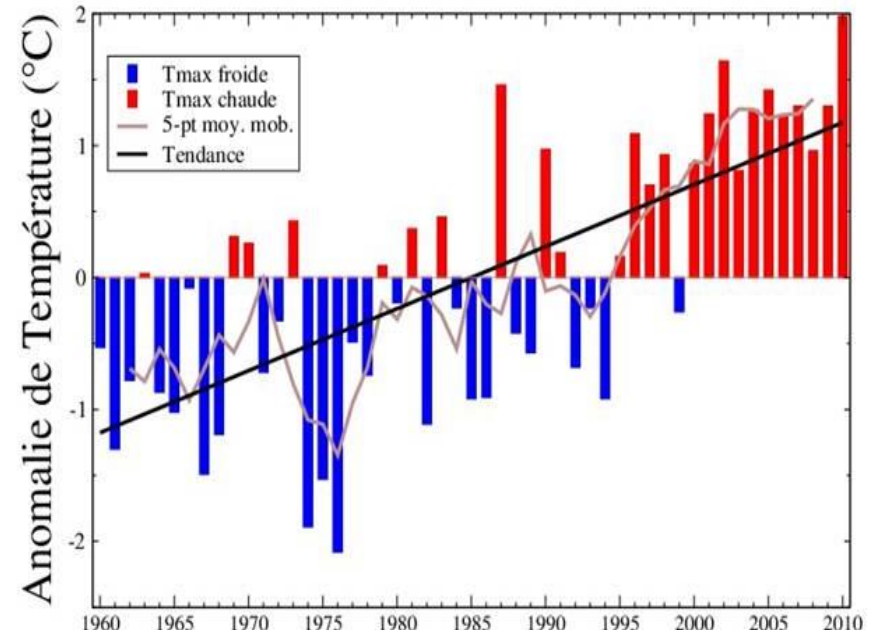
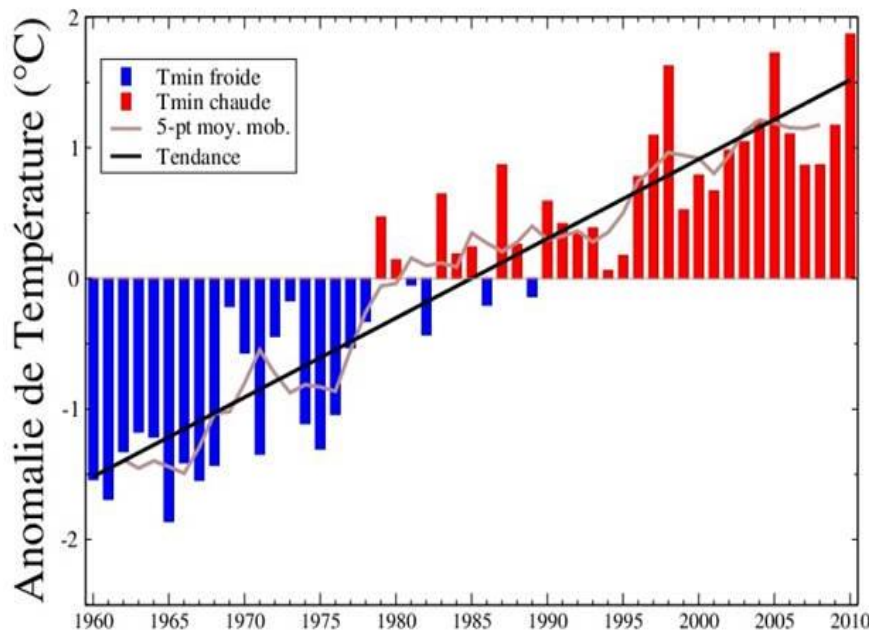


It is **extremely likely** (>95 %) that human activities since 1750 have been the dominant cause of observed global warming (IPCC, 2013). In 2007, IPCC concluded that it is **very likely** (90 %), and **likely** (66%) in 2001



II- CLIMATE CHANGE OVERVIEW IN W.A.

Global warming in West Africa region : evolution of minimum and maximum temperature



- ➔ Continuous warming since the years 80, 90s in the region particularly for Tmin,
- ➔ The 2000-2010 period experienced the warmest period,
- ➔ Warmest years are : 2010, 2005, 1998, 2003 et 2002



II- CLIMATE CHANGE OVERVIEW IN W.A.

Increase of annual minimum and maximum temperature

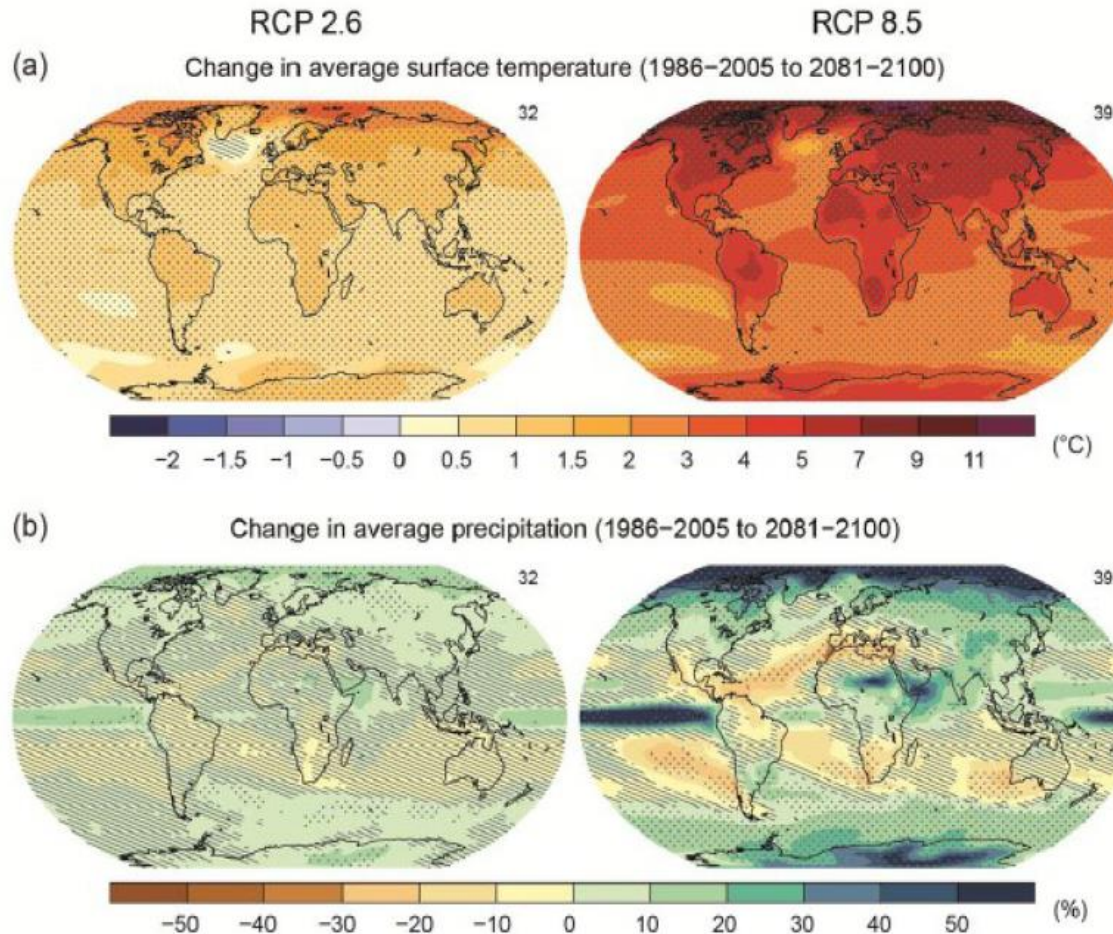
Pays	Station	Tmax before breakpoint	Tmax after break point	Ecart Tmax
Niger	Niamey	36,1	36,6	+ 0,5
Chad	Ndjamena	35,8	36,8	+ 1
Togo	Atakpame	30,8	31,7	+ 0,9
Guinea	kankan	31,6	32,5	+ 0,9

Pays	Station	Tmin before breakpoint	Tmin after break point	Ecart Tmin
Niger	Niamey	22,18	23,32	+ 1,14
Chad	Ndjamena	20,9	22,3	+ 1,4
Togo	Atakpame	20,6	21,7	+ 1,1

➔ Tmin increased from +1 to 1.4 °C and Tmax about 0.5 °C to 1°C



III- CLIMATE CHANGE TRENDS IN W.A.



Increase of mean annual **temperature** around 2 °C for RCP 2.6 and 3~ 4° C for RCP 8,5 at the end of the century

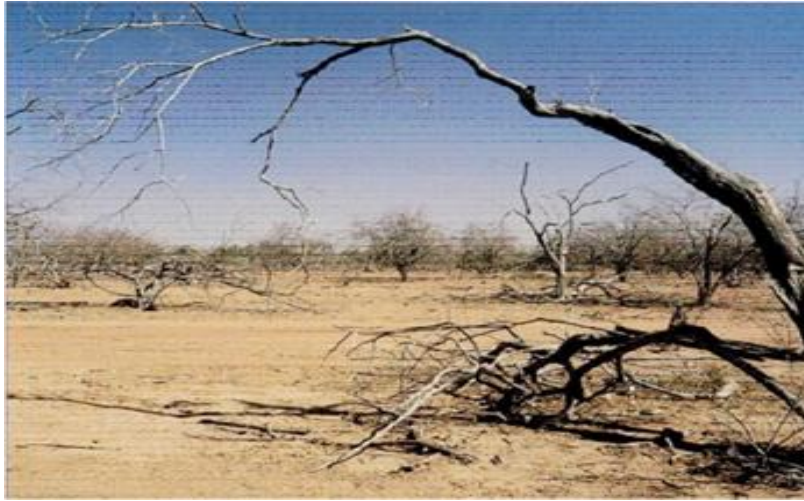
Rainfall : insignificant increase /decrease in majors part in West Africa

RCP 2.6 : radiative forcing of 2.6 watt per m² corresponding to low emission carbon scenario,

RCP 8.5 : radiative forcing of 2.6 watt per m² : high emission carbon scenario



IV- IMPACTS OF CLIMATE CHANGE IN W.A.



Drought event and natural resources degradation



Flood event



Coastal land erosion

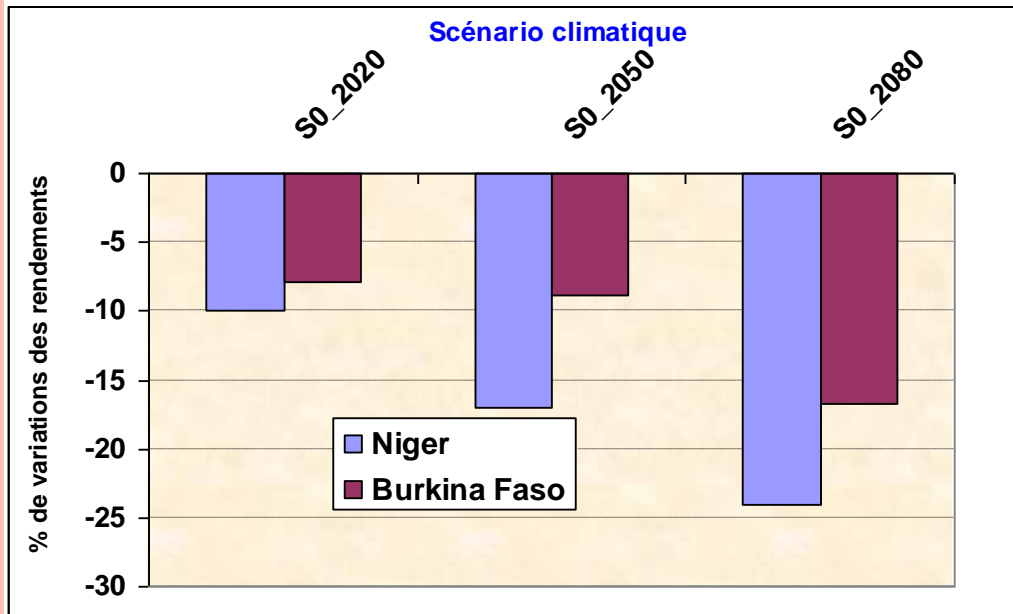


Salinization of Coastal land



IV- IMPACTS OF CLIMATE CHANGE IN W.A.

Simulation of impacts of temperature increase on millet /sorghum in Burkina Faso and Niger



2050 : crop yield decrease about 8 % in Burkina Faso and 15 % in Niger in 2050

Source Agrhymet, simulation from DSSAT crop model)

Figure . Change of millet /sorghum crop grain in 2020, 2050, 2080 relative to 1961-1990

SO_2020 : 1 °C

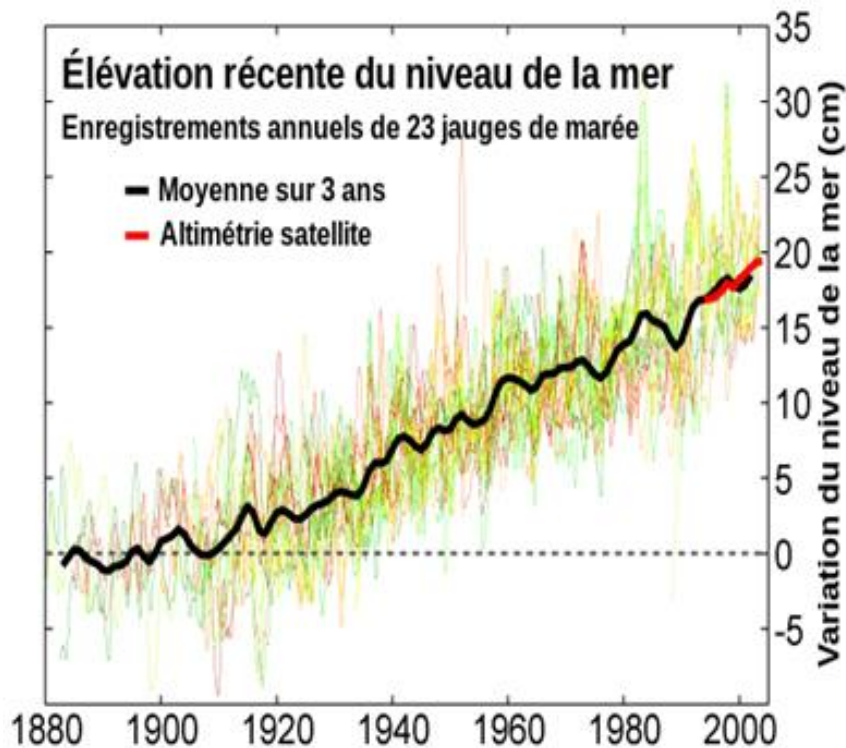
SO_2050 : 1,5 °C

SO_2080 : 3 °C

No significative change in rainfall amount and distribution



IV- IMPACTS OF CLIMATE CHANGE IN W.A.



Mean global sea level rise
relative to 1880 -2005, IPCC,
2014



Salinization affect particularly countries from Mauritania to Guinea Bissau because :

- High penetration of sea water in the hinterland, gulfs and lagoons due to (i) sea level rise (ii) coastal erosion (ii) declining of rainfall
- In the Sahelian zone: hyper-salinization of *coastal farm land* and massive destruction of mangroves due to increased evaporation is observed



Policies and Strategies

❑ Agriculture (ECOWAP, 2005) :


➤ Regional and National Agricultural Investment Programme

- ❖ Component dedicated to adaptation **and mitigation** (the Climate Smart Agriculture forum held from 14 to 18 May 2015 in Bamako)
- ❖ Development of irrigation
- ❖ Component 3 of RAIP with one key objective on resilience, vulnerability, etc.)
- ❖ **Technical and scientific collaboration with CORAF/WECARD and with CILSS on agriculture productivity, climate change and desertification**



V- ACTIONS ON CLIMATE CHANGE (CONT..)

Policies and Strategies

- ❑ Environment and climate change
 - ❖ ECOWAS Forestry Policy Statement (2005)
 - ❖ ECOWAS Environmental Policy (ECOWEP, 2008)
 - Strategic Programme on Reduction of Vulnerability And Adaptation to Climate Change in West Africa (2010)
 - The Convergence Plan for Management and Sustainable use of Forest Ecosystems in West Africa in 2013 (WA-FCP)
 - ECOWAS Meteorology Program (draft) under review
- 

V- ACTIONS ON CLIMATE CHANGE (Cont..)

☐ Water

- ❖ ECOWAS Water Resources Policy and Action Plan

☐ Energy

- ❖ Energy Directorate
- ❖ ECREEE with the ECOWAS Renewable Energy and Energy Efficiency Policies



V- ACTIONS ON CLIMATE CHANGE (Cont..)

5.1. Ongoing projects

Project: Initial Activities of the Strategic Program for Reduction of Vulnerability and Adaptation to Climate Change in West Africa.

Development/Global objective : Contribute to strengthen the resilience to extreme weather event of the West African region and the preparedness for the climate change compatible development

- **Component 1:** Contribute to increasing the performance of ECOWAS Members States negotiators and relevant stakeholders
- **Component 2:** Contribute to improving the integration of climate change concerns (**adaptation and mitigation**) in national and regional plans, programs in West Africa region
- **Component 3:** Contribute to improving coordination and synergy among initiatives in West Africa



Outputs of Specific objectives:

❑ Specific objective 1:

- **Output 1.1:** The level of understanding of climate change concerns by members of national committees of Climate change, regional CSOs and ECOWAS staff is brought up to date and improved
- **Output 1.2 :** The priorities of ECOWAS member States are taken into account in the international negotiations on climate change
- **Output 1.3:** Negotiators from the ECOWAS region attend the meetings on climate change and they are equipped with necessary skills to negotiate effectively.



❑ Specific objective 2:

- **Output 2.1 :** The understanding of climate change risks and costs in West Africa region is improved
- **Output 2.2:** Climate change adaptation concerns are integrated in the regional and national development plans, and programs: (ECOWAP/CAADP (climate-smart agric), ECOWAS Departments, WRCC, ECOWAS Renewable Energy and Energy Efficiency Policies, Early warning mechanisms, etc);
- **Output 2.3 :** ECOWAS capacities to access international funds for climate change projects are improved



V- ACTIONS ON CLIMATE CHANGE (Cont..)

❑ Specific objective 3:

- Output 3.1 : A regional consultative framework on climate change to improve synergy on climate actions in the region is established. Among others activities:
 - Organize a consultative working meeting among the relevant regional organizations to improve synergy (including : CILSS, WAEMU, CORAF, WASCAL, UN, BOAD, BIDC, ECREEE, CORAF/WECARD .. and ressources persons)
 - Establish a Technical Working Group for the enhancement of the Regional Strategic Program on adaptation to climate change to incorporate issues and opportunities related to mitigation / low carbon development/Capacity Building (including : CILSS, WAEMU, CORAF, WASCAL, UN, BOAD, BIDC, ECREEE, CORAF/WECARD .. and ressources persons. 1st meeting Planned in September)
 - Conduct study to develop a comprehensive regional strategic program to address climate challenges in the ECOWAS region (Draft TOR available)
 - Organize ECOWAS members States experts meeting for technical validation of the comprehensive regional strategic program to address climate challenges in ECOWAS region
 - Organize ECOWAS members States Ministers meeting to adopt the comprehensive regional strategic program to address climate challenges in ECOWAS region
- Output 3.2 : Communication and networking to address climate challenges in ECOWAS region are strengthened



V- ACTIONS ON CLIMATE CHANGE (Cont..)

❑ Outputs of specific objective 4: Governance

- Project Steering Committee and technical coordination meetings
- Regional Scientific and Technical Consultative Group (STCG) meetings (Planned for Sept – October 2015)

❑ **JOINT ROADMAP** : ECOWAS Commission, WAEMU, CILSS, IUCN to prepare COP 21 with ongoing activities



V- ACTIONS ON CLIMATE CHANGE (Cont..)

5.2. Others Initiatives and projects related to climate change

■Project: Monitoring for Environment and Security in Africa (MESA)

The MESA program is designed to build on the just concluded AMESD using Earth Observation (EO) data and information products for environment and sustainable development designed for African users

It is a pan- African programme that strongly supports environment and climate objectives through the use of EO tools

Five participating RECs with 6 RICs and ACMAD as Continental Impl. Center

Purpose of MESA: To support African decision-makers and planners in designing and implementing national, regional and continental policies and development plans towards sustainable development with the view to advance the socio-economic progress and well-being of populations towards achievement of the MDGs



V- ACTIONS ON CLIMATE CHANGE

5.2. Other Initiatives and projects related to climate change (Cont...)

- Forest Convergence Plan developed and adopted
- Sub Regional Action Programme to Combat Desertification updated and adopted
- Chemicals and Hazardous Waste management, including POPs, e-Waste, Plastic waste, Ozone Depleting Substances (ODS)
- Coastal resilience to climate change improved in West Africa (component 2 of the West Africa Biodiversity and Climate Change Program (WA-BiCC) with USAID/West Africa)



V- ACTIONS ON CLIMATE CHANGE

5.3. Other Initiatives and projects related to climate change with component on climate change led by Directorate of Agriculture and Rural Development;

- Project: Strengthening of the West African country capacity for integrating climate change into agricultural policies and the formulation of investment projects
- Program to support Food Security and Nutrition in West Africa
- Others projects and programs led by ECOWAS Water Coordination Center, WAEMU, CILSS, CORAF/WECARD, etc.



VI- CONCLUSION

- Climate change is a developmental threat to major investments
- Because climate change is multifaceted, only appropriate partnerships across various layers of governance including policy, public-private-partnership, capacity and financial investment will slow down potential threats and up-scale opportunities for development;
- The development of the ECOWAS Climate Change Mitigation Programme (ECCMP) initiated by ECREEE is welcome;
- **But** ECOWAS Climate Change Mitigation Programme (ECCMP) initiated by ECREEE shall be developed according to ECREEE mandate;
- The program and the regional coordination on climate change need to take into account the field of competency of ECREEE, the competencies of ECOWAS Commission and his technical departments and the others institutions who ECOWAS Commission is already working with ;
- ECOWAS Climate Change mitigation is already part of the comprehensive regional strategic program to address climate challenges in the ECOWAS region (**Activities 3.1.3 and 3.1.4 of the ongoing project with SIDA Support**);
- The global approach of the climate change concerns must be analyzed before discuss about the specifics responsibilities and missions of ECOWAS' Technical departments



**THANK
YOU**

