RCC's CLIMSA Presentations for 4th ClimSA PSC Meeting:
14-15 September 2023

Grant contract number: ACP/FED/038-833

Intra-ACP Climate Services and Related Applications Programme

IMPLEMENTATION STATUS AND OUTLOOK

Presented by Andre KAMGA FOAMOUHOUE
For ACMAD/ClimSA
September 2023

An initiative of the Organisation of African, Caribbean and Pacific States funded by the European Union

OUTLINE OF PRESENTATION

BRIEF ON ACMAD MISSION

Created trough resolution 540 of the UNECA Conference of Ministers in April 1985 following the droughts of the 70s and 80s , ACMAD is established in Niamey-Niger since October 1992

1- Continental Weather and Climate Watch Centre for Africa with Monitoring, *forecasting* and *early warning for* droughts, floods, tropical cyclones and other extreme events as functions .

ACMAD is a WMO designated RCC since Congress in May 2015 and a Continental MultiHazards Advisory Centre since October 2022

2- Institution of excellence for the Applications of meteorology for sustainable development with capacity building, methods, tools and products development, contribution to global weather and climate programs, promotion of database , research and innovation as functions

01 Introduction

1.1. Objective

- The overall objective of the Action is to contribute to foster sustainable development by strengthening the climate services value chain at the regional, national and sub-national levels

1.1.1. Specific Objectives

- Structure interaction between the users, researchers and climate services providers in Africa through User Interface Platform;
- Secure and guarantee provision of continental climate services with stronger CSIS;
- Improve access to data, products and services
- Enhance capacity of Africa to generate and apply climate information;
- Mainstream climate services in sectors decisions, policies and plans

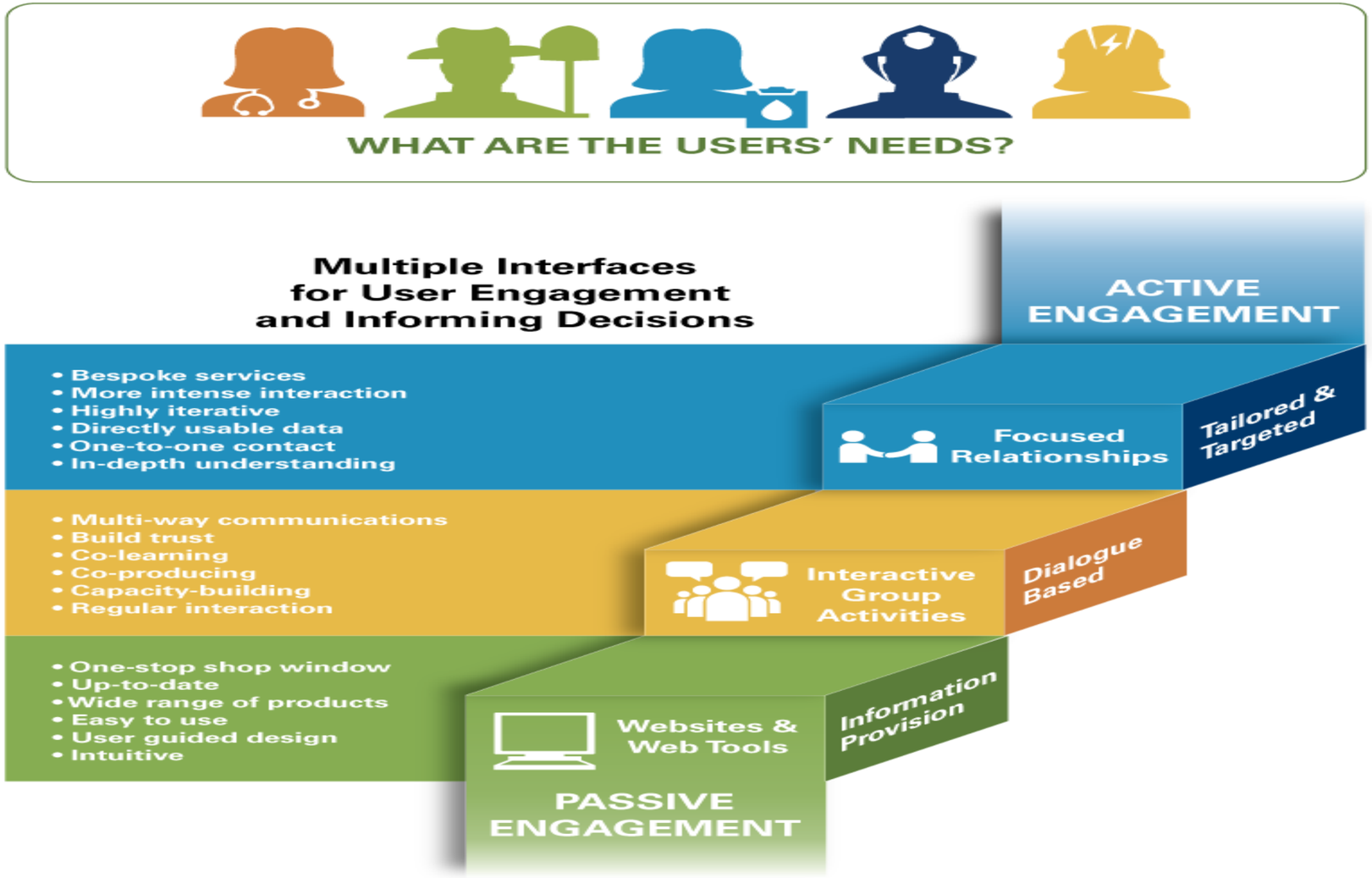
02 Status of Key Outputs

Extreme events are triggered by the interaction of processes acting at different spatio-temporal scales from large-scale dynamics of the climate system to mesoscale mechanisms. Therefore, Forecasting extremes weather often requires climate monitoring and forecasting competencies (e.g S2S forecasting capabilities)

2.1 Output 1: User Interface Platform (UIP) at ACMAD

UIPs provide knowledge management frameworks, engage users and strengthen partnerships with specific user sectors

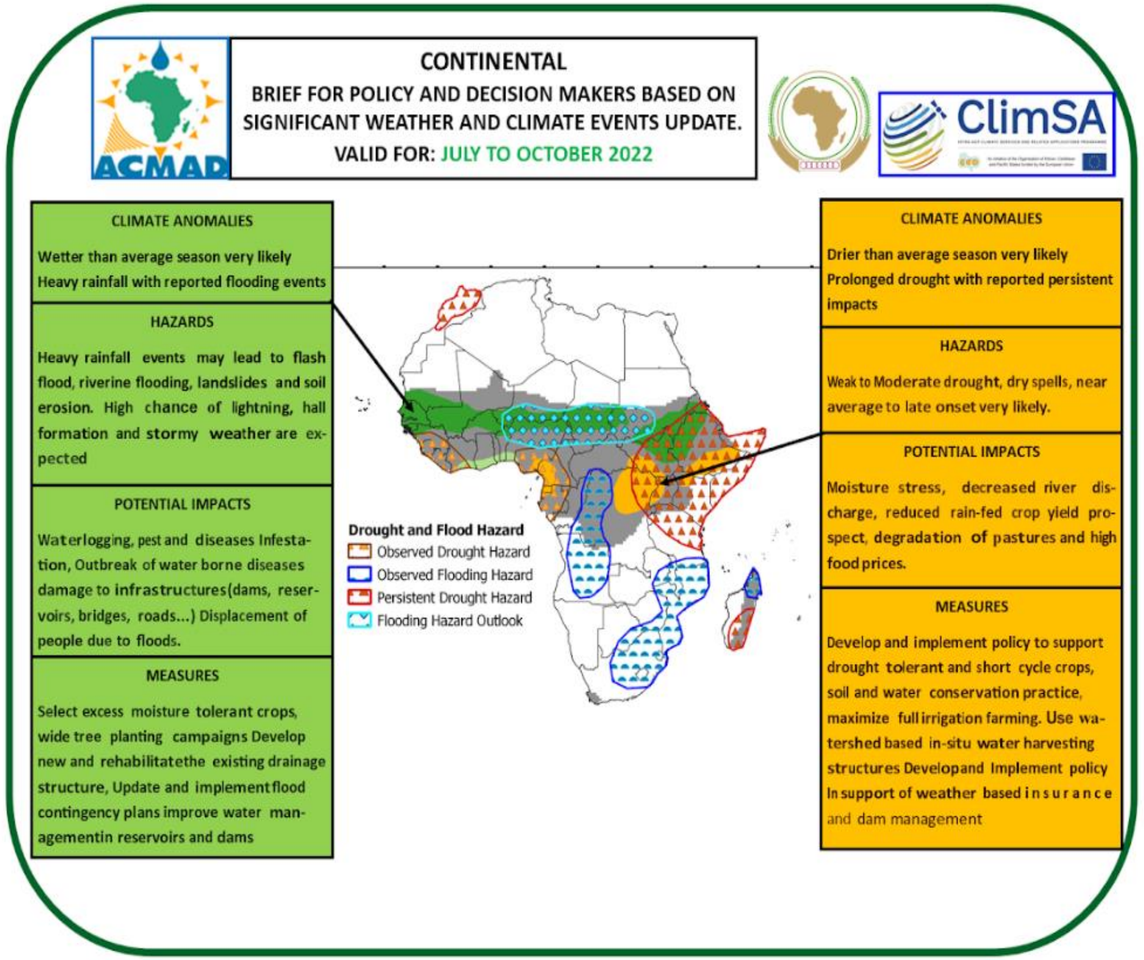
-intermediation
- Internalization
-Externalization
-Cognition

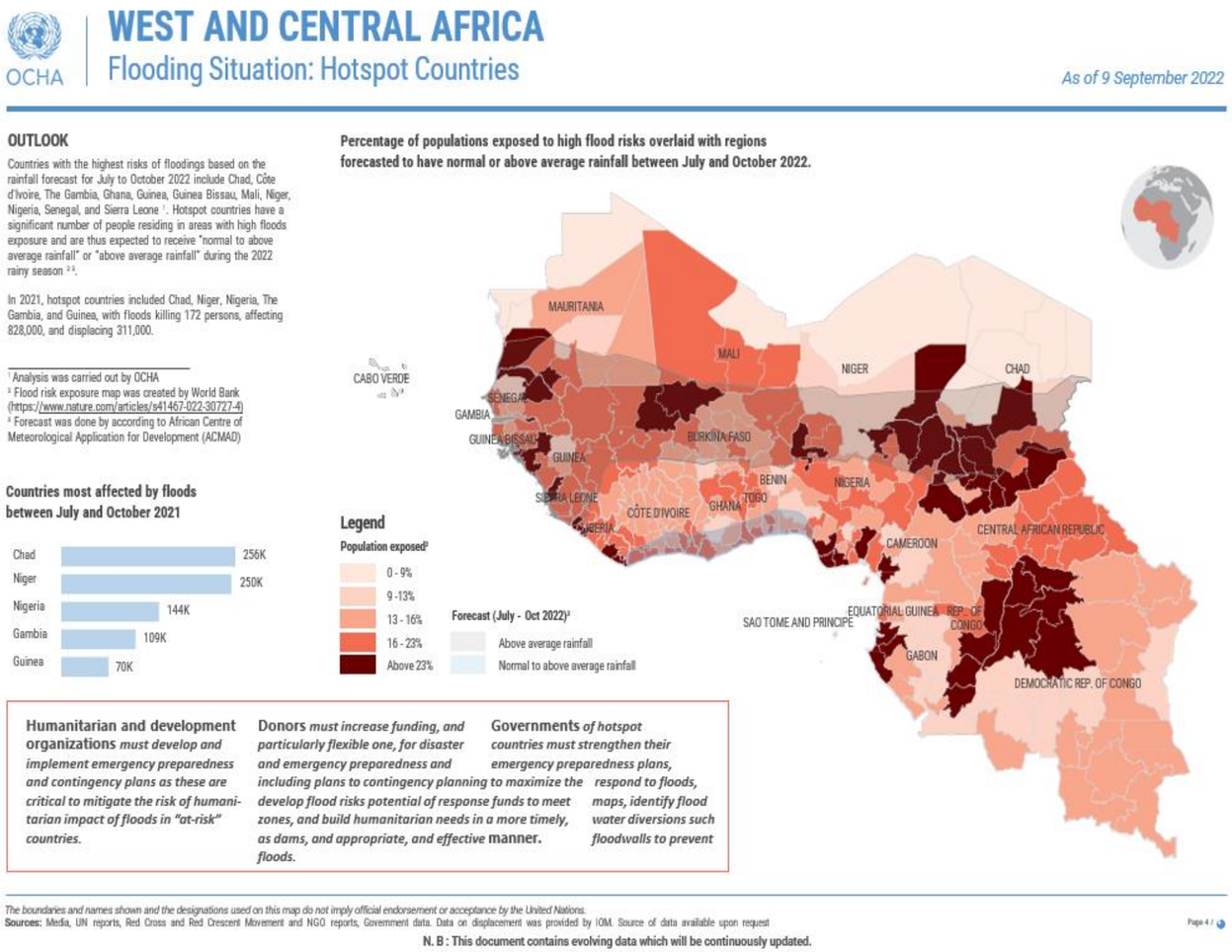


2.1 Output 1: User Interface Platform (UIP) at ACMAD

PRODUCTS TO OPERATE USER INTERFACE PLATFORM

DRR USER INTERFACE OPERATIONAL SERVICE FOR UNOCHA EMERGENCY RESPONSE AND ANTICIPATORY ACTION PLANNING

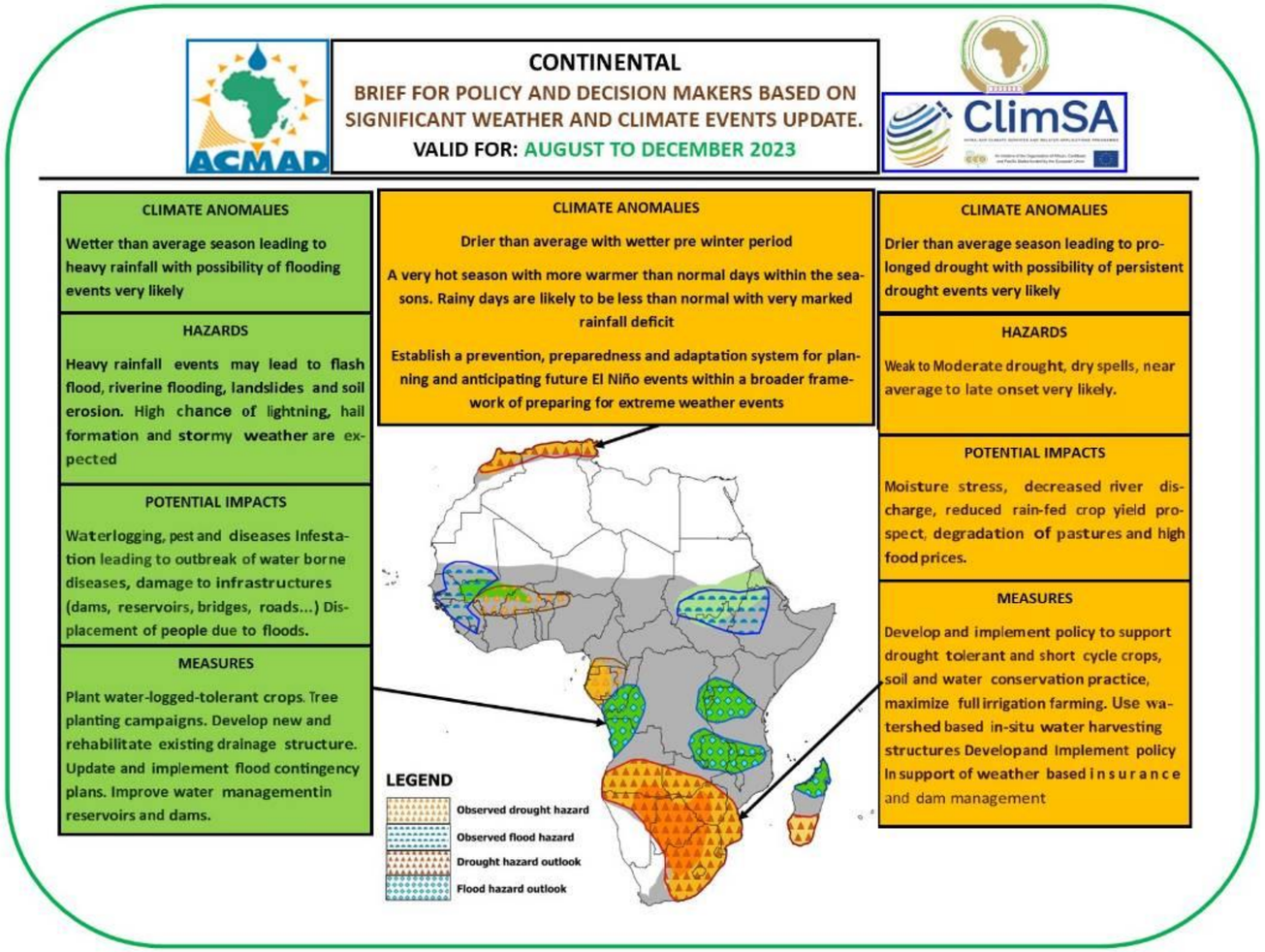




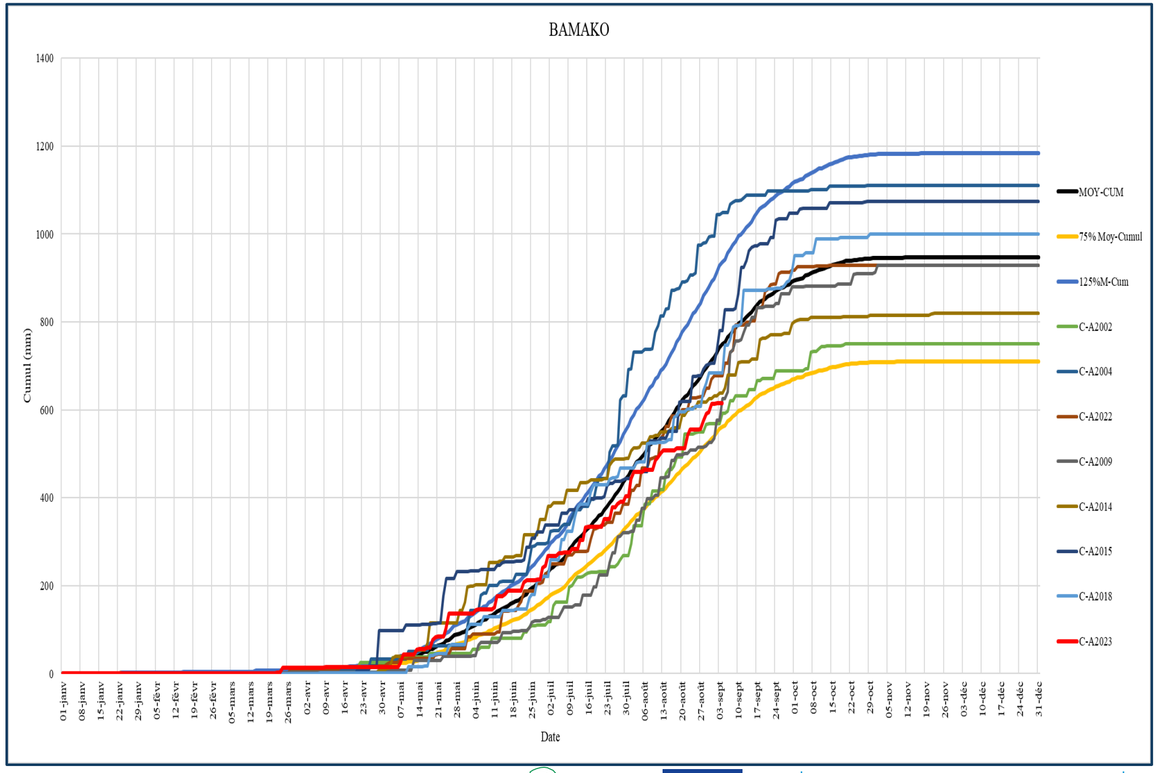
2.1 African Continental Climate Outlook Forum

2.1 African Continental Climate Outlook Forum

BRIEF FOR POLICY AND DECISION MAKERS



- ✓ Harmonize and consolidate methods, tools and products ;
- ✓ Provide monthly continental hazards outlooks, potential impacts and proposed Anticipatory Actions



2.1 User Interface Platforms Established and Operationalization in progress

African Continental User Interface Platform

Agriculture UIP | Health UIP | Water UIP | DRR UIP

African Continental User Interface for the Agriculture Sector

- Term of reference
- Rules of procedure
- Composition of the platform
- Meetings and Workshops
- Programmes, Products and Services

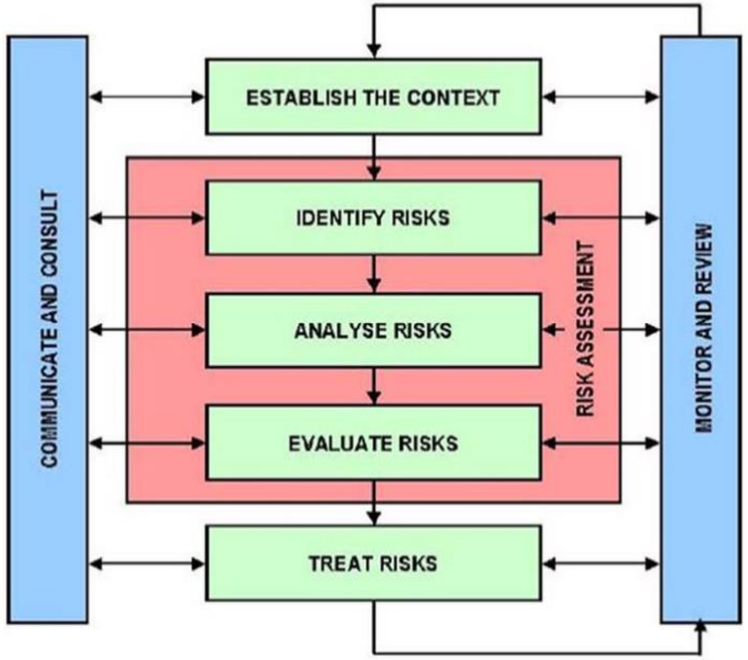


Figure 2. ISO 31000.

2.1 UIP AGRICULTURE

-AGRICULTURE SECTOR

Risk causes:

Floods, drought, High and low temperature, spells, disruptions of start and end of season, strong winds and thunderstorms, hailstorms

Products and services

Seasonal total precipitation and temperature outlooks

Start and end of season, dry and wet spells monitoring and outlooks

Advices for land preparation, sowing, fertilizer spray, weed control and management, harvesting, crop conservation, optimal crop varieties for agro climatic zones

Warnings and Alerts for pests and diseases

Activities

- Analysis climate information needs along the agriculture value chain, share bespoke impact based climate monitoring and forecasting information, advices, Climate risk assessment along the value chain for each commodity
- Prepare advices for farmers , herders, fishermen and other stakeholders of the value chain;
- Estimation of food production and advices for agriculture products conservation
- Estimation of demand and supply in agriculture commodity markets
- Management of agriculture commodity conservation and market prices
- Update , tailor and share bespoke climate information among agriculture stakeholders, monitoring and evaluation of activities

Rules of procedures

Chair Elected from the PAFO members: Secretariat: ACMAD, frequency of meetings: twice a year ahead of major agriculture seasons and ad hoc

Risk Event	Risk Cause(s)	Example Impacts	Significant Consequences?	Plausible by 2050?
caused by 0.5 m of SLR by 2050)				
Ocean acidification (Scenario: 0.15 reduction in pH by 2050)	• Higher temperatures • Higher atmospheric carbon dioxide concentrations	• Reduced shellfish productivity	✓ Psychological impacts ✓ Natural resources ✓ Economic vitality ✓ Cost to provincial government	Y
Increase in invasive species (Scenario: Expansion of knotweed by 2050)	• Multiple causes (temperature and precipitation changes)	• Ecosystem disruption • Increased control costs • Disruption to infrastructure services	✓ Natural resources ✓ Economic vitality ✓ Infrastructure services ✓ Cost to provincial government	Y
Reduction in ecosystem connectivity (Scenario: Reduction in ecosystem connectivity in the Okanagan-Kettle region by 2050)	• Multiple causes including wildfires, flooding, and ecosystem shifts	• Loss of natural resources, ecological integrity • Reduction in species resiliency to adapt • Loss of species altogether	✓ Natural resources ✓ Economic vitality	Y
Loss of forest resources (Scenario: 25% decline in timber growing stock by 2050)	• Multiple causes (temperature and precipitation changes)	• Ecosystem disruption • Economic disruption and loss of livelihoods	✓ Cultural resources ✓ Natural resources ✓ Economic vitality	Y
Glacier mass loss (Scenario: 25% decline in glacier area by 2050)	• Higher temperatures	• Water shortages • Changes in aquatic ecosystems and species	✓ Natural resources ✓ Economic vitality	Y
Long-term water shortages (Scenario: Multi-year water shortage in at least one region by 2050)	• Change in seasonal precipitation patterns year on year (or multi-year)	• Decline in drinking water quality and quantity • Crop stress • Economic shifts	✓ Psychological impacts ✓ Social cohesion ✓ Economic vitality (agriculture) ✓ Infrastructure services ✓ Cost to provincial government	Y

2.1 UIP DRR with a sub-sector on Infrastructure

-DRR SECTOR

Risk causes:

Floods, drought, Heat waves, spells, strong winds and storms, disruptions of start and end of season, landslide

Products and services

Impact based Forecasts for Anticipatory Action formulation
Outlooks, Advisories, Watches and **Warning (at national level**)
Risk based warnings, alerts

Activities

- Risk assessments , awareness raising on hazards, impacts, risks and mitigation measures
- Support for Establishment of MHEWS
- Update of emergency preparedness and responses measures
- Meteorological assistance for post disaster needs assessments
- Meteorological assistance for early response and rehabilitation
- Share advisories, watches, outlooks, warnings and alerts
- Train DRR experts on interpretation and use of climate services, train climate services providers for understanding of DRR decision systems and related climate information needs
- Monitor and evaluate activities above

Rules of procedures

Chair AUC: Secretariat: ACMAD frequency of meetings: twice a year if possible back to back with the African WG on DRR

2.1 Output 1: Adaptation or Anticipatory Actions from interactions In the UIP Agriculture

Adaptation addressing agriculture sector impacts takes a wide range of forms that include:

- planting drought-tolerant crops (need drought monitoring and outlook information);
- early/late planting (need monitoring and forecasts of disruptions on the start of agriculture season);
- crop diversification (need climate outlook for total seasonal rainfall above given threshold for crop type);
- rainwater harvesting (monitoring and forecasting of drought and/or high temperatures);
- market responses such as income diversification and credit schemes (climate monitoring and outlook for extremes) ;
- developing meteorological forecasting capability (Hazards and impact outlooks) ;
- improving livelihoods (hazards and impacts outlooks)

2.1 Output 1: IMPACT BASED FORECASTS PROTOTYPE FROM INTERACTIONS WITH UIPs

IMPACT BASED INFORMATION (from Bulletin of the American Meteorological Society) – THIS IS WHAT WE WANT IN THE MEDIUM TO LONG TERM

Example of Impact based forecasting with

Climate phenomenon – Hazards (location, severity) – potential impacts – consequences- preparation and response- BAMS June 2021

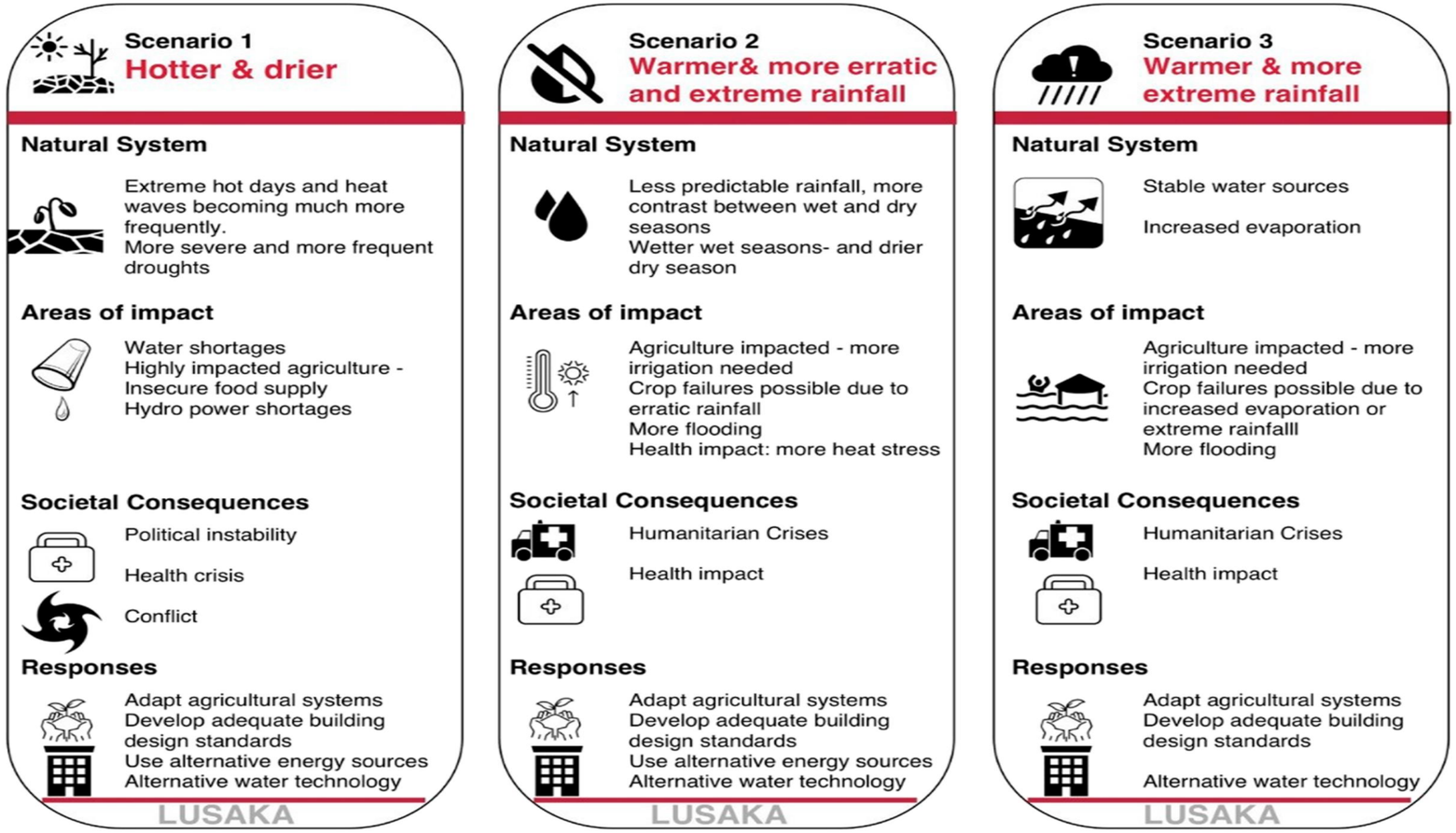


Fig. 5. Infographic summarizing three plausible future climate scenarios for Lusaka along with some key impacts, possible societal consequences, and responses.

1- Time series analysis of Climate variability (seasonal and annual cycles, interannual/interdecadal variability) and trends

2- Composite analysis

3- Analogue Analysis

4- Linear regression, principal component, canonical correlation analysis

5- Teleconnections analysis(i,e ENSO, AMO, IOD, SIOD, Atlantic Dipole, NAO, AO,, SAM, Benguela Nino, Mediterranean SSTAs)

6- Interactions analysis between seasons (summer and following winter) and regions for the same target season (i.e summer African monsoon and Atlantic cyclone activity,)

7- Single Model Ensemble Analysis (i,e ECMWF, NCEP, UKMET,,,)

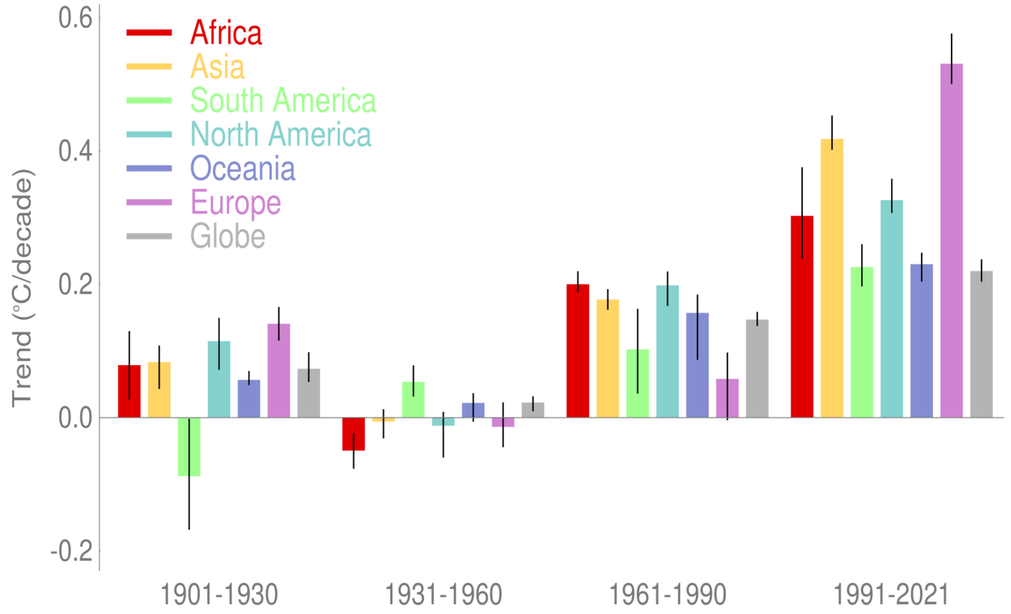
8- Multimodel Ensemble Analysis (Iie MME, Copernicus, IRI,,,)

9- Consolidation and consensus Analysis

2.2 Output 2: Continental and Regional support Services at ACMAD

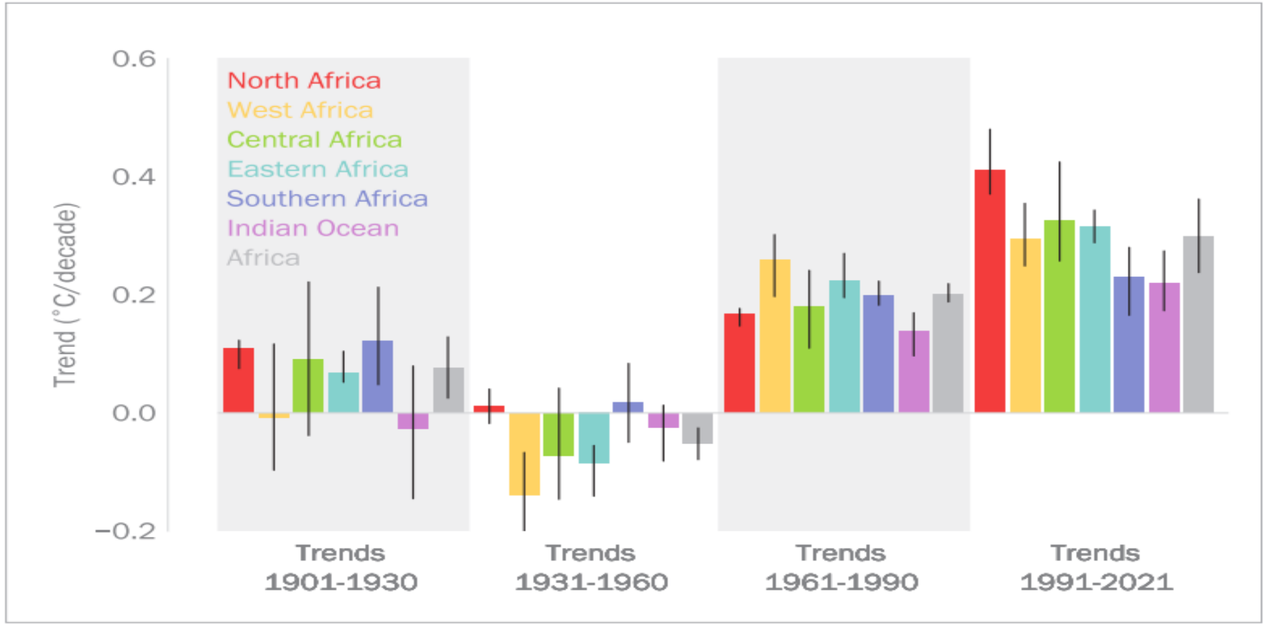
State of climate report for Africa

Warming trends for continents. The warming rate reached 3˚C per century during the recent few decades higher than the global average.



Warming rates up to 4˚C per century for North Africa.

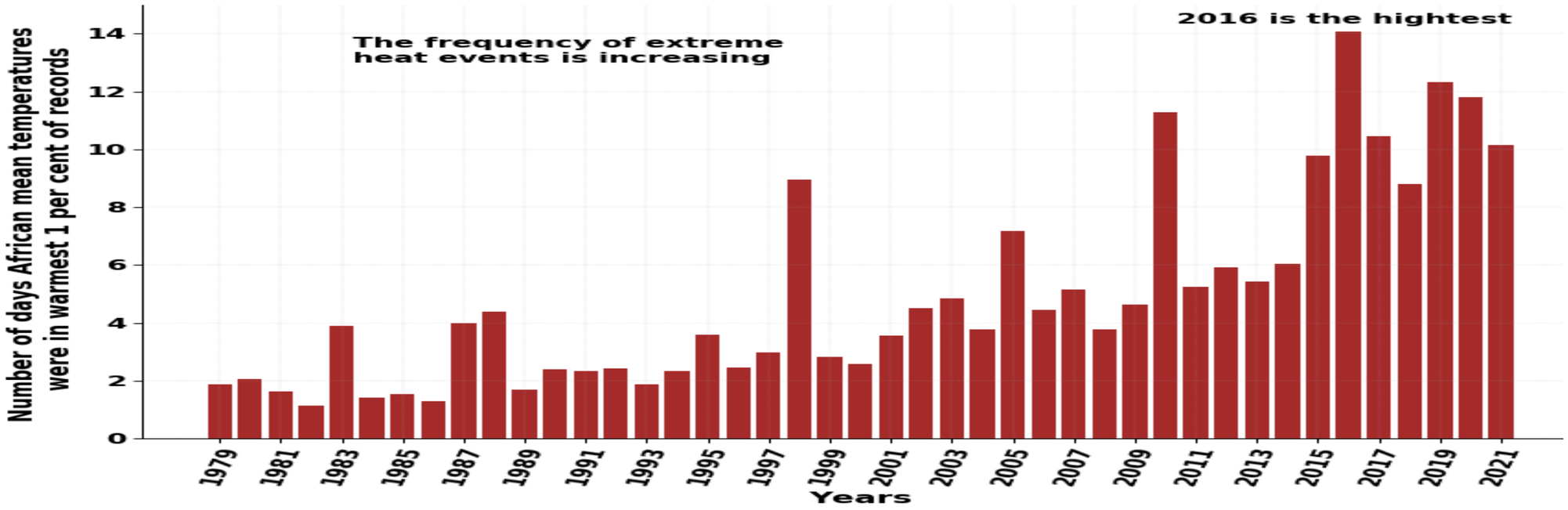
Advice: consider combating high temperatures, heat waves and wild fires as priority in NDCs updates



2.2 Output 2: Continental and Regional support Services at ACMAD

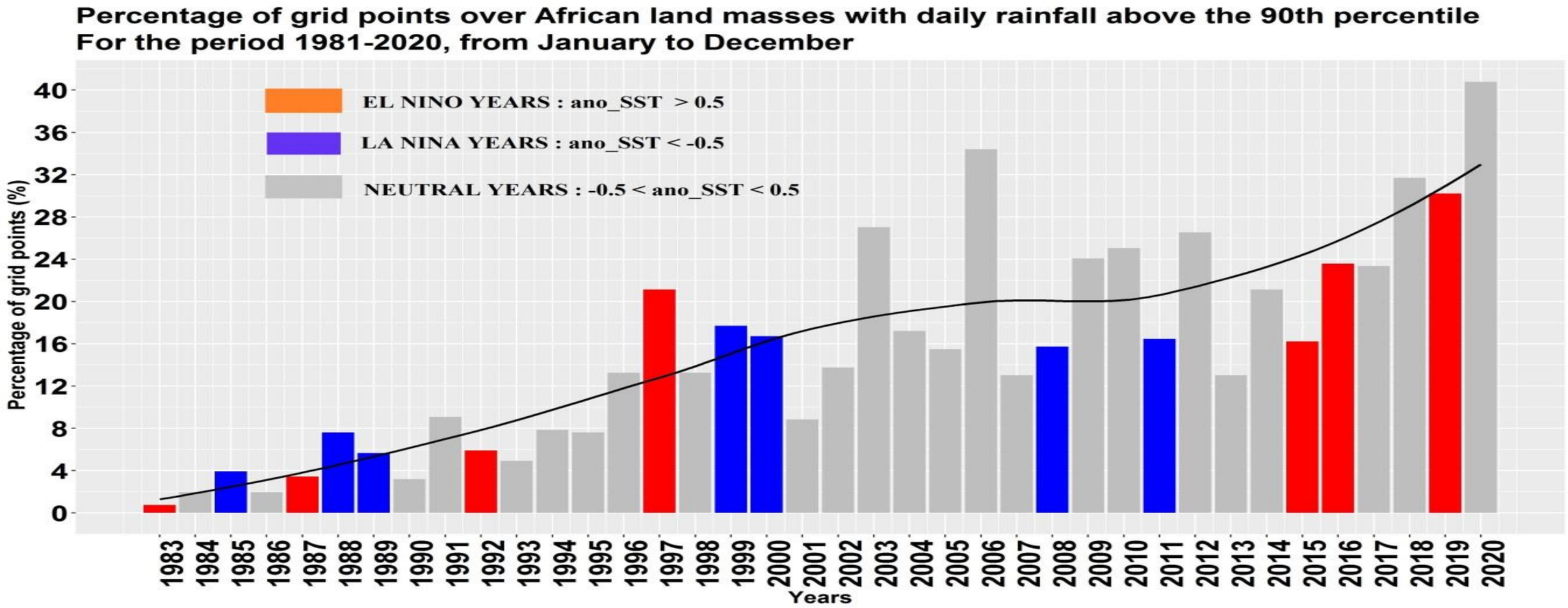
State of climate report for Africa

Trends on number of extremely warm days across Africa, 3 times higher today compared to 40years ago. High temperatures and heat waves with wild fires are priority hazards for Africa



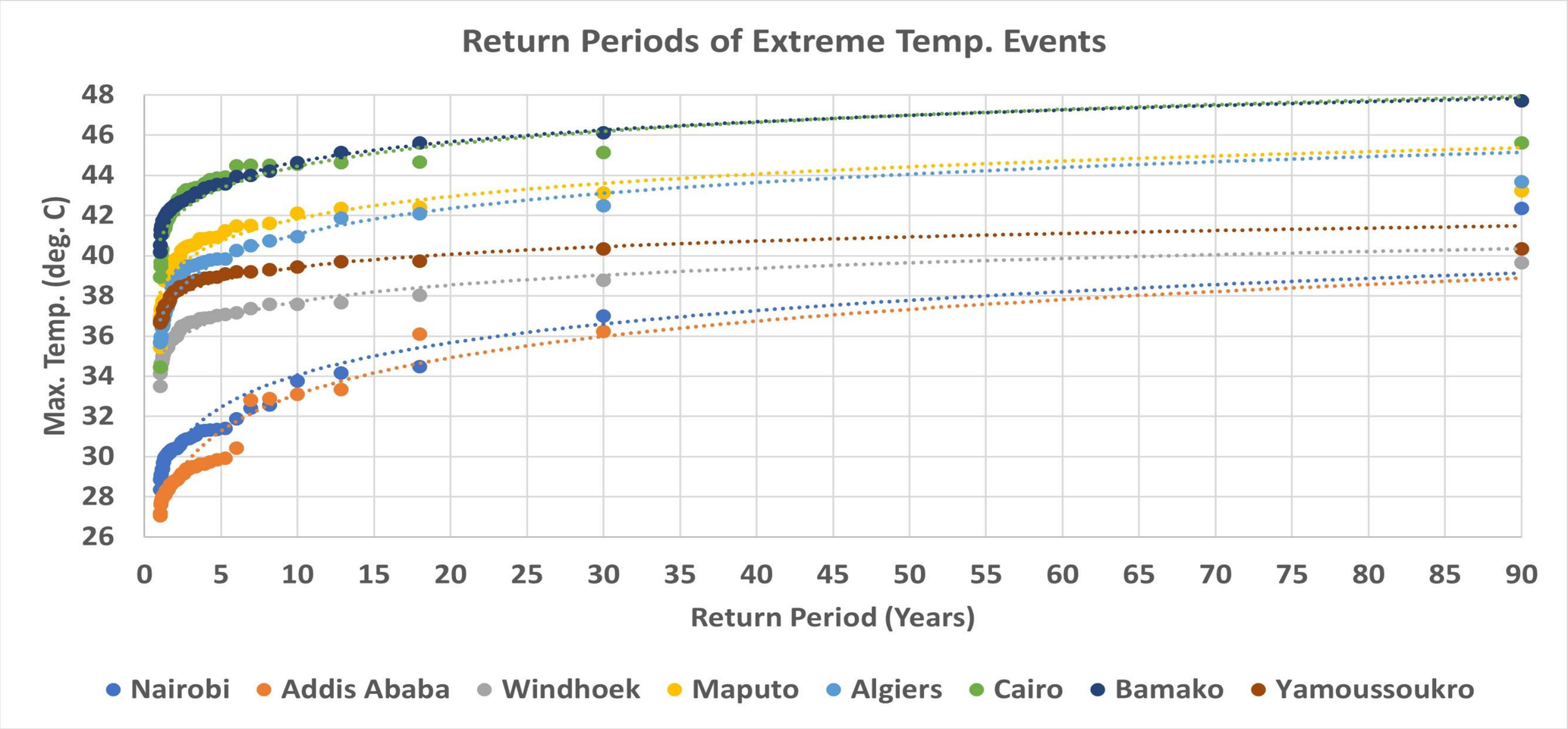
2.2 Output 2: Continental and Regional support Services at ACMAD – State of Climate Report for Africa

Trends on the land surface hit by heavy rainfall. <u>Heavy rains and floods are additional priority hazards for NDCs updates in Africa</u>



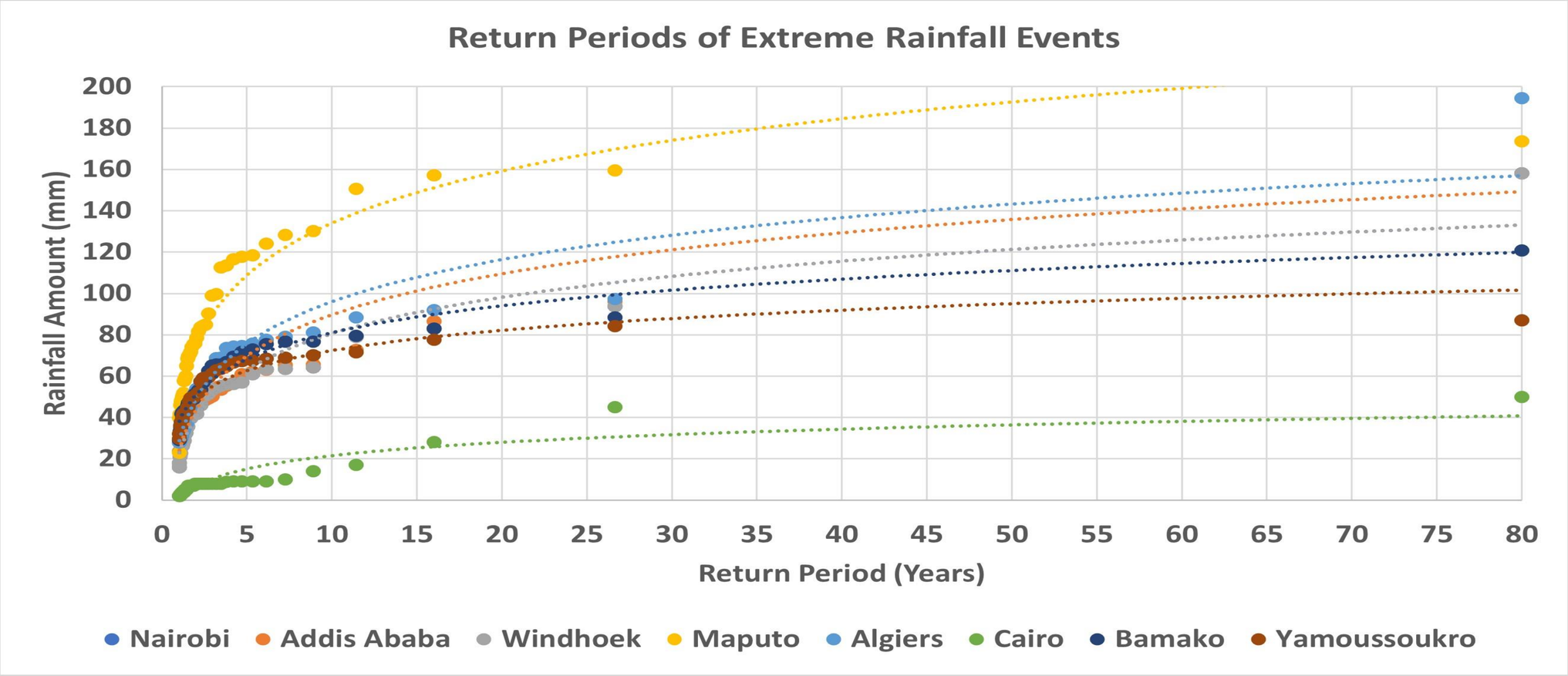
2.2 Output 2: Continental and Regional support Services at ACMAD – Actionable Climate indicators for resilient infrastructure design

Early warning for high temperatures, and wildfires urgent in North Africa (Cairo) and Sahel (Bamako)

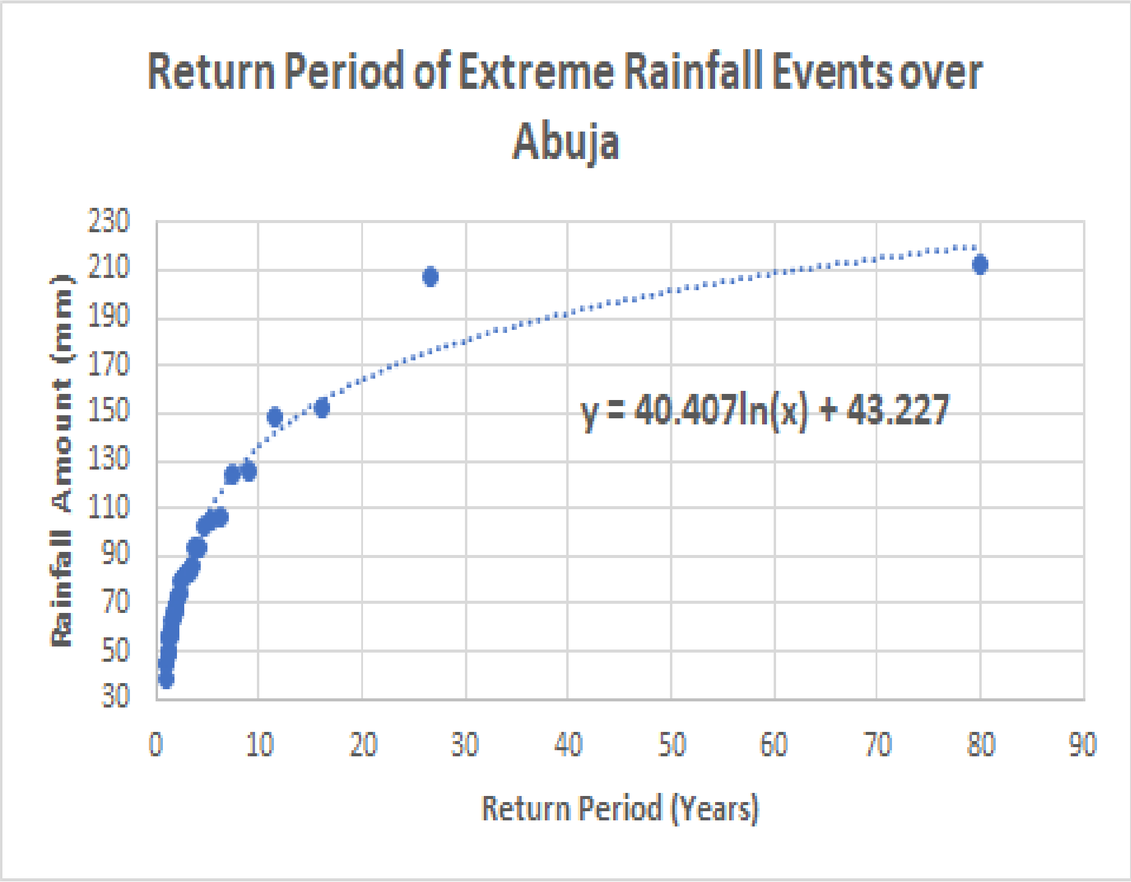


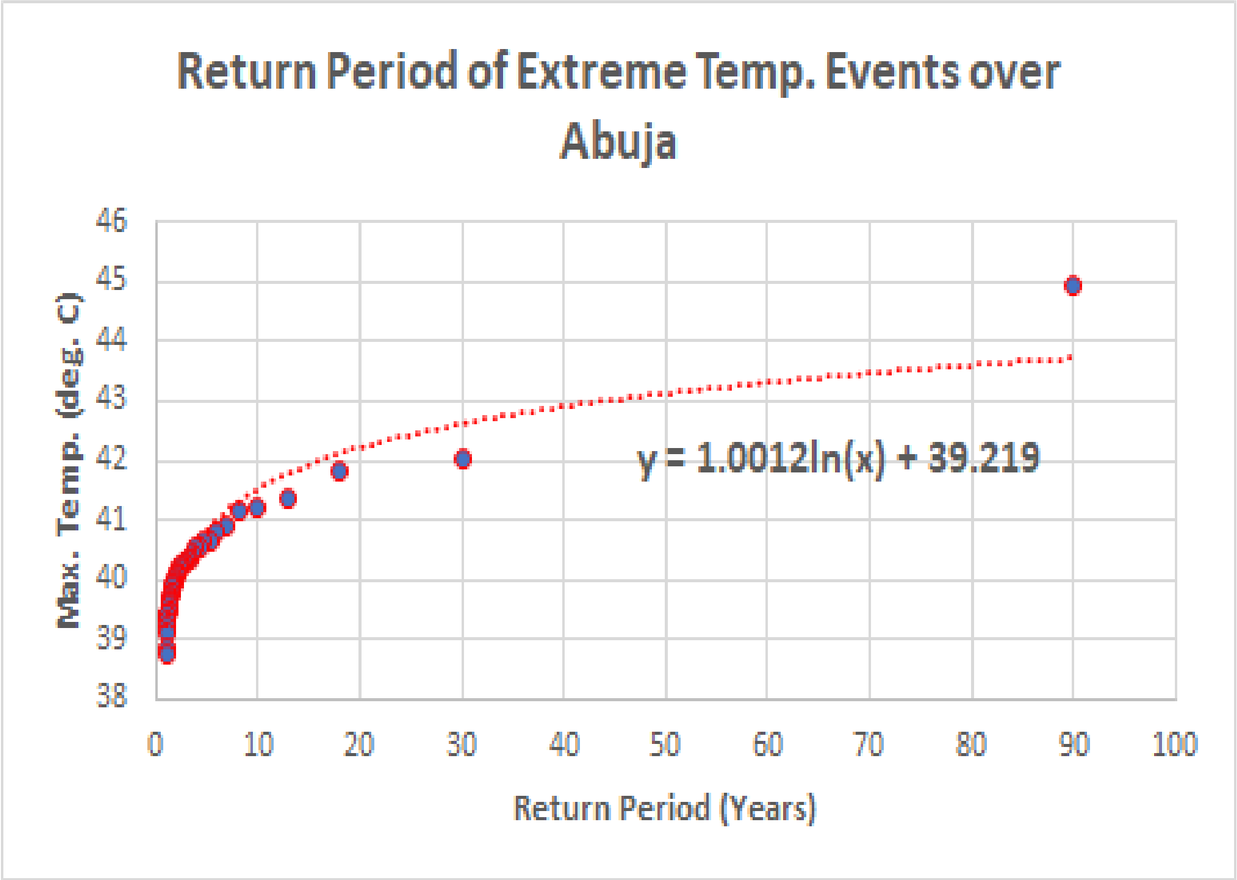
2.2 Output 2: Continental and Regional support Services at ACMAD

Only Cairo is not highly vulnerable to heavy rains and floods

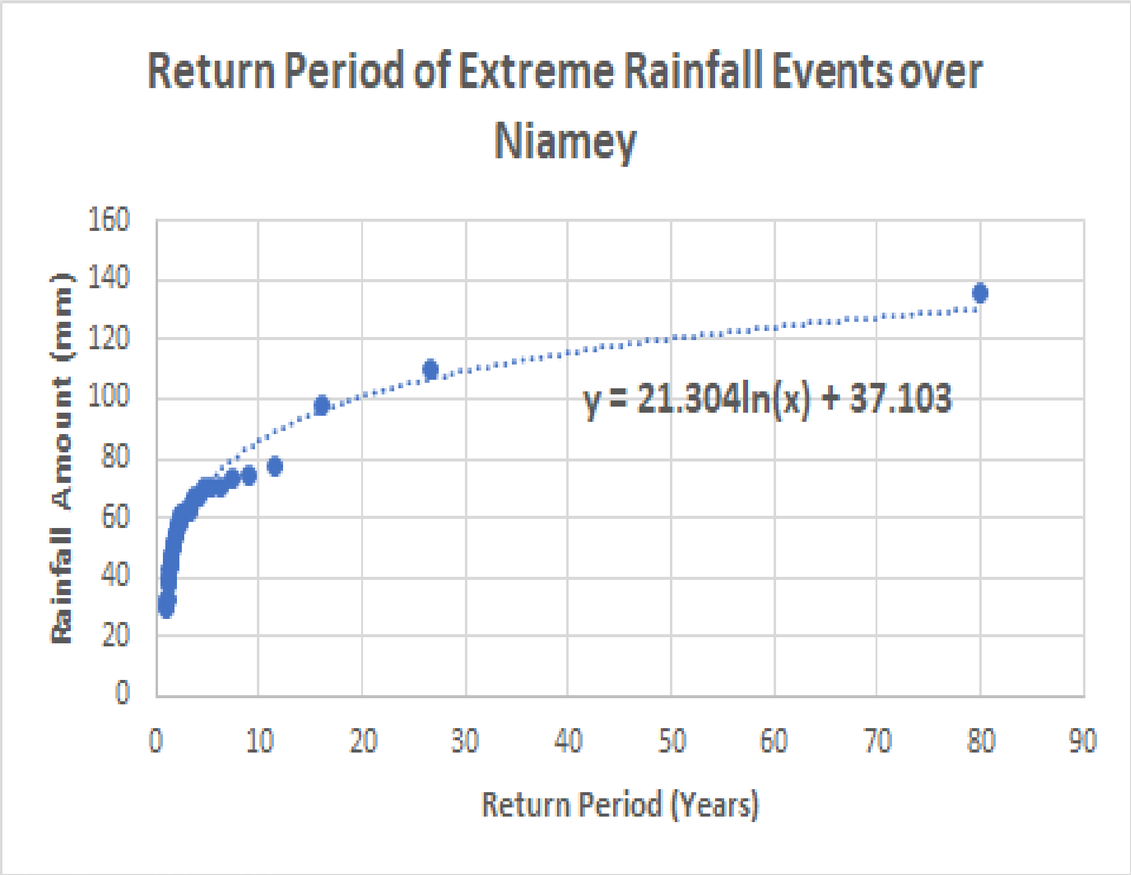


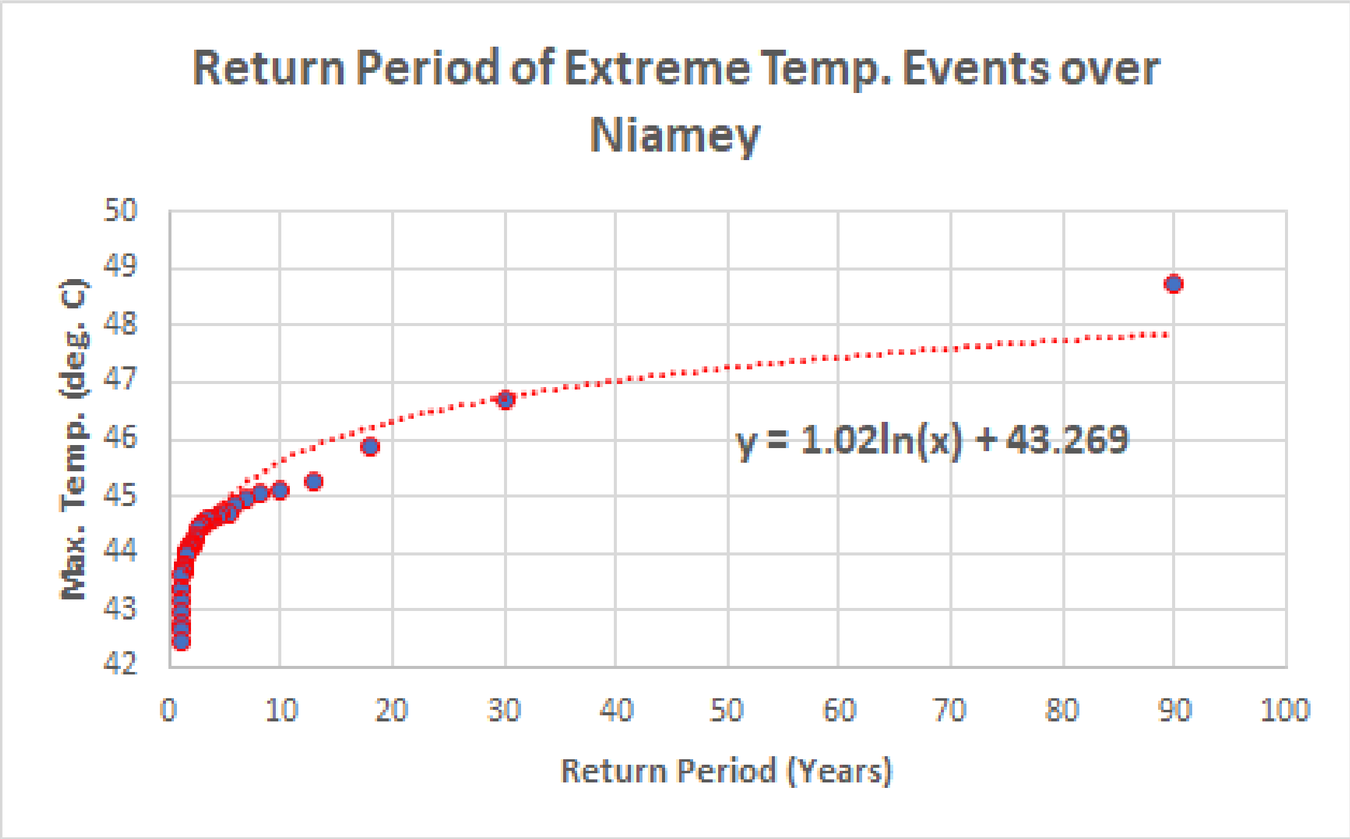
DESIGN INFRASTRUCTURE WITH EXTREME RETURN PERIOD – PROTOTYPE SERVICE





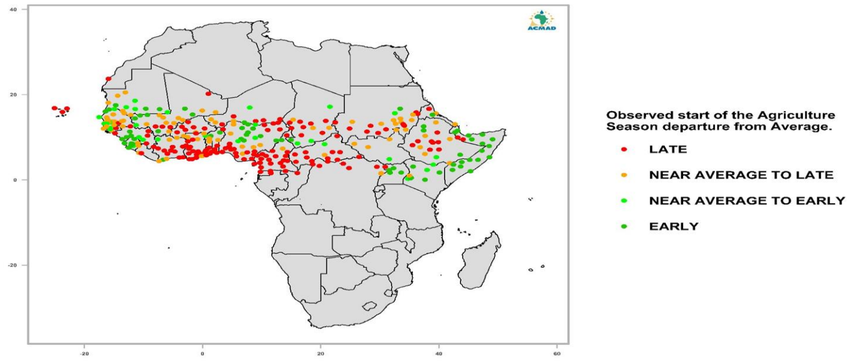
Best practices- DESIGN INFRASTRUCTURE WITH EXTREME RETURN PERIOD – PROTOTYPE SERVICE





2.2 Output 2: Disruptions on the start of the Agriculture season Product being made available on digital platforms and developed at high resolution by agromet sections of NMHSs

START OF THE AGRICULTURE SEASON FROM JANUARY TO JULY IN 2020
OVER SUB-SAHARAN AFRICA.



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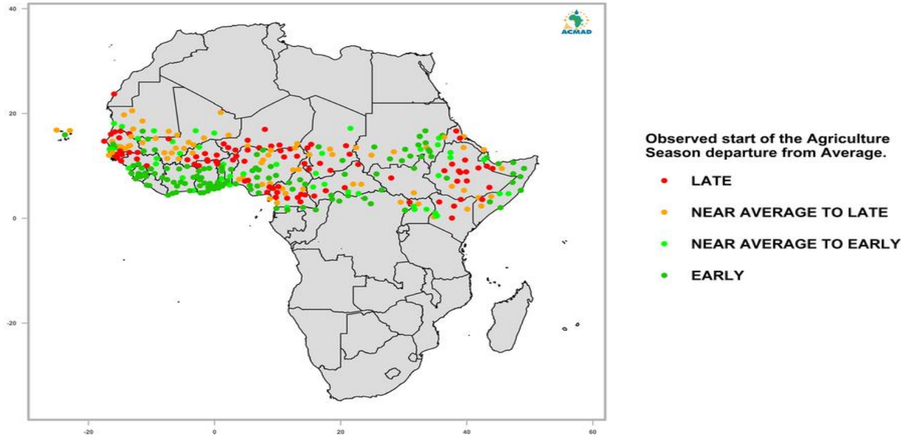
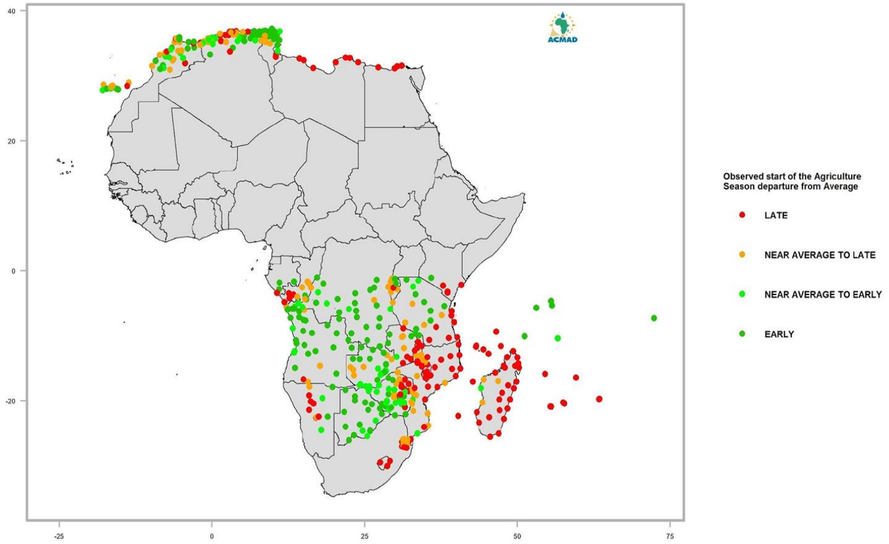


START OF THE AGRICULTURE SEASON FROM JULY TO DECEMBRER IN 2020
OVER SOUTHERN AND NORTHERN AFRICA.



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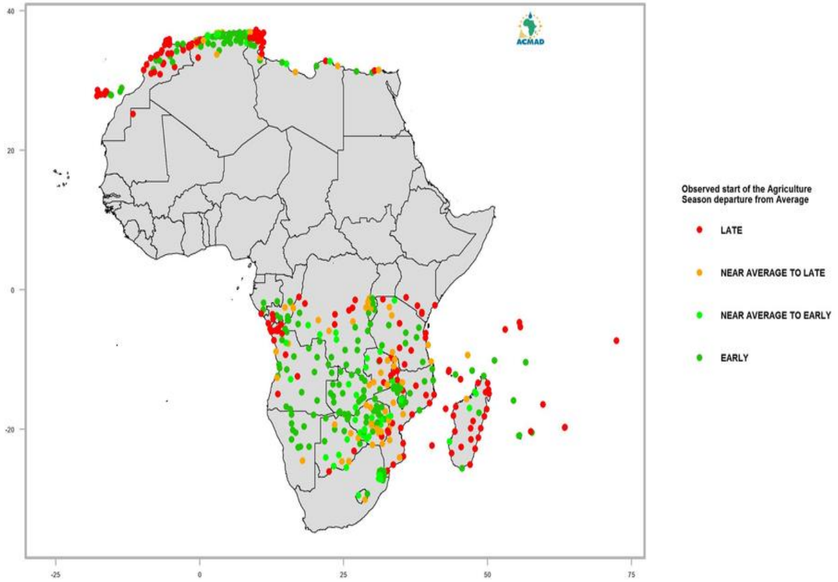
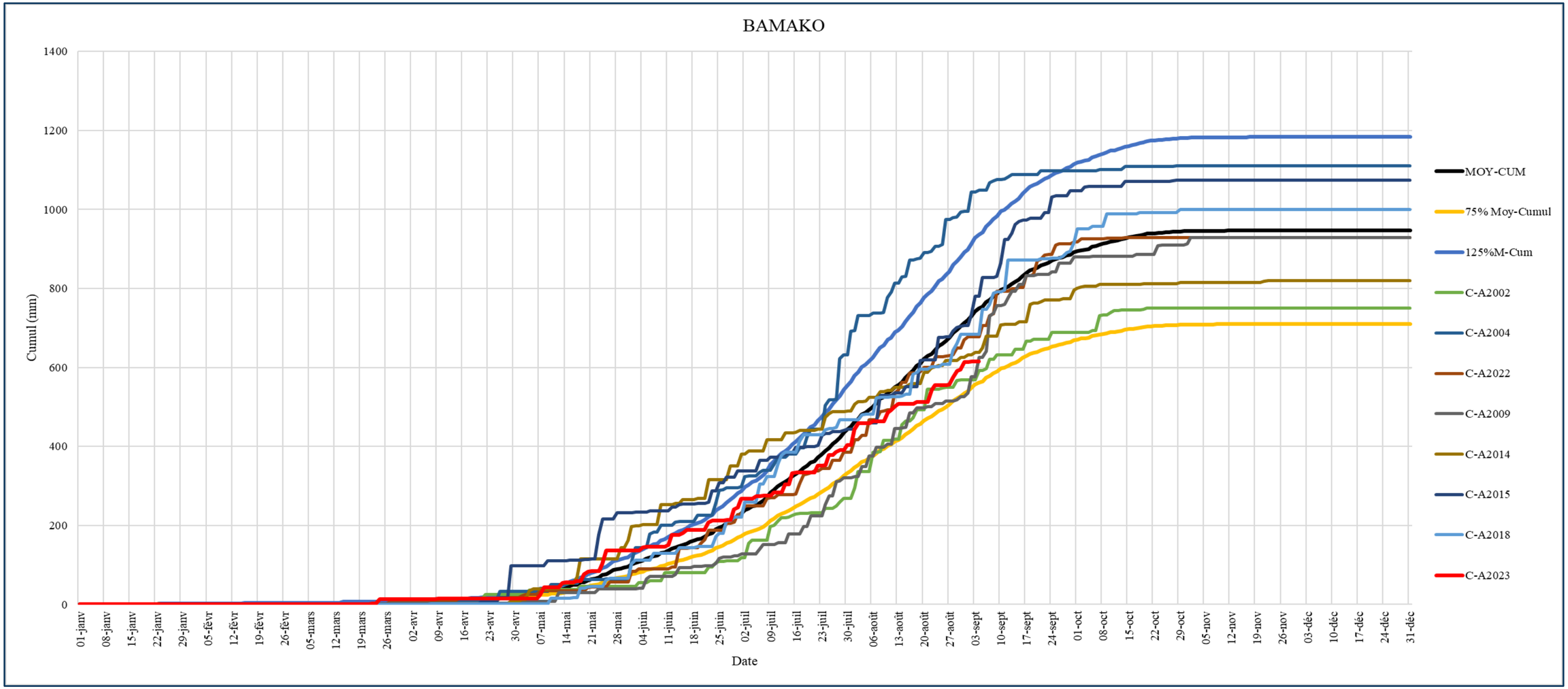


2.2 Output 2: Continental and Regional support Services at ACMAD

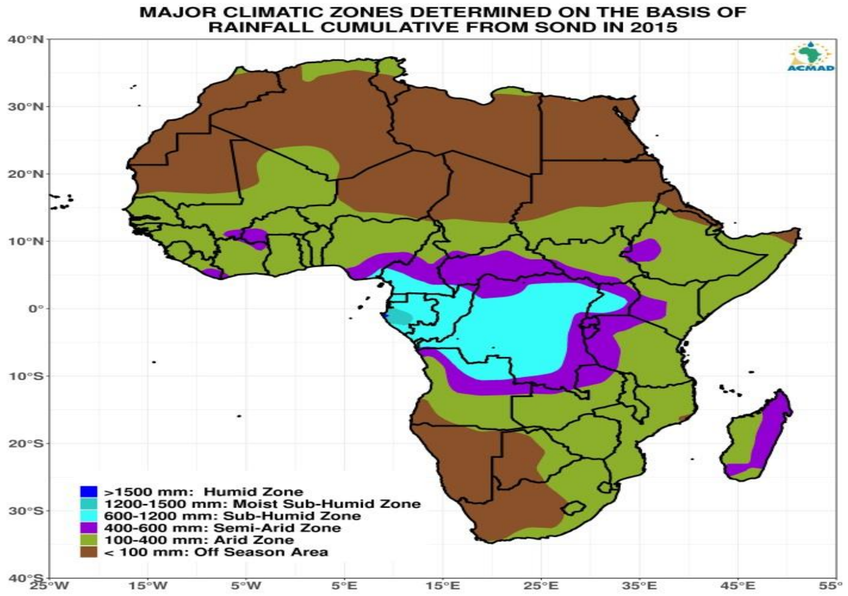
Update seasonal forecast at local level – Bamako expected to be near to below average with dry spell in July-august 2023

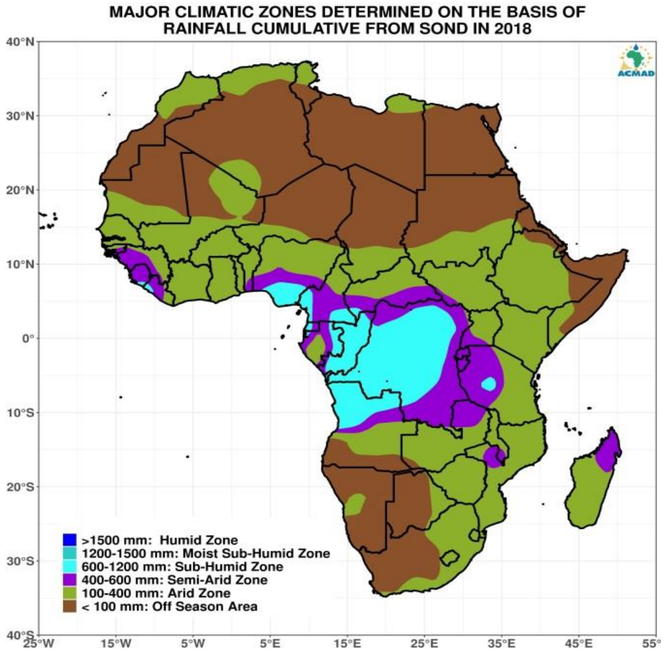
To improve interpretation and use of regional products, ad hoc briefings and dialogues are essential and should be promoted between regional centers, NMHS and stakeholders of the agriculture , water , Health and DRR sectors .

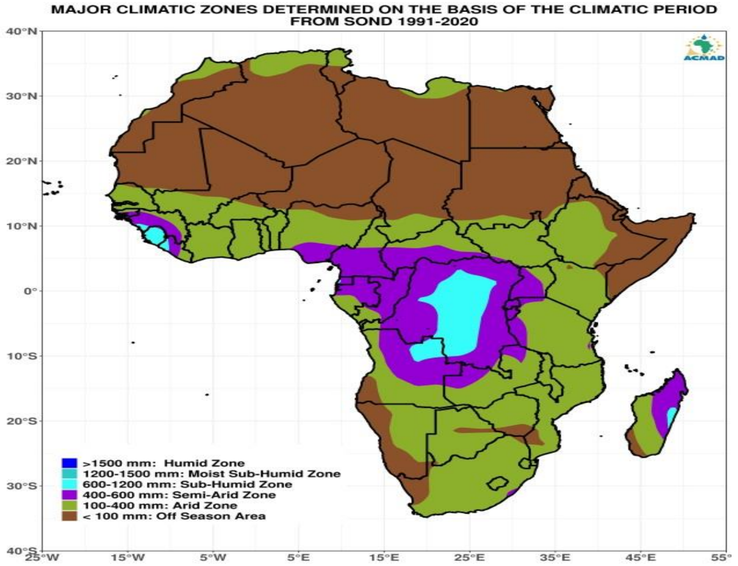
Challenge : Acceleration of establishment and operationalization of UIPs from continental to local scales



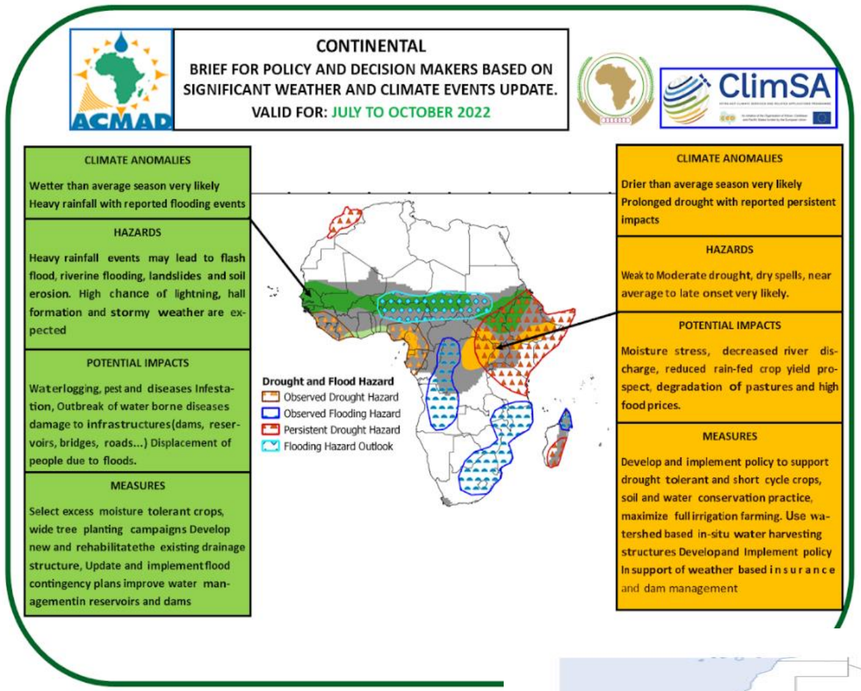
2.2 Output 2: Actionable indicator: Extend of African land masses hit by drought in El Nino years for the SOND season

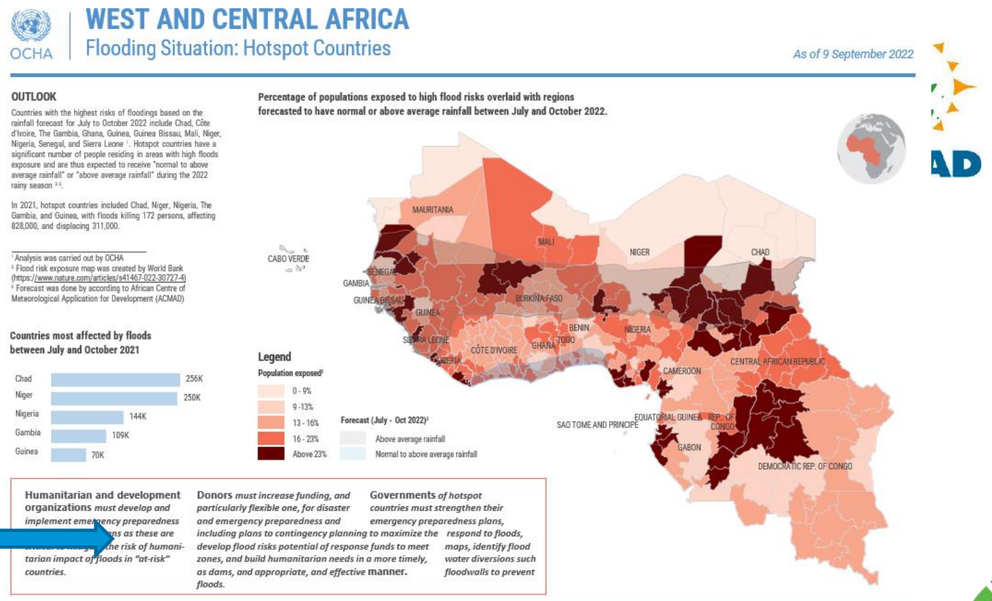






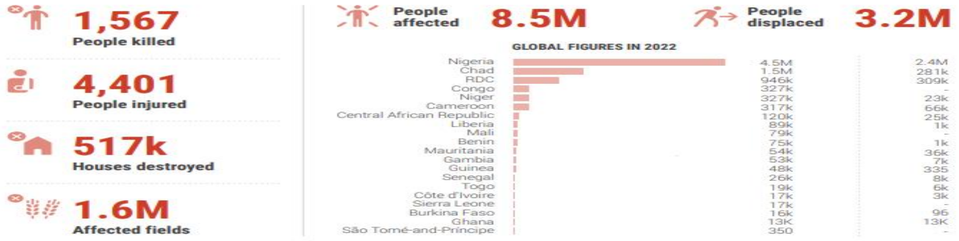
2.2 Output 2: Continental and Regional support Services at ACMAD





IMPACT BASED FORECAST-ACTIONALBLE INDICATORS

ACMAD-UNOCHA West and Central Africa office



2.2 Output 2: Continental and Regional support Services at ACMAD

IMPACT FORECASTING OF POPULATION EXPECTED TO BE AFFECTED BY HEAVY RAINS OR FLOODS

CONTINENTAL

BRIEF FOR POLICY AND DECISION MAKERS BASED ON SIGNIFICANT WEATHER AND CLIMATE EVENTS UPDATE.

VALID FOR: JULY TO OCTOBER 2022

CLIMATE ANOMALIES

Wetter than average season very likely
Heavy rainfall with reported flooding events

HAZARDS

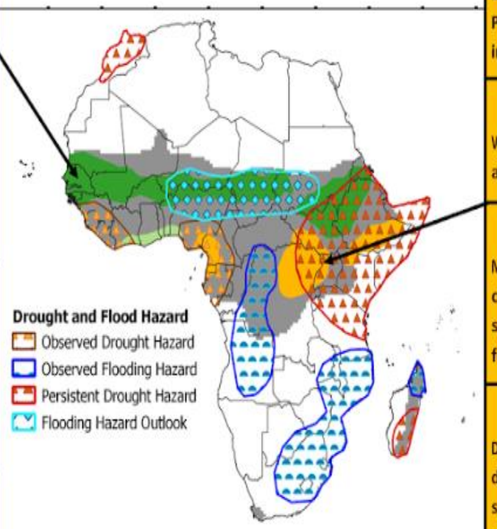
Heavy rainfall events may lead to flash flood, riverine flooding, landslides and soil erosion. High chance of lightning, hall formation and stormy weather are expected

POTENTIAL IMPACTS

Waterlogging, pest and diseases Infestation, Outbreak of water borne diseases damage to infrastructures(dams, reservoirs, bridges, roads...) Displacement of people due to floods.

MEASURES

Select excess moisture tolerant crops, wide tree planting campaigns Develop new and rehabilitatethe existing drainage structure, Update and implementflood contingency plans improve water managementin reservoirs and dams



CLIMATE ANOMALIES

Drier than average season very likely
Prolonged drought with reported persistent impacts

HAZARDS

Weak to Moderate drought, dry spells, near average to late onset very likely.

POTENTIAL IMPACTS

Moisture stress, decreased river discharge, reduced rain-fed crop yield prospect, degradation of pastures and high food prices.

MEASURES

Develop and implement policy to support drought tolerant and short cycle crops, soil and water conservation practice, maximize full irrigation farming. Use watershed based in-situ water harvesting structures Developand Implement policy In support of weather based insurance and dam management

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OCHA

WEST AND CENTRAL AFRICA
Flooding Situation: Hotspot Countries

As of 9 September 2022

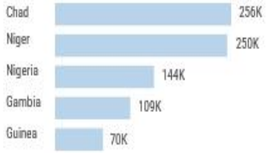
OUTLOOK

Countries with the highest risks of floodings based on the rainfall forecast for July to October 2022 include Chad, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Mali, Niger, Nigeria, Senegal, and Sierra Leone [1]. Hotspot countries have a significant number of people residing in areas with high floods exposure and are thus expected to receive "normal to above average rainfall" or "above average rainfall" during the 2022 rainy season [2 3].

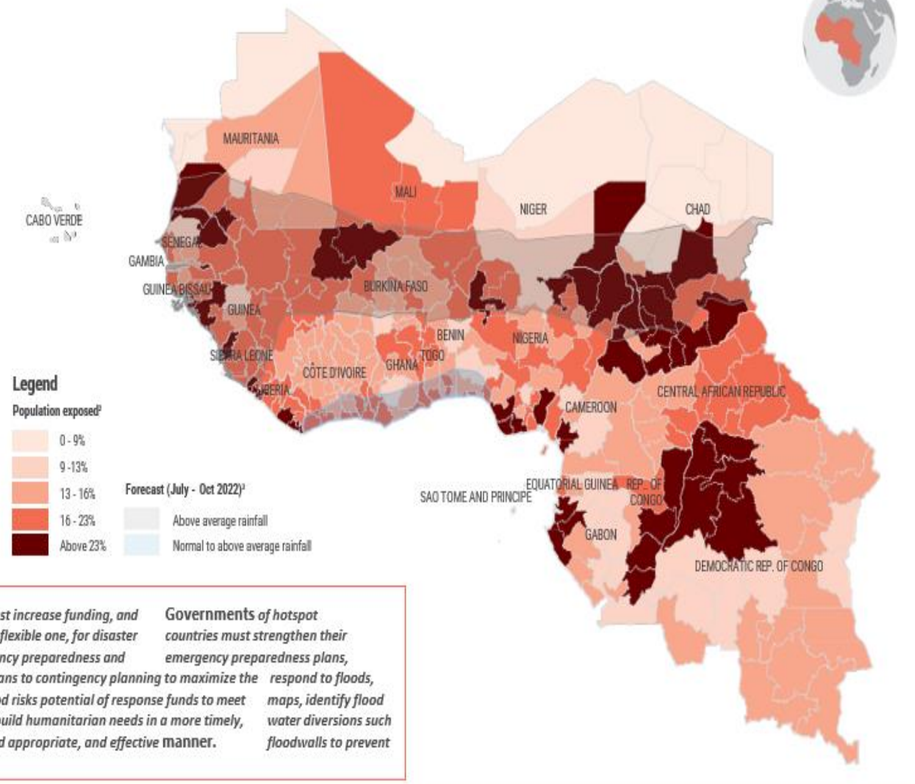
In 2021, hotspot countries included Chad, Niger, Nigeria, The Gambia, and Guinea, with floods killing 172 persons, affecting 828,000, and displacing 311,000.

[1] Analysis was carried out by OCHA
[2] Flood risk exposure map was created by World Bank (https://www.nature.com/articles/s41467-022-30727-4)
[3] Forecast was done by according to African Centre of Meteorological Application for Development (ACMAD)

Countries most affected by floods between July and October 2021



Percentage of populations exposed to high flood risks overlaid with regions forecasted to have normal or above average rainfall between July and October 2022.



Humanitarian and development organizations *must develop and implement emergency preparedness and contingency plans as these are critical to mitigate the risk of humanitarian impact of floods in "at-risk" countries.*

Donors *must increase funding, and particularly flexible one, for disaster and emergency preparedness and including plans to contingency planning develop flood risks potential of response zones, and build humanitarian needs in a more timely, as dams, and appropriate, and effective* **manner.**

Governments *of hotspot countries must strengthen their emergency preparedness plans, respond to floods, maps, identify flood water diversions such floodwalls to prevent floods.*

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Sources: Media, UN reports, Red Cross and Red Crescent Movement and NGO reports, Government data. Data on displacement was provided by IOM. Source of data available upon request

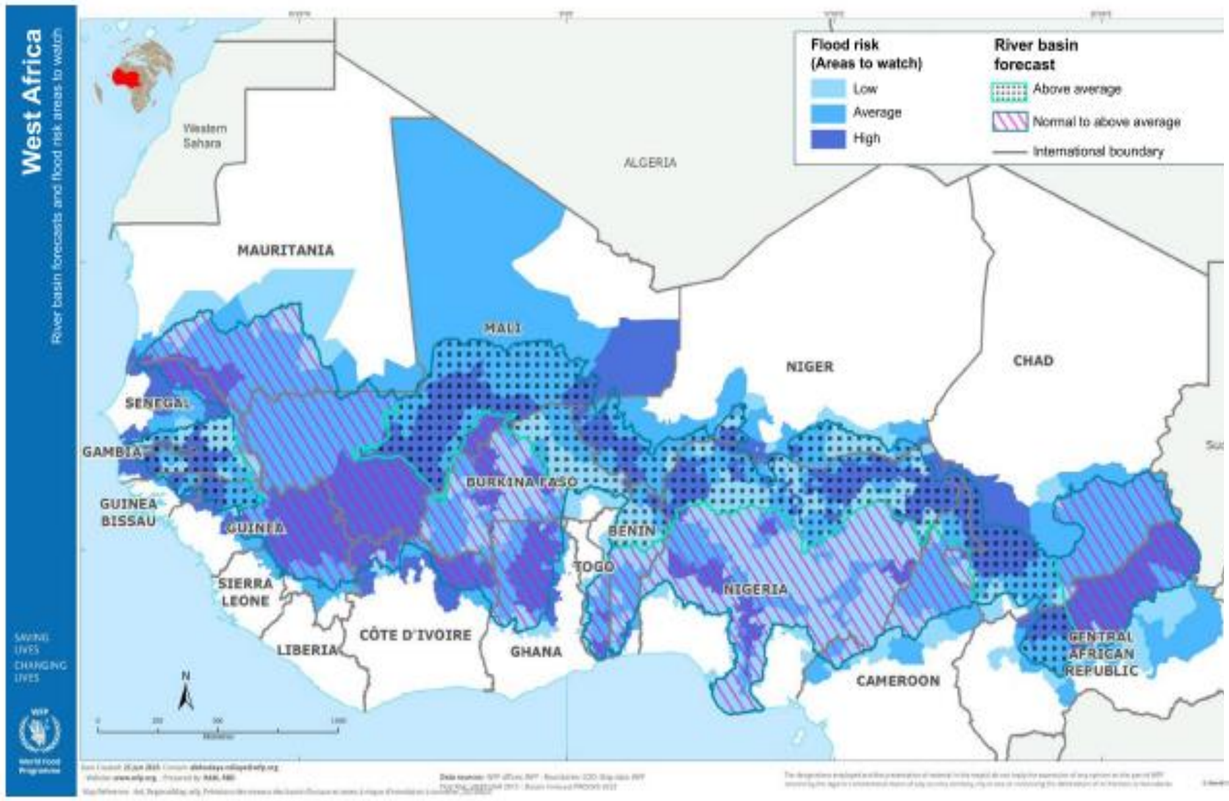
Page 4 /

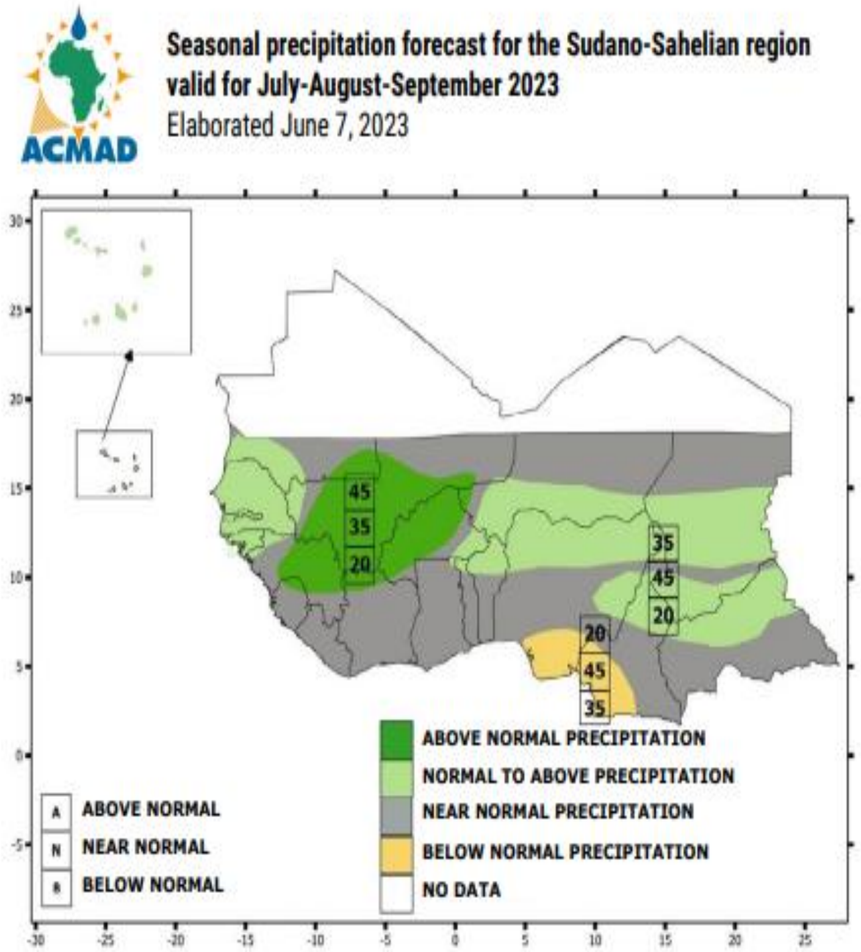
N. B : This document contains evolving data which will be continuously updated.

2.2 Output 2: Continental and Regional support Services at ACMAD

IFORECAST AND IMPACT ANALYSIS WITH UNOCHA

Humanitarian impact analysis

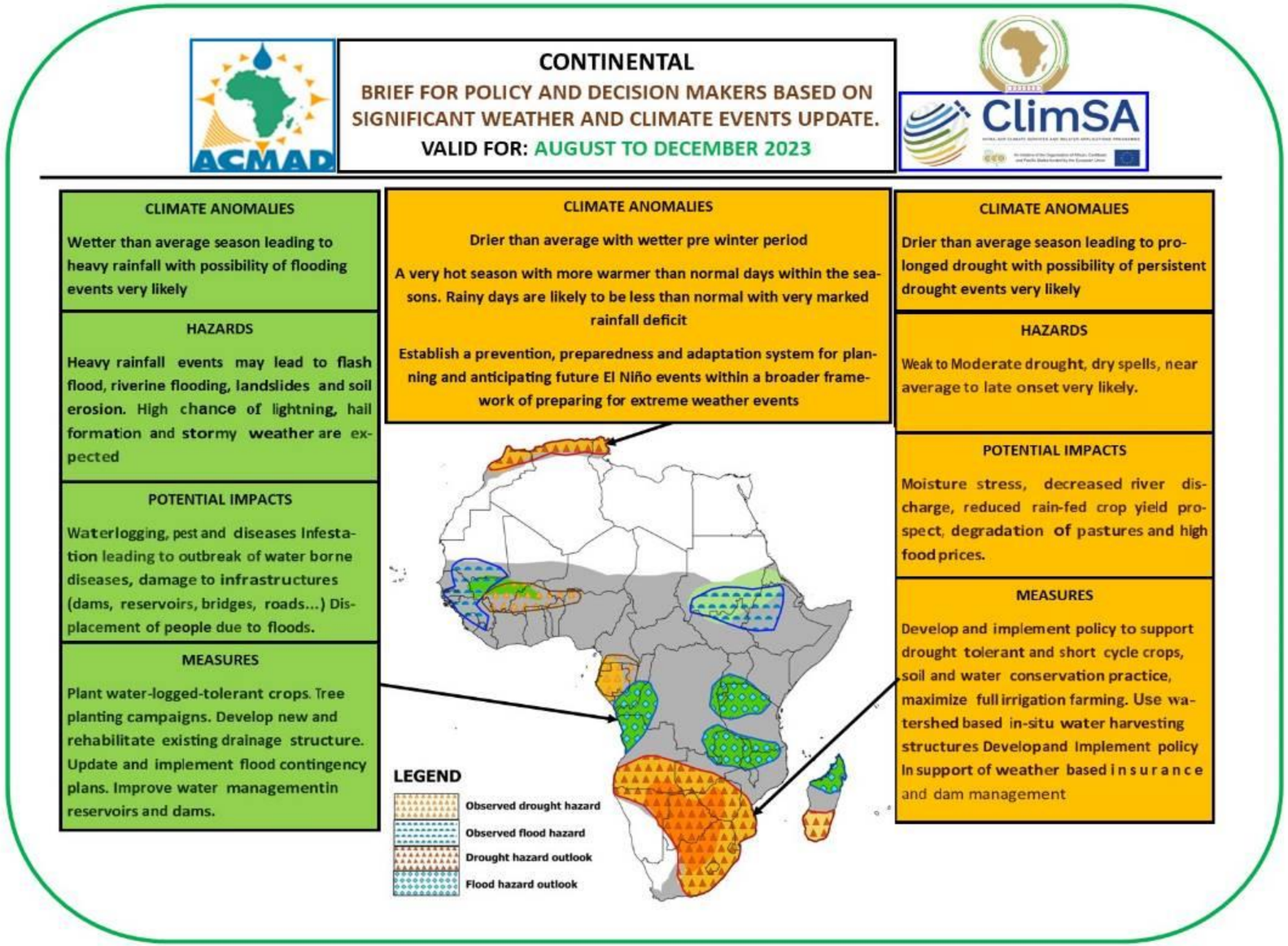




2.2 Output 2: Continental and Regional support Services at ACMAD

BRIEF FOR POLICY AND DECISION MAKERS

Impact outlook Update



2.2 Output 2: Continental and Regional support Services at ACMAD

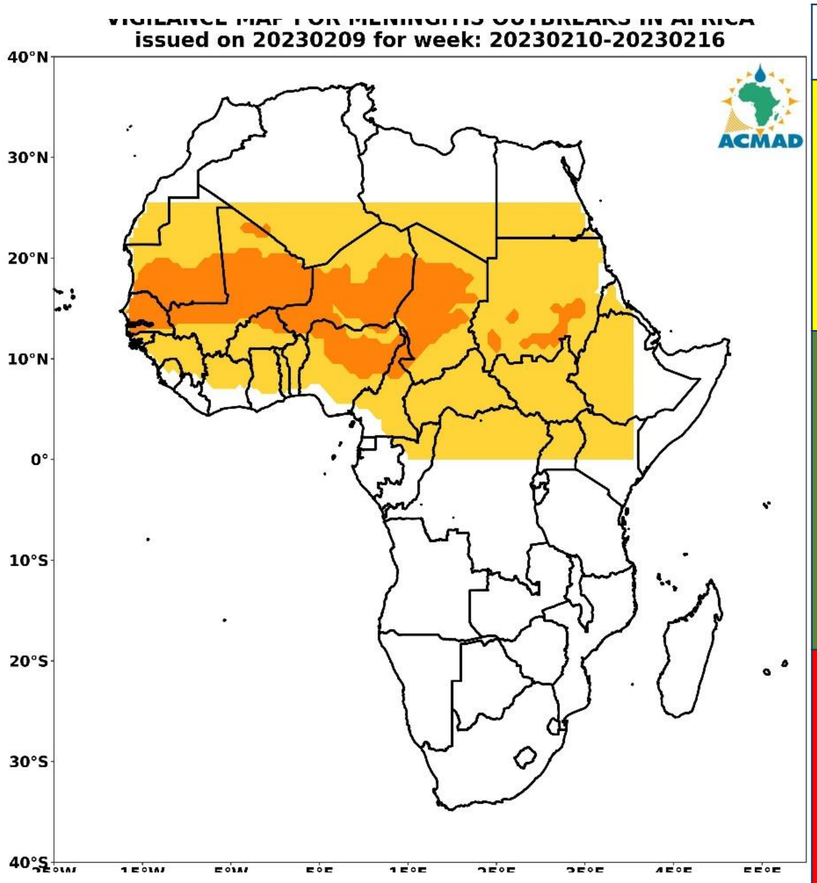
IMPACT FORECASTING AND MEASURES FOR MENINGITIS DISEASE CONTROL BY WHO IN AFRICA WITH WMO GLOBAL MEDIUM RANGE DETERMINSTIC AND S2S PRODUCTS CENTRES

VIGILANCE MAP FOR MENINGITIS OUTBREAK

Valid From 10 to 16 February 2023

Issued on February 09, 2023

HIGHLIGHT: Meningitis cases likely in Mauritania, Senegal, Mali, Algeria, Niger, Burkina Faso, Nigeria, Cameroon and Sudan.

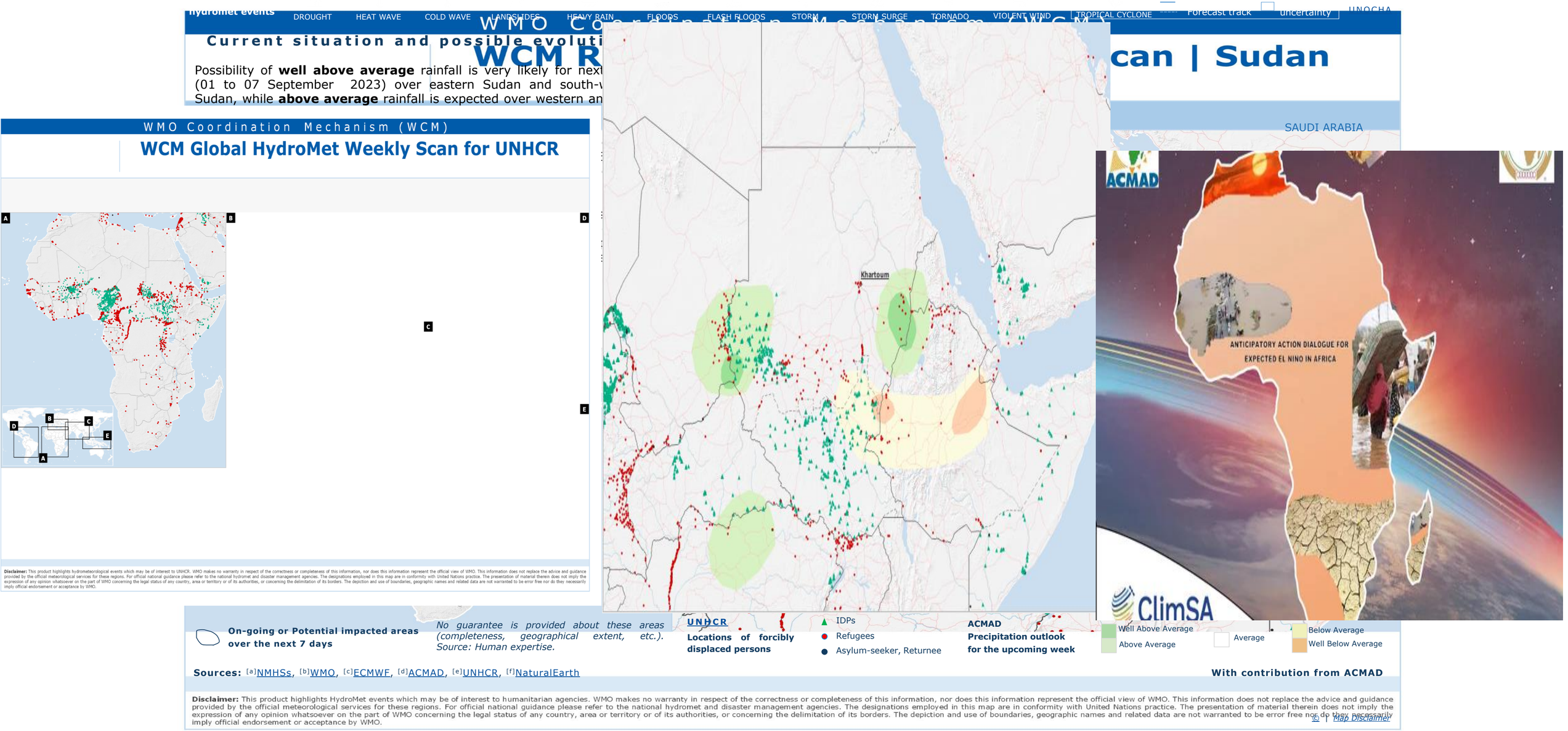


	Phenomenon	Hazard	Potentials Impacts	Advisory / Measures
	- Dust concentration below 150µg/m³ - Relative humidity above 40% - Temperature below 27°C	Emergence of Meningitis cases not likely	Potential pressure on the health system	Routine surveillance systems at regional and national levels
	- Dust concentration between 150 to 400µg/m3 - Relative humidity between 20 & 40% - Temperature above 27°C	Emergence of Meningitis cases very likely	Loss of life, pressure on the health system	Activation of surveillance systems at regional and national levels
	- Dust Concentration at least 400µg/m3 and above - Relative humidity less than 20% - Temperature above 30°C	Emergence of Meningitis cases very likely and epidemic status possible	Loss of life, increased pressure on the health system	Strengthen and increase meningitis surveillance systems at both regional and national levels

2.2 Output 2: Hazards Outlooks for management of refugees and displaced people camps - UNHCR

WORLD METEOROLOGICAL ORGANIZATION

Issued on 31 August 2023 12:00 UTC, Validity: 01 September – 07 September 2023

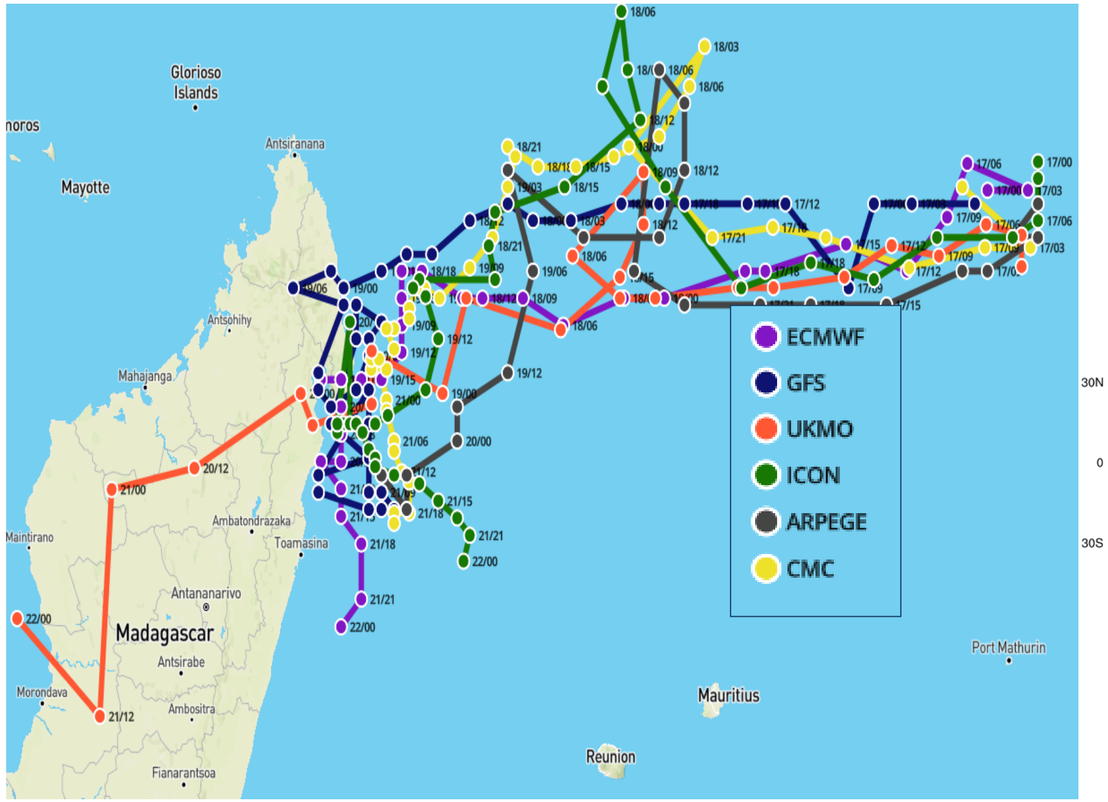


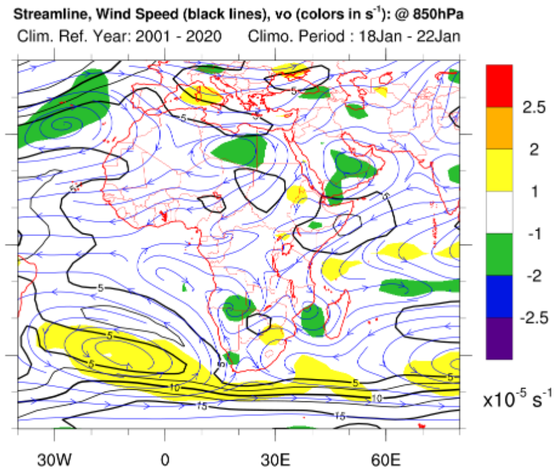
2.2 Output 2: Actionable indicator: Tracking SWIO Cyclones up to a week ahead

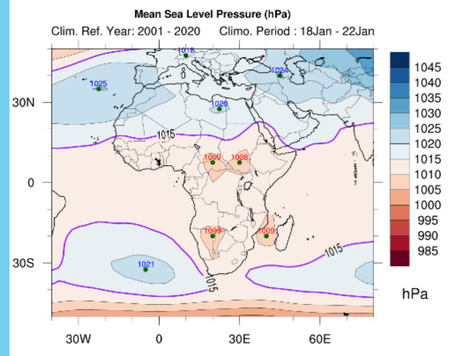
Tracks from: 17-01-2023, 00UTC to 22-01-2023, 00UTC

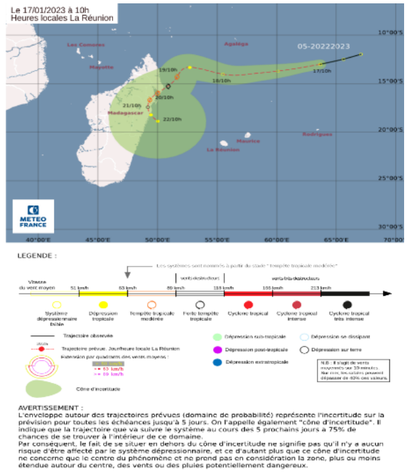
(Global deterministic models : ARPEGE, CMC, ECMWF, ICON, GFS and UKMO) – **Climatology of the forecast period** favors evolution towards the Mozambican channel

Need training on interpretation









http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/WWFD/forecastinservice/ens6TC/20230117_traj.html

2.2 Output 2: Continental and Regional support Services at ACMAD

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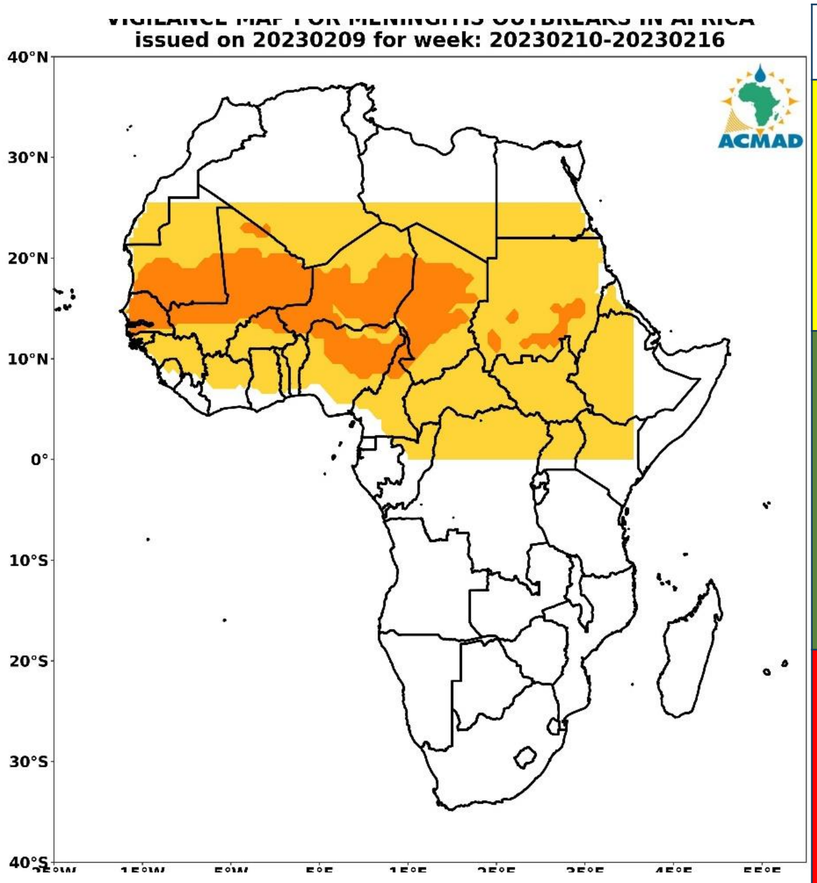

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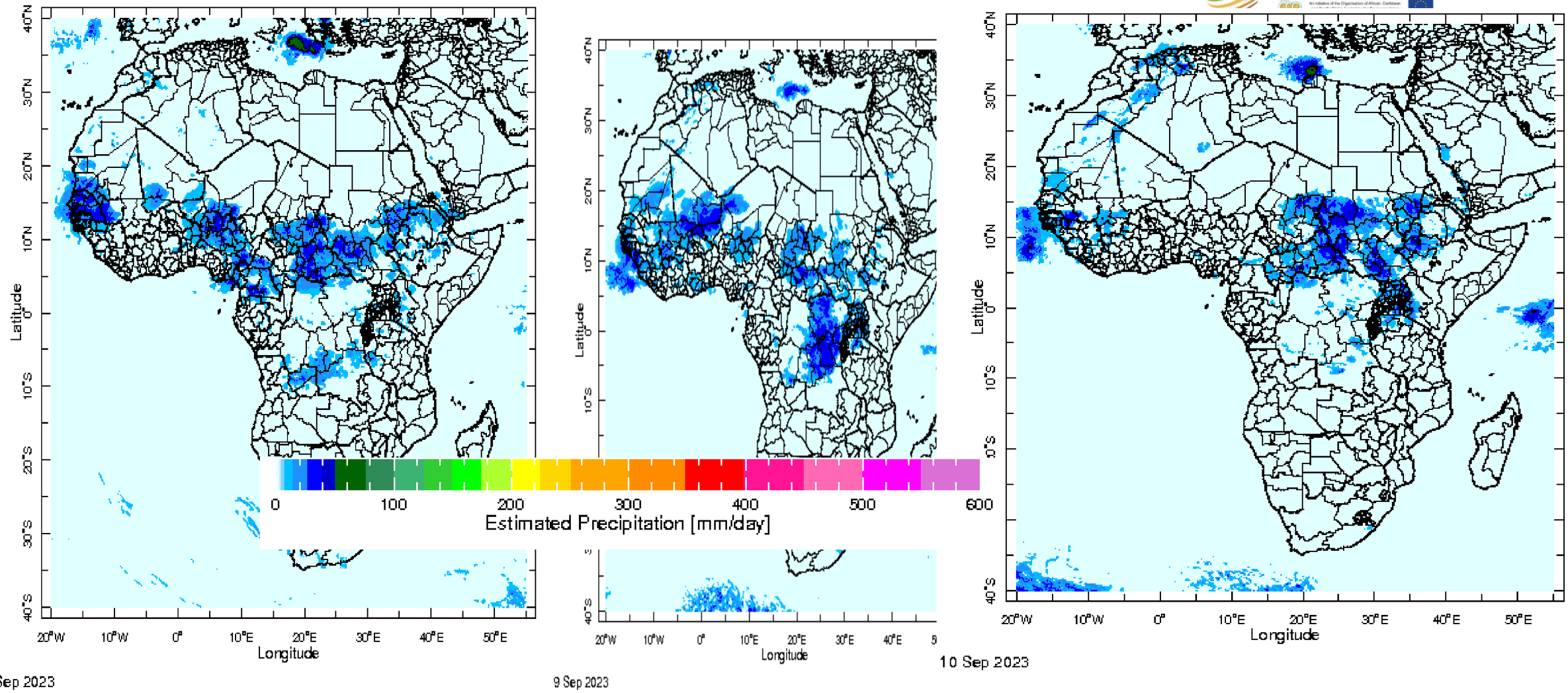
2.2 Output 2: Continental daily extreme rainfall monitoring Services at ACMAD

STORM DANIEL AND EXTREME RAINFALL IN THE MEDITERANEAN REGION

MORE THAN 10 thousands reported missing by Libyan Red Cross



7 Sep 2023

9 Sep 2023

10 Sep 2023

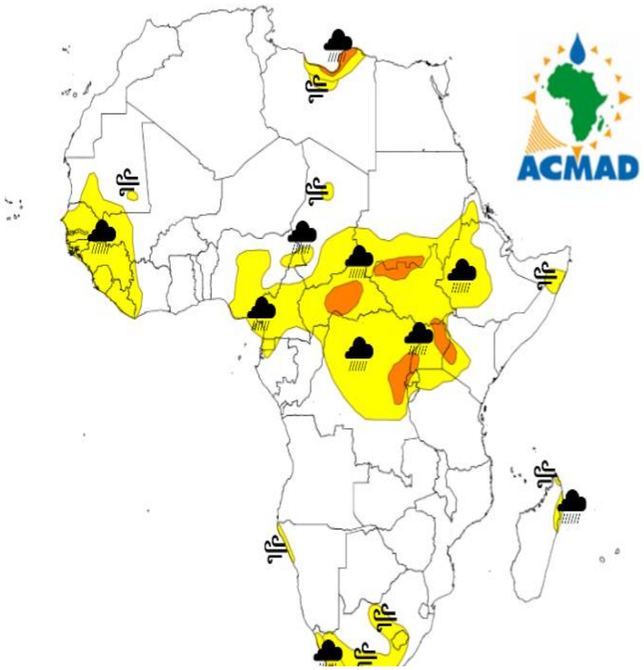
2.2 Output 2.2: MEDICANE Daniel Impacts and ACMAD vigilance products a few days ahead

1- Libya's National Meteorological Centre said the **storm peaked** in north-eastern Libya on **10 September, 2023** with **strong winds of 70 - 80 km/h**.

2- Impacts: Communications interruption, the fall of electricity towers and trees.

3- Torrential **rains** of between **150 - 240 mm caused flash floods** in several cities, including Al-Bayda, which recorded 414.1 mm (from 10 Sep 8am to 11 Sep 8am, a new rainfall record).

- Storm Daniel caused **record-breaking rainfall in Greece** on **5-6 September**, with a reported **50 mm falling in 24 hours at a station in the village of Zagora.** This is the equivalent of **about 8 months of rainfall**

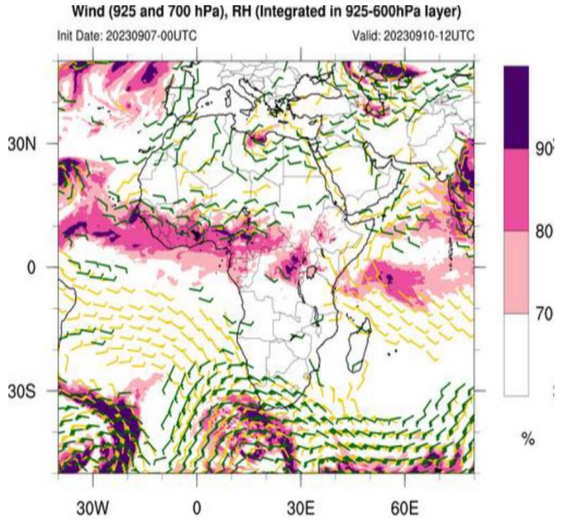


MULTI-HAZARD OUTLOOK

Validity: 2023-09-10

issued on 2023-09-07

Rain	Wind	Dust	Meningitis
Very heavy >100mm	Very strong >80kmh^{-1}	Very heavy >1000µg m^{-3}	Very likely
Heavy 50-100mm	Strong >65kmh^{-1}	Heavy >600µg m^{-3}	Likely
Moderate 10 - 49mm	Moderate >50kmh^{-1}	Moderate >400µg m^{-3}	Less likely
Light 1 - 10mm	Light <50kmh^{-1}	Light <200µg m^{-3}	

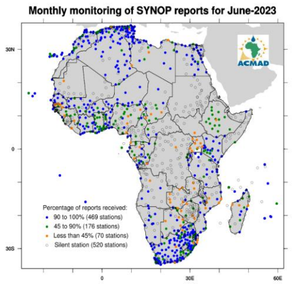


2.3 Output 3: Access to data, products and services to and from ACMAD

- ACCOFs and RCOFs in RECs are effective mechanisms to share climate outlook products

- Technical specifications for hard and software for ACMAD to start demonstration to become a **WMO Data Collection and Production Centre (DCPC)** is developed as a milestone towards modernization of access to data at ACMAD thanks to collaboration with Maroc meteo

- Following open data exchange resolutions of WMO Congress and Infrastructure commission , up to six global centres model digital outputs are used for forecast operations at ACMAD, CLIMSA stations under configuration



- Online dashboards for climate monitoring and forecasting experts prototypes

- ACMAD web portal upgraded and methods, tools, training materials, products and services are better shared;

- Data exchange Agreement with ECMWF Catalogue of products under revision to support CLIMSA and upcoming development cooperation programmes

2.4 Output 4: Enhance capacity to generate and apply climate information ACMAD

- Capacity Building and Exchanges covering (starters, practitioners, experts, trainer):
  - On the Job training for NMHSs and secondments on data access, monitoring and forecasting;
- Internships with universities and Research institutes to develop methods, tools, new products;
- the state of climate for Africa report production training (e)-workshops (e.g warming rates…)
- Return periods of extremes events for infrastructure resilience, monitoring and forecasting training materials
- Training on EW4all with WMO Regional training Centres (RCC-RTC Niamey collaboration)
- Training on administration of data reception stations
- Workshops for DRR agencies, agriculture, health, water Services, infrastructure user sectors for interpretation and use of climate informatiom (with Focus-Africa, Hydromet)
- Specific competency training for NMHSs based on national needs assessment
- Climate fora training and exchanges

2.4 Output 4: Enhance capacity to generate and apply climate information ACMAD

- RCCs and NMHSs Climate Services ***training needs assessments and materials development***

- ***Briefings, ad hoc briefings*** with NMHSs and Regional Centres (RCCs, RSMCs) to facilitate exchanges. **experience building and capacity needs assessments derived from questionnaire responses review**;

- Anticipatory Action dialogue and exchanges events (AUC, IFRC, OCHA,HCR…)

- Training of trainers for **RCCs, RSMCs and advanced NMHSs**

2.5 Output 5: Mainstream climate information in decisions, policies and plans

Towards a prosperous Africa with inclusive growth and sustainable development by strengthening the integration of climate action in development policy.

2.5 Output 5: Mainstream climate information in decisions, policies and plans

- Anticipatory Action Dialogue days with OCHA, IFRC, NMHSs, RCCs
- Section 5 of the African leaders Nairobi declaration on climate change and call for action at the inaugural Africa Climate Summit sept 04-06 2023 recognizing fast warming rate in Africa

- **Key messages** in the State of Africa Climate report for Negotiators including:
- North Africa is warming about two times more than the global Average (+4degrees/century), doubling or tripling adaptation and resilience finance is not a too far away climate finance police option;
- Number of very warm days per year 3 times higher today compared to a few decades ago
- 40% of African land masses hit by heavy rains in 2020 compared to less than 10% a few decades ago
- Increase frequency on the start and end of season disruption as well as wet/dry spells;
- Increase in floods and droughts frequency with inflation in commodity markets, higher number of refugee and displaced population

- **Watches, outlooks, advisories, warnings** for cyclones, high temperatures and wildfires, floods, droughts, monsoon rainfall disruptions, impact forecasting for AUC policy makers
- Support to Anticipatory Action dialogues for planning and implementation of disaster risk reduction action

2.5 Output 5: Mainstream climate information in decisions, policies and plans

- Side events at CCDA, COP 27, DRR platforms, Humanitarian Dialogue platform
- High level statement at COP 27
- High level policy dialogue at the inauguration of the Continental Multi Hazard Advisory centre at ACMAD
- Supports for formulation of resolutions, recommendations and regulations to accelerate open and free exchange of data and products from advanced Global Centres

03 Issues and challenges

3.1. Key issues and challenges encountered in 2022/23 for ACMAD

- ECMWF data not accessible for generation of vigilance service for meningitis surveillance. Alternative data from NOAA used. ECMWF drought outlook case studies tools and products not accessible. Collaboration with JRC to be strengthened to find solutions.

- Lack of coordination with joint planning and implementation of pilot countries related activities. Quarterly coordination meeting on pilot countries activities proposed

- Disruptions recently due to political instability .

- Limited power and internet availability for access to remote large databases leading to consideration of at least two internet service providers and power generator as alternative source of energy. Remote processing with training events on jupyter notebooks, IRI Ingrid scripting language are required for the future with JRC and partners.

- Little joint actions with similar national and regional projects. Establish quarterly events with CREWS, HYDROMET and other initiatives to share progress and speed/scale up urgent efforts

- Limited coordination and sharing of lessons learnt after midterm. Collect and share documentation on the lessons learnt by implementing centres through online dialogues. Emphasis on implementation plan and budget updates, acceleration of related administrative approval processes.

3.2. Key issues and challenges encountered in 2022/23 for ACMAD

- ➔ Little understanding of the **interference mechanisms** between climate risk events and development sectors objectives. Therefore user needs and data/products required to meet those needs not well known. **Systematic risk assessments to be key activity of the UIPs.**

- ➔ Good practices, guides and standards available not systematically considered along the Climate Service value chain. Quality assurance and control prioritized

- ➔ Limited number of countries generating downscaled high resolution climate services. Support accelerated implementation of ClimSA capacity building strategy and development of climSA stations for countries with operational and standardized climate products in mind.

- ➔ Connecting and integrating climate information into formulation and implementation of policies and actions still lagging behind. Rigorous and robust climate risk assessments with aggressive communication and dialogue with policy makers

04 Financial status

STATEMENT OF BUDGET EXECUTION

Lignes	Global Budget	Expenses	Rate
Human Resources	2 689 231,23	1 267 868,48	47%
Travel	365 400,00	152 001,71	42%
Equipment and supplies	182 596,03	90 756,88	50%
Local office	349 060,00	71 290,91	20%
Other costs, services	609 477,57	222 715,12	37%
Other	15 000,00	792,73	5%
Subtotal	**4 210 764,83**	**1 805 425,84**	**43%**
Provision for contingency reserve	82 617,31	0,00	0%
Indirect costs	214 669,10	51 150,61	24%
TOTAL (Euros)	**4 508 051,24**	**1 856 576,45**	**41%**

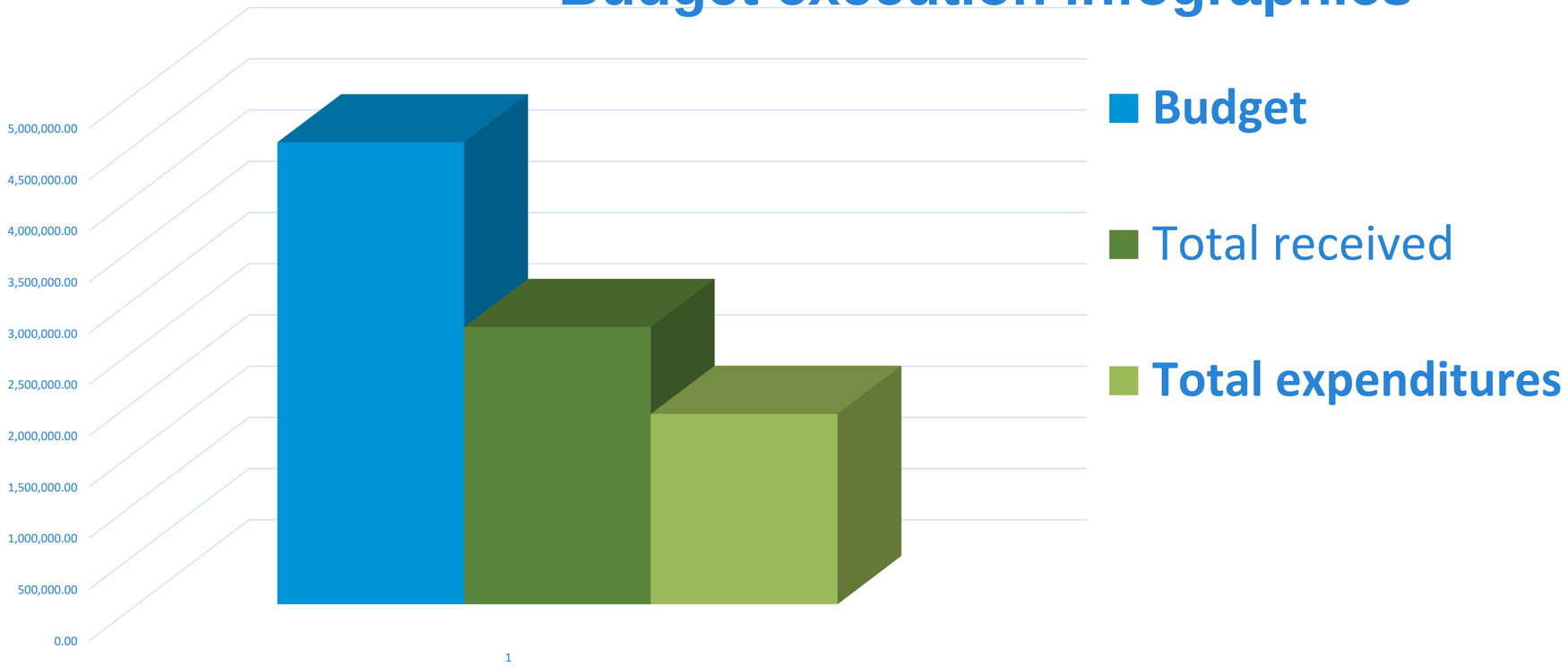
2.1 BUDGET AND DISBURSEMENT STATEMENT

Description	Amount (Euros)	Rate
Global Budget	4 508 051,24	100%
First pre-financing	1 352 415,37	30%
Second pre-financing	1 352 415,37	30%
Total received funds from AUC	2 704 830,74	60%
Balance	1 803 220,50	40%

2.2 CASH FLOW STATEMENT

Description	Amount (Euros)	Rate
First pre-financing	1 352 415,37	
Second pre-financing	1 352 415,37	
Total received funds from AUC	2 704 830,74	100,00%
Total Expenditures	1 856 576,45	68,64%
Cash balance	848 254,29	31,36%

Budget execution infographics



05 Outlook

- Budget for year 3 and
- Budget revision after Midterm

2.4. BUDGET YEAR 3- April 23-April 24

Lignes	Global Budget	Budget Year 3
Human Resources	2 689 231,23	761 738,67
Travel	365 400,00	108 850,00
Equipment and supplies	182 596,03	38 430,10
Local office	349 060,00	108 265,00
Other costs, services	609 477,57	226 778,22
Other	15 000,00	1 000,00
Subtotal	**4 210 764,83**	**1 245 062,00**
Provision for contingency reserve	82 617,31	49 802,48
Indirect costs	214 669,10	64 743,22
TOTAL (Euros)	**4 508 051,24**	**1 359 607,70**

3.1. BUDGET MODIFICATION

Lignes	Initial Budget (A)	Addendum C=(B-A)	Revised budget (B)	Rate D= (C/A)
Human Resources	2 689 231,23	-160 471,61	2 528 759,62	-6%
Travel	365 400,00	70 600,00	436 000,00	19%
Equipment and supplies	182 596,03	56 331,57	238 927,60	31%
Local office	349 060,00	-5 000,00	344 060,00	-1%
Other costs, services	609 477,57	51 539,81	661 017,38	8%
Other	15 000,00	-12 999,77	2 000,23	-87%
Subtotal	**4 210 764,83**	0,00	**4 210 764,83**	**0%**
Provision for contingency reserve	82 617,31	0,00	82 617,31	0%
Indirect costs	214 669,10	0,00	214 669,10	0%
TOTAL (Euros)	**4 508 051,24**	**0,00**	**4 508 051,24**	**0%**

06 Issues needing PSC attention

6.1. ISSUES NEEDING PSC ATTENTION

- Support establishment of accelerated technical coordination mechanisms among ClimSA projects to accelerate implementation

- Promote coordination mechanisms with other projects to better deliver on Early warning for pillars and Sendai framework

- Promote Anticipatory Action Dialogue and Ad Hoc briefings with NMHSs and RSMCs to raise awareness ahead of disasters

CONCLUSION

- Mobilize partnerships (i.e ClimDev-Africa) to rehabilitate in stations and modernize data and information exchange networks, validate, calibrate MTG data for use for climate analysis

- Strengthen partnership with ECMWF on **data , tools and products** exchange to optimize benefits and untapped potentials demonstrated on the use of ECMWF systems and outputs
- Accelerate collaboration with Focus-Africa and other partner projects to share socio-economic benefits and cost assessment tools
- Structure a coordination mechanism along the full value chain
- Further accelerate application of annual state of Africa Climate report at COP, Africa Climate summits, CCDAs, DRR and other high level events and declarations

Intra-ACP Climate Services and Related Applications Programme

ICPAC

ClimSA
INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

An initiative of the Organisation of African, Caribbean and Pacific States funded by the European Union

AESA CECODDA ENEA TYPSA agrer Grupo TYPSA