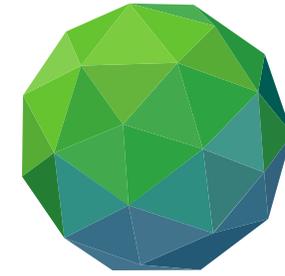


DAEs in Africa – GCF round table



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CLIMATE RATIONALE – UPDATE ON GUIDANCE FOR ADAPTATION

Dr. Kevin Horsburgh, Climate Science Lead

16 March 2022

OUTLINE OF TALK



- Describe work underway to ensure consistent guidance and review procedures across the whole GCF community
- Discuss what is meant by climate rationale and clarify the term in the context of GCF proposals
- Provide an update on resources being prepared by the GCF (with WMO) to support adaptation proposal development
- Examples in the context of preparing a concept note
- Discussion

WHAT IS MEANT BY “CLIMATE RATIONALE”?



- **There is no agreed definition (yet)! GCF is submitting a paper to B.32 to resolve that**
- The terminology arose at a 2018 GCF Board meeting where the Board asked the secretariat to address a number of issues including, “*Steps to enhance the climate rationale of GCF-supported activities*”
- The policy paper will confirm that the “*climate rationale*” ensures that activities are designed to address climate change. It can be considered the overarching narrative that contributes to all GCF investment criteria (especially Impact Potential)
- Mitigation actions should demonstrate that an ambitious level of emissions reductions will occur, and that these reductions would not have happened without the GCF-funded intervention
- **Adaptation actions should provide a well-evidenced analysis to show that proposed activities are likely to be an effective adaptive response to the threat of specific climate change risks and impacts [Identify risks – show connection to response]**³

“CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY”, IPCC AR6 WGII (28 FEB 2022)

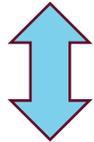


- Between 3.3 to 3.6 billion people are highly vulnerable to climate change. High confidence that human-induced climate change, including more frequent and intense extreme events, has caused widespread impacts, and losses and damages to nature and people.
- We face multiple climate risks over the next two decades even if global warming can be held to 1.5°C.
- Adaptation planning and implementation has been observed across all sectors and regions, generating multiple benefits
- Strong consensus that effective adaptation is based on integrated, multi-sectoral solutions that address social inequities, and cut across systems
- *“Climate resilient development is enabled when governments, civil society and the private sector make inclusive development choices that prioritise risk reduction, equity and justice, and when decision-making processes, finance and actions are integrated across governance levels, sectors and timeframes.”*

PRINCIPLES FOR ADAPTATION GUIDANCE



- 1. Identification:** Adaptation proposals should how the proposed activities relate to and seek to address current and/or future projected climate change impacts. Proposals should identify the systems at risk and the climate change hazards affecting them
- 2. Response:** Proposals should demonstrate how the proposed activities will reduce the risk caused by climate change and thus reduce impact
- 3. Alignment:** Proposals should confirm alignment of the proposed activities with the participating countries' national plans and climate strategies
- 4. Monitoring & evaluation:** Proposals should include a description of the monitoring and reporting system that will be used to assess the climate impact of the proposed activity



APPROACHES TO ADAPTATION ASSESSMENT



Source	IPCC Technical Guidelines for Assessing Climate Impacts and Adaptation. Carter et al. (1994) ¹	UNDP Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures. (Lim and Sponner-Siegfried, 2004) ²	The Adaptation Fund	USAID Small Grants Guide ³	Joint Report on MDB's climate finance (2020) ⁴ . Based on the MDB/IDFC "Common Principles for Climate Change Adaptation Finance Tracking" ⁵	GCF (proposed high-level principles for establishing the climate rationale of an adaptation proposal)
Context/use	Assessment of impact and evaluation of adaptation for Working Group II of IPCC	Developed to aid implementation of Global Environment Facility (GEF) and other UNDP initiatives	Assessment of proposals for Adaptation Fund approval to their board	Specifically designed for assisting AEs develop small GCF projects.	Adaptation finance tracking methodology to identify adaptation activities of the MDBs	Guidance for proposal development and the basis for consistent proposal assessment
Recommended approach	<p>Seven steps:</p> <ol style="list-style-type: none"> 1. Define problem 2. Select method 3. Test method/sensitivity 4. Select scenarios 5. Assess biophysical impacts; assess socio-economic impacts 6. Assess autonomous adjustments 7. Evaluate adaptation strategies 	<p>Five components:</p> <ol style="list-style-type: none"> 1. Scoping and designing an adaptation project: ensuring that a project is integrated into the national policy planning and development process 2. Assessing current vulnerability 3. Assessing future climate risks focuses on the development of scenarios of future climate, vulnerability, and socio-economic and environmental trends 4. Formulating an adaptation strategy in response to current vulnerability and future climate risks 5. Continuing the adaptation process involves implementing, monitoring, evaluating, <u>improving</u> and sustaining the adaptation project. 	<p>Project eligibility is screened against ten criteria:</p> <p>Has the government endorsed the project through its Designated Authority?</p> <p>Is the project consistent with national sustainable development strategies, national development plans, poverty reduction <u>strategies</u>, national communications or adaptation programs of action, or other relevant instruments?</p> <p><u>Does</u> the project support concrete adaptation actions to assist the country in addressing the adverse effects of climate change and build in climate change resilience?</p> <p>Is the project cost-effective?</p> <p>Does the project provide economic, <u>social</u> and environmental benefits, with particular reference to the most vulnerable communities, including gender considerations?</p> <p>Does the project meet the relevant national technical standards?</p> <p>Is there duplication of project with other funding sources?</p> <p>Does the project have a learning and knowledge management component? Has the project provided justification for the funding requested?</p> <p>Does the project align with the AF results framework?</p>	<p>Steps for project selection:</p> <ol style="list-style-type: none"> 1. Gather data and information 2. Describe historical changes 3. Identify project areas 4. Describe the impact of past/current changes 5. Describe the human impacts 6. Describe future expected changes <p>The USAID guide offers a simple definition of climate rationale which is that it is the explanation of how "changes in environmental conditions caused by global warming are (or will) make life difficult for people in some way".</p> <p>The USAID approach considers the response step to be beyond the climate rationale.</p>	<p>Three key steps:</p> <ol style="list-style-type: none"> 1. Setting out the climate change vulnerability context of the project 2. Making an explicit statement of intent of the project to reduce climate change vulnerability 3. Articulating a clear and direct link between specific project activities and the project's objective to reduce vulnerability to climate change <p>N.B. these three steps and the words used are identical to those in the OECD DAC Rio Markers for Climate Handbook⁴</p>	<p>Four principles:</p> <ol style="list-style-type: none"> 1. Identification: Proposals should show how the activities relate to and seek to address current and/or future projected climate change impacts. Proposals should identify the systems at risk and the climate change hazard affecting them. They should show how climate change has led, or will lead, to the specific impacts that the proposed activity addresses using the best available data 2. Response: Proposals should demonstrate how the activities will reduce the risk caused by climate change and thus reduce vulnerability (where relevant explaining why the proposed intervention was selected over alternatives). Proposals should consider barriers (<u>e.g.</u> technical, social, institutional, regulatory) to the implementation of the activities and describe how the project proposes to overcome those barriers 3. Policy Alignment: Proposals should confirm alignment of the proposed activities with the participating countries' national plans and climate strategies (including their NAPs, NAPAs, long-term climate strategies, adaptation communications and NDCs, as applicable) 4. Monitoring and evaluation: Proposals should include a description of the monitoring and reporting system that will be used to assess the climate impact of the proposed activity.

APPROACHES TO ADAPTATION SELECTION



- The assessment methodologies all provide high level frameworks that allow planners, climate finance mechanisms and assessors to answer the question, “*is it adaptation*”?
- These principles do not address the issue of originating, prioritizing, and selecting adaptation options
- Mimura et al. (2014) state, “*there is no single approach to adaptation planning because of the complex, diverse, and context-dependent nature of adaptation to climate change*”
- **Considerations when selecting adaptation options (adapted from Noble et al., 2014)**

Is the adaptation action likely to.....?	GCF context/IC
Effectively reduce vulnerability and increase resilience	Climate rationale
Succeed in the face of climate and socio-economic uncertainty	Climate rationale
Be designed with maximum stakeholder involvement	Climate rationale
Be integrated into policy and planning	Climate rationale
Be responsive and adaptive to feedbacks during implementation	Climate rationale
Exhibit synergies with mitigation and development actions	Climate rationale
Avoid maladaptation	Climate rationale
Consider or bring about transformative changes	Climate rationale
Reduce damage and losses	Climate rationale
Be sustainable in the long term	Paradigm shift
Have social acceptability/legitimacy	ESS
Be consistent with social norms and traditions	ESS
Ensure equity and avoid harm to vulnerable groups	ESS

CONCEPTUAL FRAMEWORK FOR GUIDANCE, SELECTION AND ASSESSMENT OF A GCF ADAPTATION PROPOSAL

The overarching goal of a GCF adaptation proposal should align with the Global Goal on Adaptation (Article 7.1 of the Paris Agreement) thereby, *“enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change”*.

Adaptation planning should ensure maximum stakeholder involvement in adaptation choices (IPCC AR5, AR6)

Adaptation actions should be coordinated with economic and social development and integrated into policy and planning processes

Identification: Proposals should show how the proposed activities relate to and seek to address current and/or future projected climate change risks/impacts. They should show how climate change has led, or will lead, to the specific risks/impacts.

Response: Proposals should demonstrate how the proposed activities will reduce the risk caused by climate change and thus reduce impact (where relevant explaining why the proposed activity was selected over alternatives). Proposals should consider barriers to the implementation of the activities and describe how the project proposes to overcome those barriers

DATA: Articulation of identification and response should use best available data, drawing on the data and methods that are uniquely relevant to proposals

Policy alignment: proposals should confirm alignment of the proposed activities with the participating countries' national plans and climate strategies

Monitoring and evaluation: Proposals should include a description of the monitoring and reporting system that will be used to assess the climate impact of the proposed activity

Selection can be guided by a (non-exhaustive) list of guidance questions. Using the same guidance questions for the selection/articulation of a proposal and its subsequent assessment ensures consistency and transparency in the review process

(These questions could be answered explicitly in Annex 22 of a GCF CN/FP)

USE OF BEST AVAILABLE DATA



The policy guidance being developed will be explicit that the expectation should always be the best available data, drawing on the data and methods that are relevant to the unique needs of a project/proposal, and accepting there are significant differences in data availability between countries

Annexes to the policy guidance will provide unambiguous information about:

- o What global datasets are acceptable for data poor countries
- o How IPCC data, reports, and other credible, internationally peer-reviewed climate data and quality-controlled datasets can/should be used
- o How local, traditional, and indigenous peoples' knowledge can be used

Countries which are data poor should never have proposals turned down for lacking specific data sources. Where local and sub-national data are not available or are not of sufficient quality then internationally peer-reviewed and scientifically credible data should be used (and guidance will be provided)

NEW GUIDANCE IN DEVELOPMENT



The GCF is developing non-prescriptive, principles-based guidance, supported by a suite of tools, methodologies and data platforms (in consultation with the independent Technical Advisory Panel) to ensure a consistent approach to: (1) advising the development of proposals and (2) review of proposals

Primary motivation is to ensure that countries, AEs, and DAEs, receive:

- consistent guidance
- training and support

throughout the proposal development cycle to assist them to develop high-quality proposals

Climate Information Gateway

Purpose: A portal and advice center for climate change information for climate action proposals

Badging/ownership: GCF primarily with WMO co-badging for the platform; aiming for endorsement of all information by a global forum (GCF, GCA, GEF, AF, World Bank, etc.)

Structure: Guidance documents for GCF projects - general, mitigation, adaptation;

Links to all mitigation methodologies

GCF-WMO information platform

GCF-WMO platform training page

Links to other climate model data platforms

Country-by-country information portals (interactive)

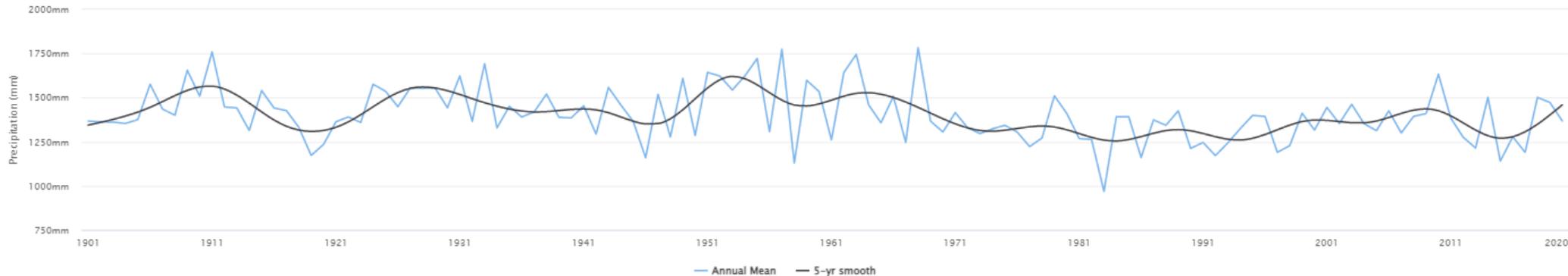
Links and user guidance for peer-reviewed global climate datasets

EXAMPLE DATA FOR THE ROUND TABLE



- 1) Identify the connection between hazards and risks/impacts

Observed Average Annual Precipitation of Cote d'Ivoire for 1901-2020



Cote d'Ivoire is located in the transition zone between the humid equatorial climate that characterizes the southern part of the country, and the dry tropical climate of the north. The country generally experiences a rainy season from June to October and average annual temperatures range from 24-28°C. In the north, the rainy season occurs from June to October, while the dry season is between the months of November to May. The southern region of Cote d'Ivoire generally experiences four seasons. May to June brings heavy rains while shorter rains occur during August and September. A shorter dry season occurs during October to November and the main dry season occurring from December to April.

Temperature

- Temperatures over West Africa have increased by 0.5-0.8°C between 1970-2000.
- The latter two decades of this period have seen a greater magnitude of change.
- Temperature observations between 1990-2000 indicate increasing temperatures over Cote d'Ivoire.

Precipitation

- The northeastern, central, and southwestern regions of Cote d'Ivoire saw a decrease in rainfall between 1990-2000.
- Station data from stations located throughout the country exhibit decreasing trends in precipitation during the main rainy season of June-October over 1951-2000.

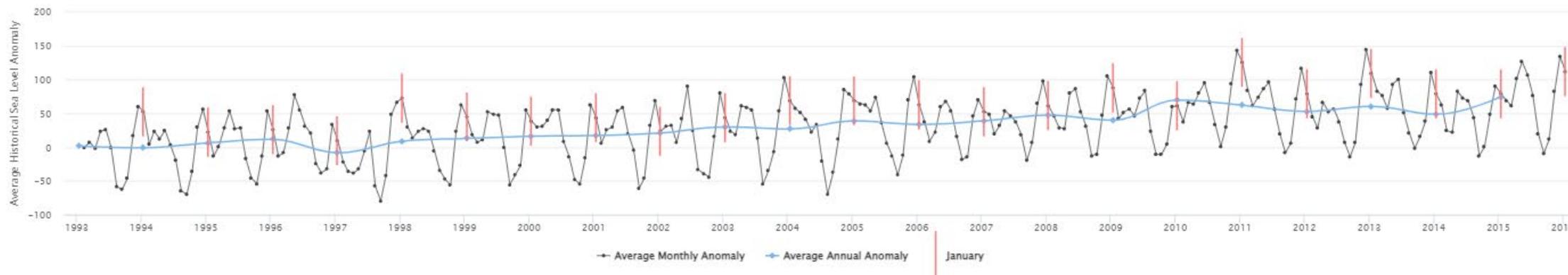
This section provides the options to visualize historical climate data for different timeframes via map and annual cycle chart.

EXAMPLE DATA FOR THE ROUND TABLE



Historical Sea Level for coastal Cote d'Ivoire (1993-2015)

observed anomalies relative to mean of 1993-2012



Effects of climate change

According to Côte d'Ivoire's Third National Communication, "vulnerability to climate change is the degree to which a system is susceptible to, or unable to cope with, the adverse effects of climate change."⁴ **Through its effects on temperature and rainfall, climate change is increasing the vulnerability of agriculture, water resources, coastal areas and human health throughout the country.** In Côte d'Ivoire, climate change is characterized by:

- floods
- storms
- landslides
- droughts and heatwaves
- bush fires
- decrease in river flow and shrinking of surface water volume
- shorter average length of growing periods and increased exposure of plants to water stress
- weaker growth of plant biomass
- reduced productive potential of ecosystems
- decrease in arable land due to land degradation
- coastal erosion of up to 3 metres per year and up to 6-12 metres during storms
- weakening of seasonal upwelling

EXAMPLE DATA FOR THE ROUND TABLE



- 1) Identify the connection between hazards and risks/impacts

Coastal areas: Côte d'Ivoire's coastal areas are vulnerable to climate change (Third National Communication, 2017). The Third National Communication highlights the main impacts of climate change on coastal and marine areas, which include sea level rise and increased wave heights that increase coastal erosion, flooding, salinization of fresh water and the reduction of mangroves. Coastal erosion, which is a natural process, is worsened by climate change and certain socioeconomic disturbances caused by populations themselves. These include:

- immigration in coastal urban areas (attractiveness of Abidjan and San-Pédro)
- felling of mangrove forests for domestic firewood or fish smoking
- the rapid urbanization of coastal cities
- the exploitation of beach sand for construction purposes.

In addition, rising sea levels and rising temperatures due to climate change are impacting the viability of Ivorian ports, beach development and seaside housing. These impacts result in the loss of land through erosion or flooding, which affects the settlement of riverside populations, agricultural activities, lagoon aquatic ecosystems separated from the sea by narrow, flat coastal strips (Grand-Lahou, Ebrié, Aby), seaside tourism infrastructure (especially between Abidjan and Assinie), and coastal industrial and communication infrastructure (roads, airport, etc.). Based on geomorphological characteristics, the coastal fringe in the south-west (Sassandra-Tabou) shows slight changes with moderate and limited socioeconomic impacts. From Sassandra to Abidjan, the most vulnerable area is Grand-Lahou, which is currently regressing significantly. The most sensitive areas are Abidjan, Grand-Bassam and Assinie, entailing high socioeconomic stakes. The combination of the morphological characteristics of the sensitive areas (very narrow peninsulas in some places, barely above sea level in the vicinity of Assinie) and the stakes (high concentration of populations and economic activities along the seafront) defines the potential extent of these socioeconomic impacts.

The role of historical data for GCF proposals



It demonstrates a particular climate risk/impact and the related hazard(s). For example, a country that suffers drought can articulate the societal impacts of droughts and their frequency. Future projections can then be interpreted to deduce that those problems are likely to become worse

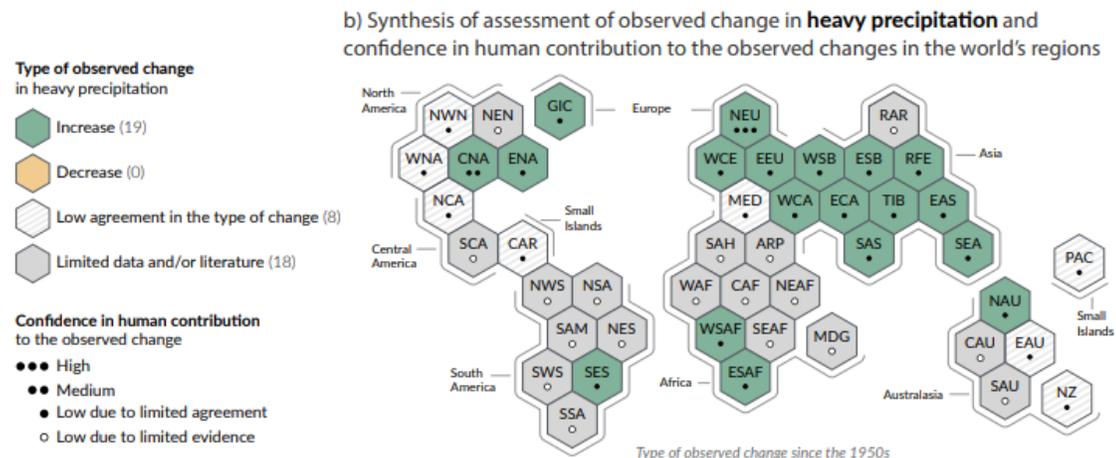
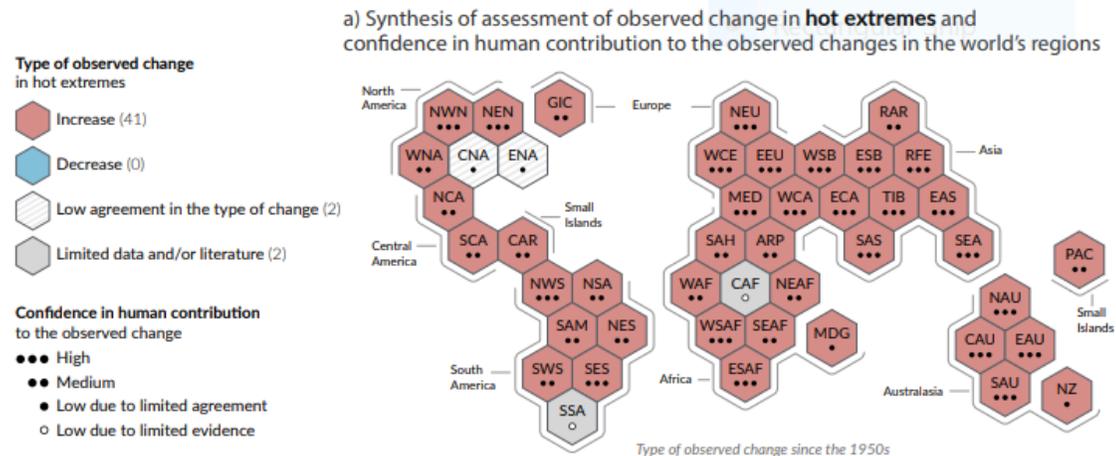
It provides a setting for the overall narrative. IPCC stresses the value of multiple lines of evidence: *“Physical climate information at global, regional and local scales is developed from multiple lines of evidence, including observational products, climate model outputs and tailored diagnostics”* (from IPCC AR6 WG1 SPM)

It establishes a baseline - the present-day conditions against which adaptation options will be compared (e.g. how close are systems to critical thresholds)

IPCC ATLAS CLIMATE CHANGE PROJECTIONS



Climate change is already affecting every inhabited region across the globe with human influence contributing to many observed changes in weather and climate extremes



- The latest report of the Intergovernmental Panel on Climate Change (IPCC, AR6, Summary for Policymakers) highlights the climate impacts facing many regions including heatwaves, more intense precipitation, alterations to the onset and duration of monsoonal rainfall, agricultural and ecological droughts
- All regions are projected to experience increases in hot climatic impact drivers
- Heavy precipitation and associated flooding is projected to intensify and be more frequent across most of Africa and Asia, even with 1.5°C of global warming
- More frequent and severe agricultural and ecological droughts are projected for most regions

GCF-WMO CLIMATE INFORMATION PLATFORM



The GCF-WMO collaboration promotes access to high quality climate information, expert advice, tools and scientific methodologies that contribute to the development of investments, proposals for climate action, and national policies and plans

The resources

Climate Information Platform - A web-based data platform that provides access to climate projections and indicators worldwide.

Climpact - A software package for the calculation of climate indices associated with impacts in climate sensitive sectors



Specify an area of interest

City

Latitude and longitude

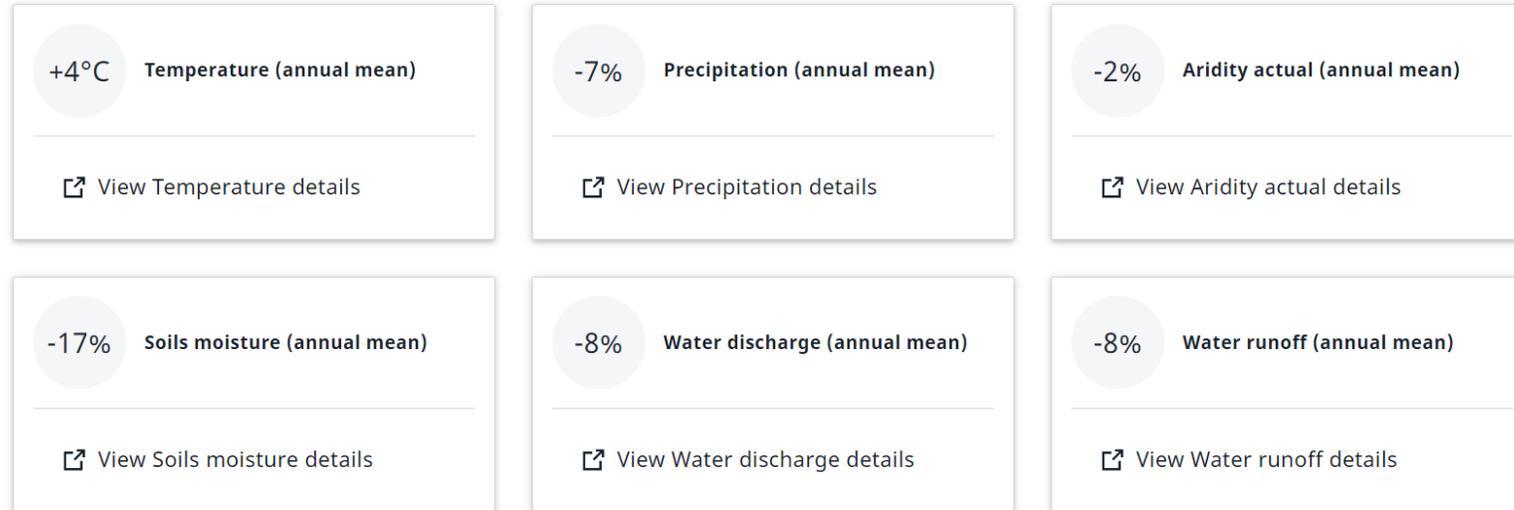
Input format is valid

Scenario

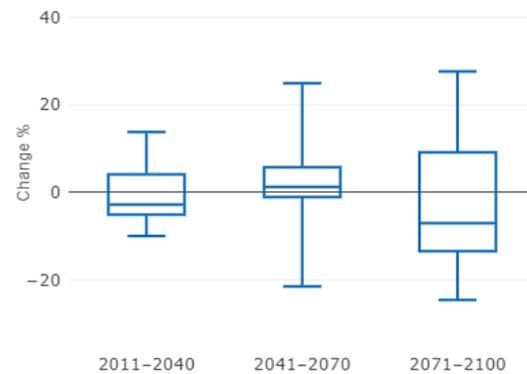
Emission scenario

Time period

Future change in top indicators



Legend

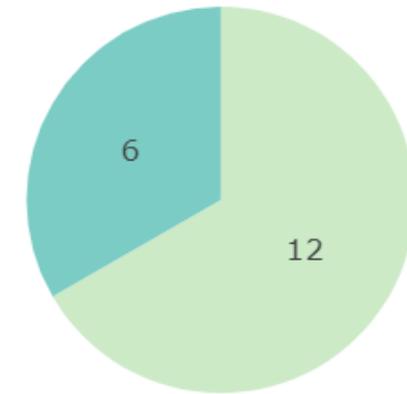


Indicator: Precipitation (annual mean), Time period: 2071-2100, Historical period: 1981-2010, RCP 8.5, Model: CORDEX Africa Ensemble Mean, Model results for an area covering the location: Abijan, Abidjan (5.33, -4.02)

Reference: <https://climateinformation.org> (date: 2022-03-14)

Ensemble Agreement of Precipitation (annual mean)

Amount of ensemble members that results in a decrease, increase, and no change compared to the historical period.

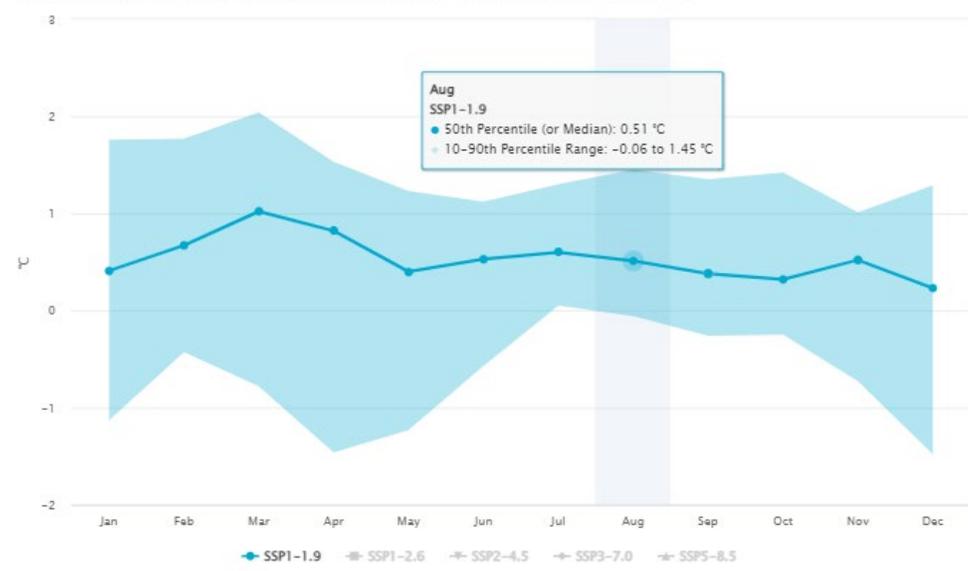


Decrease Increase
No change

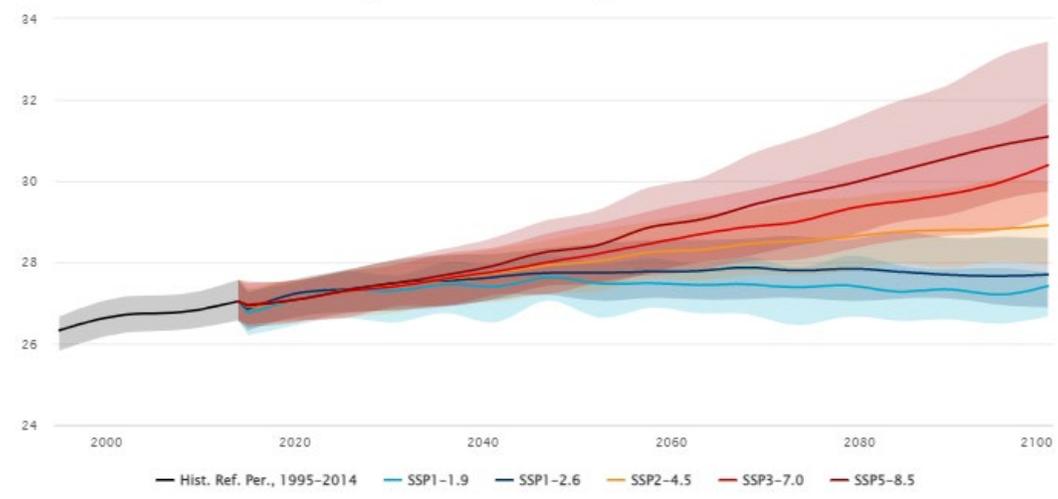
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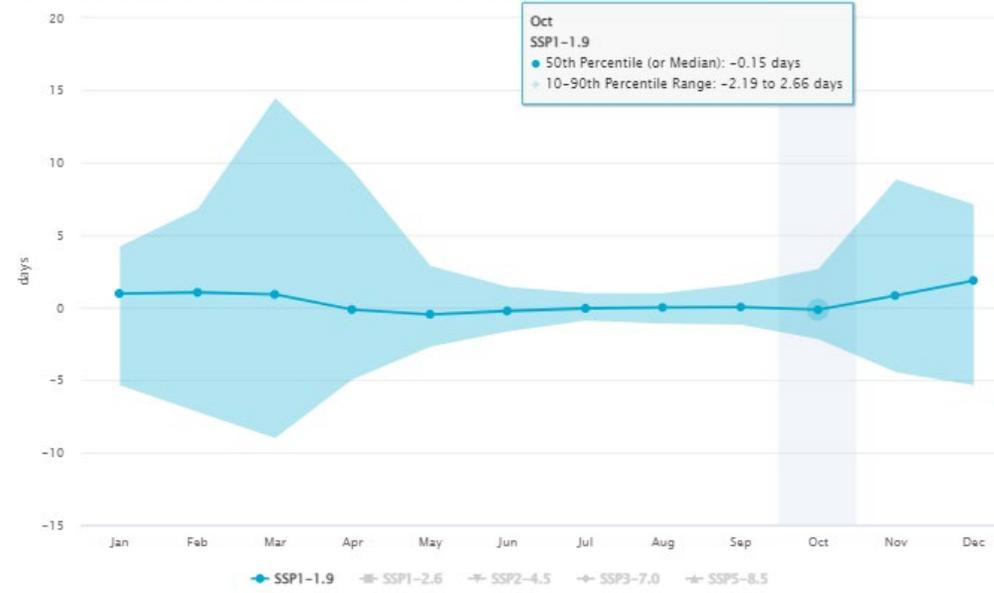
Projected Mean-Temperature Anomaly for 2080-2099
Cote d'Ivoire; (Reference Period: 1995-2014), SSP1-1.9, Multi-Model Ensemble



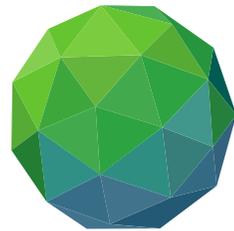
Projected Mean-Temperature
Cote d'Ivoire; (Ref. Period: 1995-2014), Multi-Model Ensemble



Projected Max Number of Consecutive Dry Days Anomaly for 2080-2099
Cote d'Ivoire; (Reference Period: 1995-2014), SSP1-1.9, Multi-Model Ensemble



HAPPY TO TAKE ANY QUESTIONS



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**Raising
ambition.**
**Empowering
action.**