

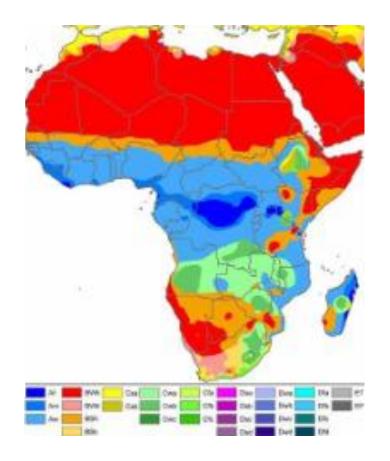


Background to the Green Climate Fund

Enhancing public and private sectors capacities to understand climate change impacts in the water sector, and design, finance and implement gender-sensitive and inclusive adaptation responses



- The basis to the climate rationale
- Framing project-specific climate impacts
- Linking observed and projected climate impacts to project activities
- Understanding attribution and causality and reflecting it in the narrative







The Climate Rationale

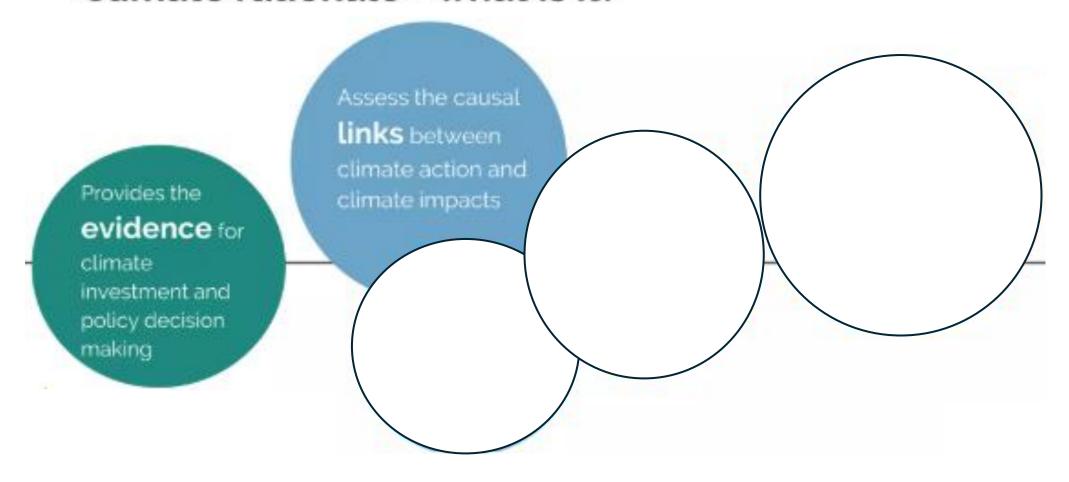
Describe - with Referenced Information: what climate changes are expected:

- 1. Increasing temperatures past and projected the number of high heat days, etc. impacting agriculture and need for ready water access?
- 2. Precipitation Variability past and projected number of days of drought, high intensity rains, changes in storms intensity and frequency. Linking to e.g. Landslides.
- Sea-Level Rise (if applicable) salination of Ground water resources, increased flooding damaging households and infrastructure.
- 4. Extreme Events past and projected number droughts, floods, tropical cyclones, seasonal variation (growing season), increasing intensity and frequency of storms.

The Climate narrative is telling a story: "The region/area has experienced climate risks already and because of Climate Change these risks will be much greater and impacting more people and sectors."



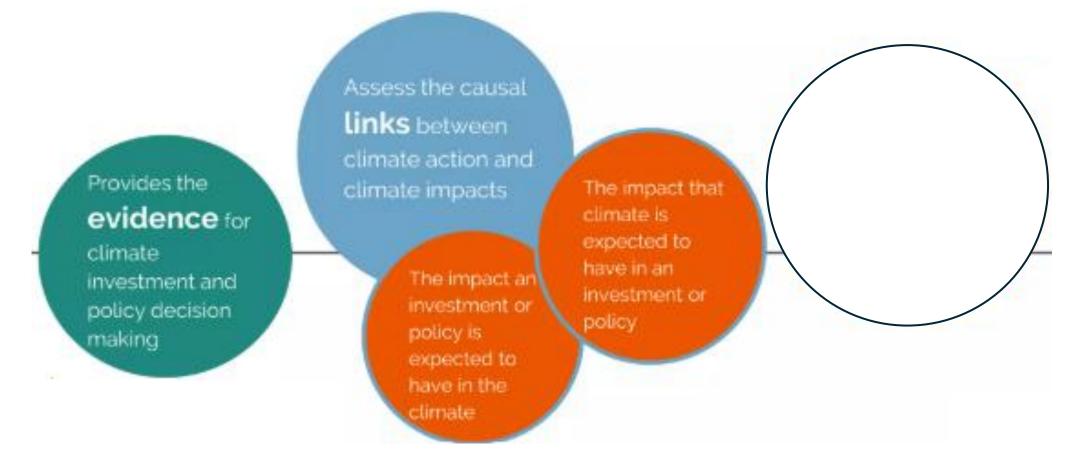
Climate rationale - what is it?







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Climate rationale - what is it?

Assess the causal Needs to be links between based on climate action and best Provides the The impact that climate impacts evidence for climate is: available expected to climate science have in an The impact an investment and investment or investment or policy decision policy policy is making expected to have in the ctimate







- The GCF funds **climate** action, not development as usual.
- Proposals must clearly identify climate drivers.
- The rationale must distinguish climate change impacts from development issues.





Climate Rationale Examples

- Managing coastal and river erosion:
 - √ Changing storm frequencies and magnitude
 - ✓ Changing river flows
 - √ Higher rainfall intensities
 - × Land use changes
 - × Sediment transport blocked by anthropogenic activities
 - × River flows reduced by abstraction
 - Exception: if abstractions were in response to CC
 - × Sand mining





Examples continued

- Adapting to sea level rise:
 - √ Thermal expansion of oceans
 - ✓ Melting icecaps
 - × Land subsidence as a result of GW extraction
 - Exception: extraction was as a result of another CC impact
 - × Geological movements





Counterfactual logic – "what if..."

"What if we lived in a world where anthropogenic climate change did not exist?"

Attribution -> shows how well activities respond to a climate threat

"What if our activities/project/initiatives don't get funded/implemented?"

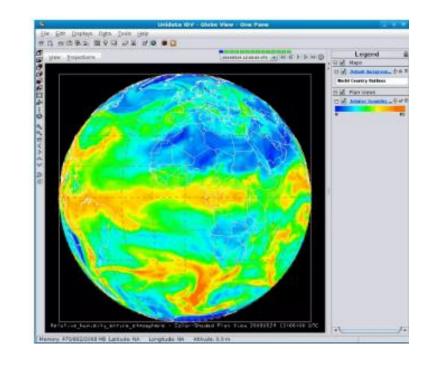
 Link to IMPACT -> shows how well activities respond to needs of vulnerable communities/sector





Climate Science Basis

- Show **trends over time** (spatial and graphs) for the last 20+ years: temperatures, rainfall, extremes, variance.
- Hazards Severity, Magnitude, Frequency and Intensity: feeds into the Theory of Change, Logframe and Indicators, and Financial model and budget).
- Reference national data (NDCs, NatComs, BURs (UNFCCC Biennial Update Reports submitted by Non-Annex 1 parties)), IPCC data/reports, and downscaled climate models (best available e.g., precipitation shifts, temperature rise, extreme event records), Research, National & Local reports: "zoom in" gradually.
- Remote Sensing/Earth Observation data and hydro-meteorological insights.
- Example: use **SSP2 and SSP5** with selected visuals: <u>Home | Climate Change Knowledge Portal</u>
- Communicate Climate Impact: use Graphs & Vulnerability maps (which also feed into the GEDSI action plan, ESS, noting refinement/validation via Stakeholder engagements).

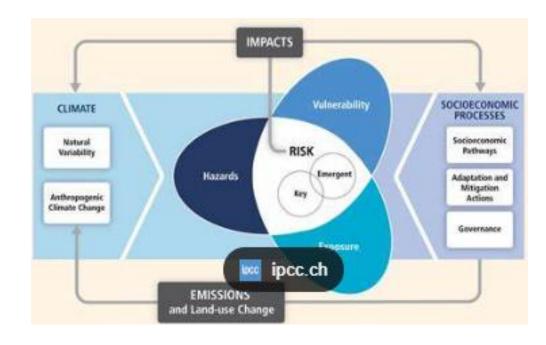


What's the difference between "Representative Concentration Pathways" and "Shared Socioeconomic Pathways"



Vulnerability

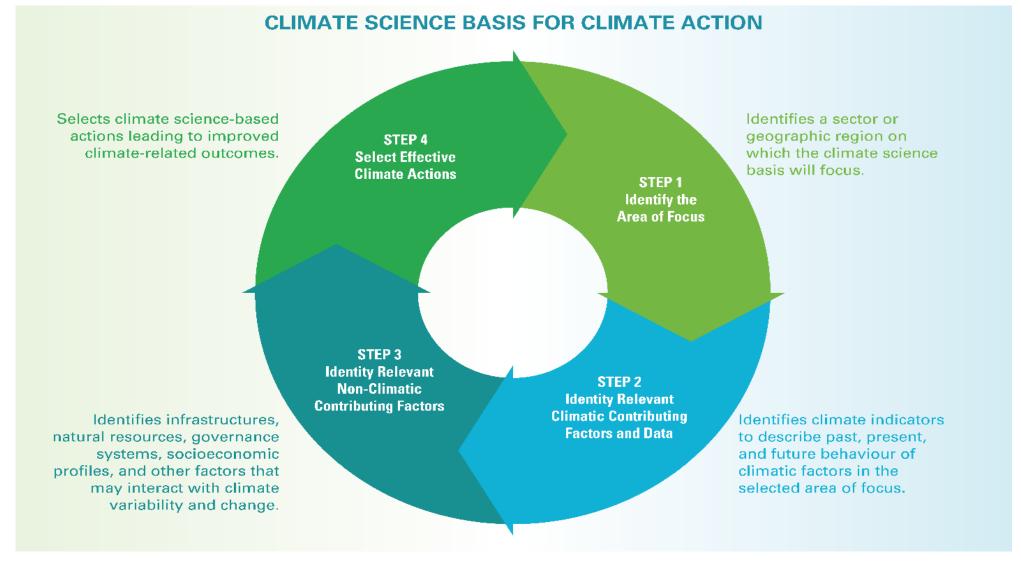
- Limited capacity to adapt or mitigate
- Vulnerable populations: # persons/households/area
- Socio-economic factors: evidence based
- Exposure
- Infrastructure, governance, and institutional capacity
- Historical response
- Community resilience indicators
- Determine: What is the impact? How does it arise? On whom/what?







Using climate science for climate action







Country example: Bosnia and Herzegovina

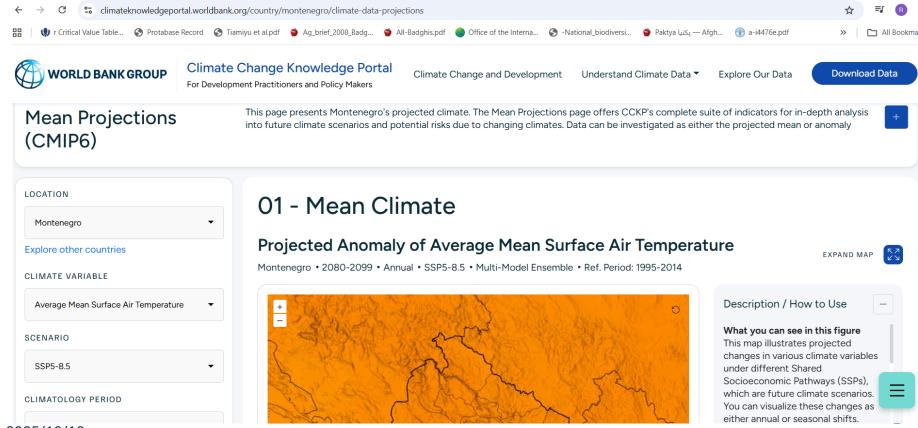
- Climate change is expected to continue to cause increases in rainfall extremes, with associated increases in flood impacts
- 26% of B&H's population is already vulnerable to flood impacts
- This vulnerability is underpinned by limited use of climate data and integrated flood risk management
- Consequently, the country proposes an integrated flood risk management approach that incorporates flood forecasting and early warning systems and the use of long-term, climate-informed data





Groupwork

 SELF: Access World Bank Climate Change Knowledge Portal – access data for Montenegro







Groupwork - continued

- Form 3 groups
- Using the World Bank portal, identify key climate change risks for a sector/initiative/vulnerable area/vulnerable community of interest
- Outline how climate changes are likely to result in adverse impacts
- Identify particular vulnerabilities
- Present your findings as a <u>problem statement</u> start with "Climate change is causing..."

