

A Climate Landscape Analysis for Children (CLAC) in Guinea Bissau

A SUMMARY

1. INTRODUCTION

Climate change is impacting the children of Guinea-Bissau's right to a clean, healthy and sustainable environment. Each year, the growing number of extreme weather events puts more children's lives at risk. When floods rage, schools, homes and hospitals are destroyed. When droughts hit, families lose their livelihoods and child poverty increases. Additionally, other forms of environmental degradation, including air and water pollution, forest loss and desertification also threaten the country's children. It is Guinea-Bissau's poorest, most vulnerable children that will be the most affected by these impacts.

Climate change is an imminent threat to children in Guinea-Bissau, not only because of the projected frequency of extreme weather events but also because of the country's low human development index and fragility. According to UNICEF 2021 Children's Climate Risk Index (CCRI), which analyses countries' exposure to climate and environmental hazards, shocks and stresses; and child vulnerability, Guinea-Bissau holds a score of 8.4, ranking 4th out of the 163 countries covered in the Index. Children in Guinea-Bissau are considered at "extremely high" risk to the impacts of climate change, given their physical and psychosocial vulnerability, and disruption to services essential for their development.

The Climate Landscape Analysis for Children (CLAC) compiles all the available data and research on the impacts of climate change and environmental degradation on children in Guinea-Bissau. This document provides a summary of the CLAC Report, including a snapshot of who the country's most vulnerable children are - and where they live, and specific measures to protect them. The extended version of the CLAC report, including a series of sector-specific recommendations, can be found [here](#). The CLAC has been developed in consultation and collaboration with the Government and other partners. Most importantly, the CLAC has been developed in collaboration with children and young people, including their experiences and recommendations for future action.



2. KEY FINDINGS



- **Climate change and other environmental hazards are among the greatest threats facing Guinea-Bissau's children, both now and in the future.** Water scarcity, drought, flooding and sea-level rise are all becoming more common as a result of climate change. Additionally, air pollution, water pollution, deforestation and a lack of sustainable solid waste management, all threaten Guinea-Bissau's children's right to a safe and healthy environment.
- **It is the poorest children living in the most hazard-prone regions who are most vulnerable to climate change and other environmental impacts.** All of Guinea-Bissau's regions face multiple overlapping climate hazards, in addition to having extremely high levels of child vulnerability.
- **Around 540,000 children in Guinea-Bissau (55% of the under-18 population) are currently exposed to extreme high temperatures (exceeding 35°C).** These rising temperatures are expected to lead to the tripling of heat-related mortality by 2080, many of these victims will be children.
- **Flooding currently threatens almost half of Guinea-Bissau's children; 47 percent, or 470,000 children live in areas with high coastal flood risk.** In addition, around 70,000 children in Guinea-Bissau are at high risk of riverine flooding.
- **Guinea-Bissau's primary food sources, rice and fish, in addition to cash crops, such as cashew nuts, are highly vulnerable to the impact of climate change.** This has major implications for food security, poverty and child nutrition. There are additionally emerging concerns around the loss of livelihoods, poverty and child protection issues such as early marriage, violence and child labour.
- **In Guinea-Bissau, seasonal variations exist in rates of food insecurity and under-5 malnutrition - both of which peak during the dry season (August to October).** Malnutrition rates are the highest in the hotter, dryer northern and eastern regions of Gabu, Oio and Bafata.
- **Guinea-Bissau's heavy rainfall and flooding are important risk factors for post-neonatal infant and child mortality in Guinea-Bissau - the majority of which is caused by vector-borne disease.** Post-neonatal infant and child mortality during the rainy season was found to be the most pronounced in children aged 1-4, particularly among girls.
- **Climate change is set to alter the country's epidemiological landscape.** This will lead to the proliferation of certain pathogens in warmer climates (e.g E.coli, malaria etc) while hindering others (e.g. rotavirus).
- **According to the most recent satellite data, children across Guinea-Bissau are exposed to unsafe levels of air pollution from multiple sources.** Many of these air pollutants exceed the levels that are considered safe for children's health and wellbeing, increasing their risk of cancer, asthma, neurological disorders and lower respiratory infections.
- **Guinea-Bissau's young people care deeply about the state of the environment and want their Government to do more to protect it.** Their voices and needs are however, still not included across the policy, strategy and programmes that affect their futures. Additionally, Guinea Bissau has not yet received any significant child-responsive climate funding from the major climate donors.


3. CHILDREN’S EXPOSURE TO CLIMATE CHANGE AND OTHER ENVIRONMENT-RELATED HAZARDS

a. Observed and projected changes in climate

The table below provides a summary of the observed and projected changes for the key climate-related hazards facing Guinea Bissau’s children.

Table.1 Summary of observed and projected climate changes in Guinea Bissau, including their impact on children

Climate impacts	Current situation	Projected changes	Most affected regions	Potential impacts for children	The most affected children
<p>1. Extreme heat</p> 	<p>Temperatures today are around 1.5°C higher than they were in the 1950s.</p>	<p>By 2080, average annual temperatures are expected to increase by an additional 2.0°C to 3.8°C, compared to the 1950s.</p>	<p>All regions will be affected, but especially Gabu and Bafata, and Oio.</p>	<ul style="list-style-type: none"> ● Heatstroke and dehydration ● Increased incidence of pre-eclampsia in pregnant women ● Increased risk of low birth weights in infants ● Increased risk of chronic and acute malnutrition in under-5 children ● Increased risk of food and water-borne diseases. ● Increased risk of vector-borne disease, including Malaria and Dengue Fever. ● Reduced concentration and learning at school. ● Increased risk of violence and abuse ● Anxiety and other mental health disorders. 	<ul style="list-style-type: none"> ● Children living in extreme poverty, including those without access to water and electricity ● Children under-5, particularly infants ● Children with disabilities and other medical conditions ● Orphans and other vulnerable children (including migrant children, street children and those engaged in child labour).
<p>2. Drought and water scarcity</p> 	<p>Over the past century, dry spell length and precipitation intensity have both increased, with the climate becoming slightly dryer overall.</p> <p>Guinea-Bissau has experienced a series of</p>	<p>Rainfall patterns will become more extreme and unpredictable - and the country will become hotter and dryer overall.</p>	<p>All regions will be affected, but especially Gabu and Bafata.</p> <p>Oio and Tombali are also highly vulnerable due to extremely poor WASH access and poor water quality</p> <p>The Bijagos islands and coastal regions are also</p>	<ul style="list-style-type: none"> ● Increased risk of malnutrition due to food insecurity and loss of livelihoods. ● Increased risk of vector-borne disease, including Malaria, Dengue Fever and Leishmaniases. ● Increased concentration of toxins, bacteria and other contaminants in water, increasing risk of water-borne disease 	<ul style="list-style-type: none"> ● Children living in extreme poverty, including from families without access to water ● Children from remote rural communities that rely on rain-fed agriculture ● Children under-5, particularly infants

	<p>recurring droughts since the 1970s, including in 2002, 2006 and 2012.</p> <p>Water scarcity is an ongoing challenge in many regions, due to the lack of safe water access.</p>		<p>vulnerable due to the salinisation of water sources.</p>	<ul style="list-style-type: none"> ● Increased risk of dehydration ● Increased risk of displacement, urban migration and exploitation. ● Women and children are required to walk further to collect water, putting them at risk of violence and abuse, and taking time away from school and other activities. 	<ul style="list-style-type: none"> ● Children with disabilities and other medical conditions ● Orphans and other vulnerable children (including migrant children, street children and those engaged in child labour).
<p>3. Flooding, storms and sea-level rise</p> 	<p>The intensity and frequency of heavy rainfall and storms have increased significantly, leading to increased flooding in coastal, delta and riverine areas.</p> <p>Sea levels have risen at a rate of 8.79 mm/year over the last 15 years, exceeding the global rate of 3.1mm/year.</p>	<p>Flooding and storms will likely become more intense and frequent.</p> <p>Sea levels are predicted to rise even more rapidly in the coming years, rising by a further 250-375 mm by 2050, and by 600-700mm by 2100.</p>	<ul style="list-style-type: none"> ● Coastal regions (Cacheu, Biombo, Oio, Quinara and Tombali) ● The Bijagos Islands ● The Cacheu, Geba and Corubal river basins (particularly Gabu, Bafata, Oio and Cacheu regions). ● Urban areas, including Bissau, particularly informal settlements. 	<ul style="list-style-type: none"> ● Injury and death. ● Salinisation of water sources, leading to, safe water shortages for consumption and agriculture, displacement and health issues such as high blood pressure ● Destruction of homes, infrastructure and essential services for children. ● Displacement and urban migration. ● Financial hardship and stress for families. ● Increased exposure to chemicals, pathogens and other toxins, which contaminate soil and water sources. ● Increased risk of water and vector-borne disease. 	<ul style="list-style-type: none"> ● Children living in extreme poverty, including those without access to safe housing ● Children living close to rivers and the ocean ● Children under-5, particularly infants ● Children with disabilities and other medical conditions ● Orphans and other vulnerable children (including migrant children, street children and those engaged in child labour).

b. Children’s Climate Risk

Map.1 Children’s exposure to climate hazards

The map below provides a snapshot of the most important climate-related hazards facing Guinea-Bissau’s children; **flooding, extreme heat and water scarcity**. These hazards have then been combined to create the total hazard exposure score for each region. The regions with the highest score have the greatest



exposure to overlapping climate hazards.

All regions of Guinea-Bissau face either a HIGH or EXTREMELY HIGH exposure to multiple overlapping climate hazards

Map. 2 Children’s vulnerability to climate hazards

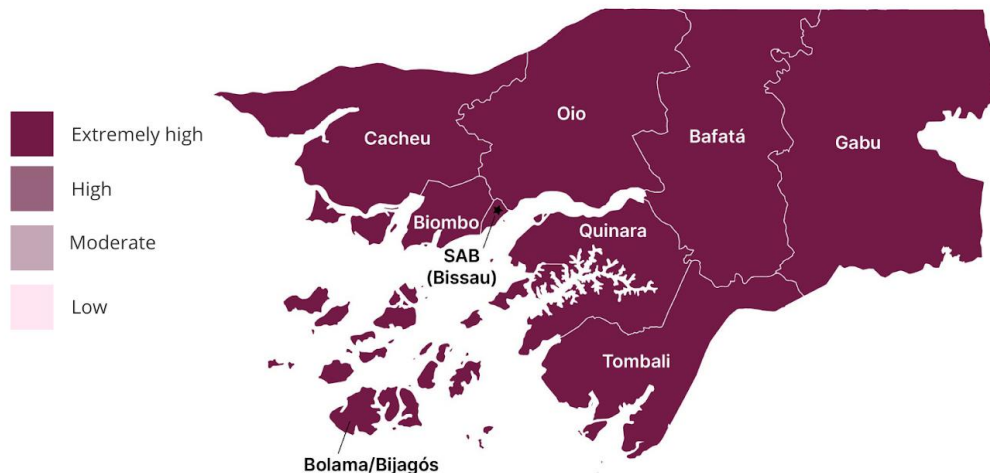
The map below provides a snapshot of the most important climate-related vulnerabilities for children in Guinea-Bissau. These include **a lack of access to Water, Sanitation and Hygiene (WASH), Health, Food Security and Nutrition Education and Child Protection services**, in addition to other factors such as the housing quality and population density.



All regions of Guinea-Bissau currently experience EXTREMELY HIGH levels of child vulnerability

Map.3 Overall Child Climate Risk

In Guinea-Bissau, the children facing the greatest climate change risks are the ones who are most exposed to climate hazards (Map.1) and are highly vulnerable due to multidimensional child poverty (Map.2). **An overall Children’s Climate Risk Score has been developed by combining the Climate Hazard (Map.1) and Child Vulnerability scores (Map.2) for each region.**



Children living in ALL regions of Guinea Bissau face an EXTREMELY HIGH overall climate risk

4. RECOMMENDATIONS

1. Ensure that all national policies and strategies in Guinea-Bissau incorporate considerations of climate change and environmental degradation, with specific measures to protect children and youth.

Specific opportunities include updating the National Development Plan, the upcoming National Adaptation Plan and 4th National Communication to the UNFCCC, in addition to sector-specific policies and plans. The May 2024 National Climate Dialogue also provides an important opportunity to reflect on the current and future impacts of climate change on children in Guinea Bissau.

2. Enhance the collection of climate and environment-focused research, data, and evidence pertaining to children in Guinea-Bissau.

Community-level data should also be collected, where available, to provide a more complete picture of local hazards and vulnerabilities. This involves strengthening academic research and integrating climate-related indicators for children into existing monitoring and data collection systems (e.g., MICS, DHS and EMIS), disaggregated by gender, socioeconomic status, and ethnicity.

3. Identify and support the specific technical expertise required by partner organisations and government agencies in Guinea-Bissau to build capacity around climate mitigation and adaptation actions to protect children.

Training and support should concentrate on child-focused policy development, project design, implementation, and monitoring to better address the needs of children and young people.

4. Prioritise climate-resilient interventions for children in the most hazard prone regions, tackling all aspects of child vulnerability and deprivation.

Partners must work together to ensure holistic interventions that increase the resilience of communities and children.

5. In collaboration with the Government and UN partners, establish Early Warning Systems to facilitate the early identification, monitoring, preparedness, communication and response to climate-induced threats to children.

This will help establish more resilient systems capable of safeguarding children from climate-related risks before they materialise.

6. Mobilise additional financial resources to shield Guinea-Bissau's children from the long-term impacts of climate change.

An estimated \$688.8 million in climate finance is needed to address both climate mitigation and adaptation in Guinea Bissau, yet the country is still failing to fully access and benefit from the large amount of climate financing available globally. It remains one of the most underfunded LDCs and SIDS in the world. UNICEF and the Government must therefore cultivate new partnerships with donors, to apply for large scale climate funding. This includes exploring opportunities with private sector entities and the Green Climate Fund (GCF) and Global Environment Facility (GEF) in collaboration with the Ministry of the Environment and Biodiversity and accredited partners. The 2025 UN Climate Change Conference (UNFCCC COP 30) in Brazil also provides a critical opportunity for the country to prevent evidence of the impact of climate change on its children - and lobby for additional financial support.

For sector-specific recommendations, please refer to the [extended version of the CLAC Report](#).