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We are also grateful to Paul Karaimu and Rupsha Banerjee, who took time away from their busy schedules to support the editing of this document.

About SPARC

Climate change, armed conflict, environmental fragility and weak governance and the impact these have on natural resource-based livelihoods are among the key drivers of both crisis and poverty for communities in some of the world’s most vulnerable and conflict-affected countries.

SPARC aims to generate evidence and address knowledge gaps to build the resilience of millions of pastoralists, agro-pastoralists and farmers in these communities in sub-Saharan Africa and the Middle East.

We strive to create impact by using research and evidence to develop knowledge that improves how the FCDO, donors, non-governmental organisations, local and national governments, and civil society can empower these communities in the context of climate change.
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## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>Adaptation Fund</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AFLOLU</td>
<td>agriculture, forestry, livestock and other land use</td>
</tr>
<tr>
<td>BOAD</td>
<td>West African Development Bank</td>
</tr>
<tr>
<td>CBIT</td>
<td>Capacity-building Initiative for Transparency</td>
</tr>
<tr>
<td>CILSS</td>
<td>Comité permanent Inter Etats de Lutte contre la Sècheresse dans le Sahel (Permanent Interstate Committee for Drought Control in the Sahel)</td>
</tr>
<tr>
<td>CO2 eq</td>
<td>carbon dioxide equivalent</td>
</tr>
<tr>
<td>Covid-19</td>
<td>Coronavirus disease</td>
</tr>
<tr>
<td>CPI</td>
<td>Climate Policy Initiative</td>
</tr>
<tr>
<td>DFI</td>
<td>development finance institution</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GCF</td>
<td>Green Climate Fund</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GHG</td>
<td>greenhouse gas</td>
</tr>
<tr>
<td>GNI</td>
<td>gross national income</td>
</tr>
<tr>
<td>MDB</td>
<td>multilateral development bank</td>
</tr>
<tr>
<td>Mt CO2 eq</td>
<td>million tonnes of carbon dioxide equivalent</td>
</tr>
<tr>
<td>MRV</td>
<td>measurement, reporting and verification</td>
</tr>
<tr>
<td>NAP</td>
<td>national adaptation plan</td>
</tr>
<tr>
<td>NDC</td>
<td>nationally determined contribution</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organisation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>SME</td>
<td>small and medium enterprises</td>
</tr>
<tr>
<td>SSA</td>
<td>sub-Saharan Africa</td>
</tr>
<tr>
<td>SWOT</td>
<td>strengths, weaknesses, opportunities, threats</td>
</tr>
<tr>
<td>t CO2 eq</td>
<td>tonnes carbon dioxide equivalent</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>$</td>
<td>United States dollar</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>WAEMU</td>
<td>West African Economic and Monetary Union</td>
</tr>
</tbody>
</table>
KEY FINDINGS

1. Climate finance data is diverse, scattered and based on different time horizons. Significant discrepancies have been noted from stakeholders’ records.

2. There is need to re-establish a real convergence towards a common understanding of adequate climate finance.

3. Climate change and its multifaceted characteristics means that a standard method should be developed to measure the size and distribution of climate finance needs in the West African Economic and Monetary Union (WAEMU) region.

4. The WAEMU region is one of the most exposed landscapes to global warming, although it is among the lowest emitters (0.54% of global emissions and 7.41% of sub-Saharan Africa’s (SSA) emissions).

5. Implementing nationally determined contributions (NDCs) across the WAEMU region will cost $79.1 billion over 2020–2030, almost equally distributed between adaptation and mitigation (48.4% and 49.9%), with the remainder for dual benefit projects (1.7%). WAEMU’s climate finance needs amount to $79 billion annually, representing 35.5% of West Africa’s needs and 3.2% across the continent. However, climate finance flows to the WAEMU region stood at only $3.5 billion in 2020, leaving a wide gap that needs to be filled.

6. The public climate finance flowing to WAEMU member states amounted to $3.136 billion in 2020 (i.e. 90% of climate finance flows) while the private climate finance reached $356 million. Rebalancing public and private sources is necessary as shortcomings of the public source of funding appear particularly difficult to overcome (non-compliance of G20 countries to allocate 0.7% of their gross national income (GNI) to development assistance due to increasing budget deficits in the post-Covid-19 context, the self-centred orientation of China’s new carbon market, plus lack of funds from the Green Climate Fund (GCF)).

7. Although West African countries allocate most of their needs to mitigation (77%) as observed in the African continent, the WAEMU countries have a slightly more balanced approach; they place both adaptation and mitigation issues almost equally.

8. From an agro-ecological perspective, coastal countries of the WAEMU region are more likely to focus on mitigation (57%) while in Sahelian countries the efforts are more oriented to adaptation-related issues (53% of needs).

9. Climate change affects both food security and sovereignty, nutrition and livelihoods of different categories of the population including those engaged in food systems. Although the primary sector is the main source of livelihood in the WAEMU countries, only Guinea Bissau, Benin and Niger have seen climate finance flows prioritise agriculture, forestry, livestock and other land uses (AFLOLU) while other countries have focused on energy systems. The AFLOLU vulnerable to climate change should be the core priority of climate finance in the WAEMU region.
10. The West African population is predominantly young (64% are younger than 24 years old). Although very vulnerable to climate change, women and youth can be drivers of transformation towards a low-carbon economy. Mainstreaming gender-sensitive climate change and climate finance requires the urgent attention of policy-makers.

11. More than two-thirds of multilateral climate finance is provided by the World Bank (71%) followed by the African Development Bank (AfDB) (14%). The bilateral component is equally dominated by funding from the European Union (EU) and France (27% each). The bilateral climate funds are intended for 75% of Sahelian countries that experience problems related to climate change and its effects on vulnerability and fragility in terms of food, the ecosystem, health and social inclusion.

12. Debt instruments are mostly used for climate finance in the WAEMU region (75%) while grants represent only 25% of climate funds. In the context of growing debt in the WAEMU due to unpredictable pandemic-related supportive measures, the current trend of climate finance needs to be reversed.

13. To sustain climate finance in the WAEMU region, consistent policy-making and enforcement, plus implementation of regulations, can strengthen standard coping mechanisms and reduce vulnerability levels.

14. Overrepresentation of public sources of climate finance and poor response by the private sector means that new and innovative mechanisms amongst other proven approaches such as secondary debt markets, debt-for-nature swaps or debt relief for climate finance should be explored.

15. Climate change should be mainstreamed into national policies and budgets as climate finance needs constitute only $72 per capita per year in the WAEMU with a gross domestic product (GDP) of $1,452 per capita per year. This offers opportunities to internalise this cost even though these countries struggle on a daily basis to cover budgetary emergencies.
STUDY BACKGROUND

While the countries of the WAEMU region account for the lowest share of global greenhouse gas (GHG) emissions annually (0.5% of global emissions and 7.4% of SSA emissions), they disproportionately suffer from the effects of climate change. There is a significant climate finance gap in the WAEMU region. The region is particularly vulnerable to land degradation, and experiences more extreme droughts, floods and other life-threatening weather events caused by climate change. Some of the country members rank among the top seven most vulnerable countries to climate change. However, their ability to adapt is constrained by poverty and fragility.

Multilateral climate funds and bilateral donors tend not to allocate funds in fragile and conflict-affected situations, seemingly due to perceived higher risks and challenges. For instance, between 2010 and 2018, global public adaptation finance was only 6% of cumulative international development assistance ($1.3 trillion) (OECD, 2020a). Over the same period, only 8% ($5.9 billion) of global adaptation finance ($77.8 billion) was committed to countries in the Sahel region and to the Horn of Africa (Watson and Schalatek, 2020; OECD, 2021).

On a per capita basis, more than half of the countries in the region received less adaptation funding than the average for least developed countries, despite sharing similar levels of socioeconomic development but ranking at the top of climate vulnerability indexes. Evidence suggests that the more fragile a country is, the less adaptation finance it receives, thus supporting the idea that donors tend to favor safer places.

The challenge of accessing adaptation finance is exacerbated by instability associated with conflict conditions. These include weak government capacities to meet fiduciary standards set by the GCF, Global Environment Facility (GEF), multilateral development banks (MDBs) and other agencies tasked to provide climate funding.

Based on three country case studies (Mali, Somalia and Sudan) assessed by the Strategic Purchasing Africa Resource Centre (SPARC), state institutions lacked the public financial management systems to mitigate financial fiduciary risks, including fraud and corruption. As a result, climate finance was almost entirely channelled through multilateral organisations or (international) partners on the ground.

The underfunding of climate finance in fragile and conflict-affected settings is often related to risk perceptions and management processes that are ill-suited to fragile and conflict-affected settings. These, in turn, are hindered by a lack of climate change strategies and policies specifically addressing conflict and fragility, and insufficient investment in cultivating human resources to address the challenge.

In early 2022, the Environment and Climate Finance Division of the West African Development Bank (BOAD) requested Supporting Pastoralism and Agriculture in Recurrent and Protracted Crisis (SPARC) to commission research aimed at advancing its climate action agenda. The main objective of the study was to assess gaps and identify policies that could help decision-makers address key issues that might enhance climate finance within the WAEMU region. It was based on a comprehensive literature analysis articulated around four steps. First,
publications that contain climate finance-related terms in their titles or keywords were explored. Second, the climate-related words (climate risk, climate change, climate variability, global warming, heat, drought, floods, scarcity, etc.) and finance-related terms (bonds, equity, stock markets, stock exchange, loans, swaps, portfolios, etc.) were combined. Third, the term ‘Africa’ was added to the exploration to ensure a continental understanding of the topics. Fourth, the search was narrowed down by looking at what was available in West Africa and the Sahel. In total, 57 publications were utilised for the study. The researchers also used all the grey literature available in institutions such as the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) to analyse the different stages of climate negotiations concerning member countries. Finally, quantitative information from the World Bank, the United Nations Development Programme (UNDP), Knoema, the United Nations Framework Convention on Climate Change (UNFCCC), NDCs and Climate Policy Initiative (CPI) databases was extracted and analysed.

Technical and policy notes were produced by Dr Abdrahmane Wane, the International Livestock Research Institute’s (ILRI) Regional Representative for West Africa and Livestock Value Chain and Climate Risk Specialist based in Senegal, and Dr Maguette Kairé, Lead Climate Change Expert at CILSS based in Niger.

GENERAL CONTEXT

WAEMU was established in 1994 as a trade and currency union comprising eight countries – Benin, Burkina Faso, Côte d’Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. It was expected to provide stability and more substantial, sustainable and inclusive growth across West Africa and the Economic Community of West African States (ECOWAS) to improve citizens’ lives. WAEMU has experienced a decade of sustained economic growth, with an average rate of 6.4% between 2012 and 2019. This economic dynamism has been primarily stimulated by private investment, public spending and proactive credit mechanisms.

In the context of multifaceted shocks (pandemic, insecurity, climate change), most WAEMU governments have put in place multiple measures to mitigate their potential negative impacts. In spite of the budget deficits (-5.4% of GDP in 2020), these actions resulted in an economic recovery that started in the third quarter of 2020 and firmed up in the following years. Debt levels remain sustainable (despite some warning signs in Senegal). However, structural weaknesses persist, notably in human resource development; WAEMU countries are at the bottom of the league.

Despite developing some resilience during the pandemic, WAEMU countries remain among the most exposed nations to climate change impacts although they are among the lowest emitters. These countries are also weak in the Environmental Performance Index, illustrating their inability to attain critical achievements regarding environmental health and ecosystem vitality (ecosystem protection and resource management). This paradoxical situation requires a paradigm shift in the direction of climate finance and a sharp reduction in the gap between needs and captured financial resources.
## TABLE 1: WAEMU – SELECTED ECONOMIC AND SOCIAL INDICATORS IN 2020

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Benin</th>
<th>Guinea Bissau</th>
<th>Côte d’Ivoire</th>
<th>Togo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions of inhabitants)</td>
<td>12.1</td>
<td>1.9</td>
<td>26.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Area km² (thousands)</td>
<td>112.8</td>
<td>28.1</td>
<td>318.0</td>
<td>54.4</td>
</tr>
<tr>
<td>GDP per capita (current $)</td>
<td>1291.0</td>
<td>727.5</td>
<td>2325.7</td>
<td>915.0</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-1.8</td>
<td>-2.7</td>
<td>-3.2</td>
<td>-0.3</td>
</tr>
<tr>
<td>Foreign direct investment, net inflows (% of GDP)</td>
<td>1.1</td>
<td>1.5</td>
<td>1.2</td>
<td>-0.8</td>
</tr>
<tr>
<td>External debt stocks (% of GNI)</td>
<td>33.9</td>
<td>55.3</td>
<td>42.2</td>
<td>33.5</td>
</tr>
<tr>
<td>Human Development Index – Value (rank)</td>
<td>0.53 (167)</td>
<td>0.48 (177)</td>
<td>0.55 (159)</td>
<td>0.54 (162)</td>
</tr>
<tr>
<td>Environmental Performance Index – Value (rank)</td>
<td>30.0 (156)</td>
<td>29.1 (160)</td>
<td>25.8 (175)</td>
<td>29.5 (158)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Burkina Faso</th>
<th>Mali</th>
<th>Niger</th>
<th>Senegal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions of inhabitants)</td>
<td>20.9</td>
<td>20.2</td>
<td>24.2</td>
<td>16.7</td>
</tr>
<tr>
<td>Area km² (thousands)</td>
<td>273.7</td>
<td>1220.2</td>
<td>1266.7</td>
<td>192.5</td>
</tr>
<tr>
<td>GDP per capita (current $)</td>
<td>857.9</td>
<td>862.5</td>
<td>567.7</td>
<td>1462.8</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>4.1</td>
<td>-2.2</td>
<td>-13.2</td>
<td>-</td>
</tr>
<tr>
<td>Foreign direct investment, net inflows (% of GDP)</td>
<td>-0.6</td>
<td>3.1</td>
<td>2.6</td>
<td>7.5</td>
</tr>
<tr>
<td>External debt stocks (% of GNI)</td>
<td>27.0</td>
<td>36.3</td>
<td>34.9</td>
<td>71.7</td>
</tr>
<tr>
<td>Human Development Index – Value (rank)</td>
<td>0.45 (184)</td>
<td>0.43 (186)</td>
<td>0.40 (189)</td>
<td>0.51 (170)</td>
</tr>
<tr>
<td>Environmental Performance Index – Value (rank)</td>
<td>38.3 (111)</td>
<td>29.4 (159)</td>
<td>30.8 (153)</td>
<td>30.7 (154)</td>
</tr>
</tbody>
</table>

Cumulative carbon dioxide (CO2) matters and using a carbon budget is a critical component of climate justice and equity debates. A crucial paradox is that countries that produce the least emissions continue to suffer from the effects of climate change and struggle to access climate finance, while the highest emission countries have easier access to the resources. A better balance of adaptation and mitigation cost coverage requires more efficient compensatory mechanisms to avoid hampering the economic growth processes of developing countries. For these reasons, donors’ adaptation finance allocation tends to be more closely linked to vulnerability to climate change and state fragility than poverty (Eisenstadt et al., 2021).

For WAEMU countries, weak and unequal access to climate finance is at the very core of vulnerability and resilience. However, these developing nations must put in place the legal, institutional, technical and human resource capacities to access the available resources. Urgent to timely action requires identification, assessment, prioritisation and planning to reduce climate risks and build resilience. An interesting, up-to-date and relatively comprehensive review of the literature on innovative concepts and approaches is provided by Pörtner et al. (2022) and Eisenstadt et al. (2021) and expatiated upon in this report.
Main interactions and trends between climate change, human society and ecosystems

Dell et al., 2014; IPCC, 2021; Lesterquy, 2021; Burke and Emerick, 2016; Feng et al., 2010; Garrmans et al., 2017; Hsiang, 2010; Leiter et al., 2009; Lobell et al., 2011; Noth and Rehbein, 2019; Schlenker and Lobell, 2010; Zhang et al., 2018; Magdaza, 2000; Feithmann, 2012; Toulinn, 2009; Yang et al., 2021; UNEP, 2012; Niang et al., 2015; FAO, 2020; FAO, 2016; Ehiakpor et al., 2016; Serdeczny et al., 2017; Charreau et al., 2021; Sako and Ogigio, 2002; Abidoye and Odusola, 2015; Adam and Amoar, 2021; Funkhauser and Tol, 2005; Raddatz, 2009; Alagidede et al., 2016; Kahsay and Hansen, 2016; Reza et al., 2018; Liu et al., 2020; Talib et al., 2021

High vulnerability, low readiness and limits to adaptation

Bakkensten and Mendelsohn, 2016; Burke and Emerick, 2016; Hornbeck, 2012; Hsiang and Nanta, 2012; Hsu et al., 2018; Jin et al., 2021; Miao and Popp, 2014; Sono et al., 2021

Paradigm shift towards climate change adaptation

Weikmans and Timmons Roberts, 2019; Aklin and Mildegener, 2020; Hallegate, 2019; Eisenstadt and Macková, 2022; Chan et al., 2018; Jamieson, 2014; Victor, 2011; Downing, 2019; Kuyper et al., 2018; Barrett and Toman, 2010; Sovacool and Linner, 2016; IDA, 2010; Graham and Serdaru, 2020; World Bank Group, 2019

Options to reduce climate risks and to build resilience by filling the gap of climate finance mechanisms

Source: Adapted from Pörtner et al. (2022) and Eisenstadt et al. (2021)
EMISSION PROFILES OF WAEMU COUNTRIES

WAEMU countries contribute only 0.54% of global emissions and 7.41% of SSA’s emissions. The coastal countries of the WAEMU zone contribute just one-third of the emissions recorded in the region, while the Sahelian countries are responsible for the remaining two-thirds. In the coastal countries, the highest GHG emitter is Côte d’Ivoire (57%) while recording lower GHG emissions relative to GDP in the agro-ecological (AE) zone. Benin follows with 31% of GHG emissions.

In the Sahelian countries of the WAEMU, Senegal contributes the least with 19% of GHG emissions, while also recording lower GHG emissions relative to GDP in the agro-ecological zone.

On average, all WAEMU countries emit less GHG compared to the rest of the world and the SSA averages.

**TABLE 2: ANNUAL GHG EMISSIONS OF WAEMU COUNTRIES, 2019**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Emissions (Mt CO2 eq)</th>
<th>% Global emissions</th>
<th>% SSA emissions</th>
<th>% WAEMU emissions</th>
<th>% AE zone emissions</th>
<th>Emissions (CO2 eq) per capita</th>
<th>Emissions (t CO2 eq) per $ million GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAEMU coastal countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>25.78</td>
<td>0.05</td>
<td>0.71</td>
<td>9.61</td>
<td>28.58</td>
<td>2.18</td>
<td>1,790.00</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>51.51</td>
<td>0.10</td>
<td>1.42</td>
<td>19.20</td>
<td>57.10</td>
<td>2.00</td>
<td>879.87</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>4.21</td>
<td>0.01</td>
<td>0.12</td>
<td>1.57</td>
<td>4.67</td>
<td>2.19</td>
<td>2,920.00</td>
</tr>
<tr>
<td>Togo</td>
<td>8.71</td>
<td>0.02</td>
<td>0.24</td>
<td>3.25</td>
<td>9.66</td>
<td>1.08</td>
<td>1,210.00</td>
</tr>
<tr>
<td>WAEMU coastal average</td>
<td>90.21</td>
<td>0.18</td>
<td>2.49</td>
<td>33.63</td>
<td>100.00</td>
<td>1.86</td>
<td>1,699.97</td>
</tr>
<tr>
<td>WAEMU Sahelian countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>56.31</td>
<td>0.11</td>
<td>1.56</td>
<td>20.99</td>
<td>31.63</td>
<td>2.77</td>
<td>3,480.00</td>
</tr>
<tr>
<td>Mali</td>
<td>44.16</td>
<td>0.09</td>
<td>1.22</td>
<td>16.46</td>
<td>24.80</td>
<td>2.25</td>
<td>2,560.00</td>
</tr>
<tr>
<td>Niger</td>
<td>43.96</td>
<td>0.09</td>
<td>1.21</td>
<td>16.39</td>
<td>24.69</td>
<td>1.89</td>
<td>3,400.00</td>
</tr>
<tr>
<td>Senegal</td>
<td>33.60</td>
<td>0.07</td>
<td>0.93</td>
<td>12.53</td>
<td>18.87</td>
<td>2.06</td>
<td>1,440.00</td>
</tr>
<tr>
<td>WAEMU Sahelian average</td>
<td>178.03</td>
<td>0.36</td>
<td>4.92</td>
<td>66.37</td>
<td>100.00</td>
<td>2.24</td>
<td>2,720.00</td>
</tr>
<tr>
<td>WAEMU</td>
<td>268.24</td>
<td>0.54</td>
<td>7.41</td>
<td>100.00</td>
<td>2.05</td>
<td>2,209.98</td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>49,760.00</td>
<td>100</td>
<td></td>
<td>100.00</td>
<td>6.48</td>
<td>567.67</td>
<td></td>
</tr>
<tr>
<td>SSA</td>
<td>3,620.00</td>
<td>100</td>
<td></td>
<td>100.00</td>
<td>3.27</td>
<td>1,990.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Climate Analysis Indicators Tool
Implementing NDCs across Africa is estimated to cost $2.4 trillion during the 2020–2030 period. This global cost also includes government commitments to provide resources to address the effects of climate change and the costs of loss and damages when data is supplied by countries. The expressed needs are 24% for adaptation, 66% for mitigation and 10% for dual benefits. The diversity of situations in Africa is illustrated by the needs expressed by West African and WAEMU countries, which may seem comparatively modest (9% and 3% of the needs expressed by all African countries). Although West African countries allocate most of their needs to mitigation (77%), as observed in the African continent, the WAEMU countries have a slightly more balanced approach; they place adaptation and mitigation issues almost equally (Table 3).

| TABLE 3: COMPARISON OF CLIMATE FINANCE NEEDS IN $ BILLION FROM 2020 TO 2030 |
|--------------------------|----------|----------|----------|
|                         | Africa*  | West Africa* | WAEMU    |
| Total                   | 2,429.0  | 222.7     | 79.1     |
| Adaptation              | 579.2    | 31.2      | 38.3     |
| Mitigation              | 1,607.0  | 171.5     | 39.5     |
| Dual benefits           | 242.8    | 20.0      | 1.4      |

Source: CPI(*) and updated country NDCs

From an agro-ecological perspective, it should be noted that in coastal countries (with the slight exception of Côte d’Ivoire), the focus is on mitigation (57%), while Sahelian countries (except Senegal) focus a little more on adaptation issues (53%) (Table 4).

| TABLE 4: DISAGGREGATED CLIMATE FINANCE NEEDS IN THE WAEMU COUNTRIES IN $ BILLION FROM 2020 TO 2030 |
|--------------------------|----------|----------|----------|
|                         | Costal countries | Benin | Guinea Bissau | Côte d’Ivoire | Togo |
| Total                   | 38.4      | 10.4    | 22.0       | 0.7          | 5.3  |
| Adaptation              | 16.5      | 1.8     | 12.0       | 0.1          | 2.6  |
| Mitigation              | 21.9      | 8.6     | 10.0       | 0.7          | 2.7  |
| Dual benefits           | 0.0       | 0.0     | 0.0        | 0.0          | 0.0  |

Source: Updated country NDCs (see https://unfccc.int/NDCREG)
The mobilisation of climate resources must be based on the countries’ ability to generate wealth. If GDP is considered an indicator of wealth, WAEMU as a union should devote 5% of its current GDP to cover its climate finance needs. The Sahelian countries of this economic and monetary union should commit an additional point of GDP compared to the coastal countries. The burden is much heavier for countries such as Benin and Togo, as well as Mali and Niger.

### TABLE 5: CLIMATE FINANCE NEEDS BASED ON GDP IN WAEMU COUNTRIES IN $ BILLION

<table>
<thead>
<tr>
<th>$ billion</th>
<th>WAEMU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate finance needs from 2020 to 2030</td>
<td>79.1</td>
</tr>
<tr>
<td>Average annual climate finance needs</td>
<td>7.9</td>
</tr>
<tr>
<td>GDP (current $)</td>
<td>159.6</td>
</tr>
<tr>
<td>Average annual climate finance needs (% GDP)</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$ billion</th>
<th>Coastal countries</th>
<th>Benin</th>
<th>Côte d’Ivoire</th>
<th>Guinea Bissau</th>
<th>Togo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate finance needs from 2020 to 2030</td>
<td>38.4</td>
<td>10.4</td>
<td>22.0</td>
<td>0.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Average annual climate finance needs</td>
<td>3.8</td>
<td>1.0</td>
<td>2.2</td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>GDP (current $)</td>
<td>86.0</td>
<td>15.7</td>
<td>61.3</td>
<td>1.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Average annual climate finance needs (% GDP)</td>
<td>4.5%</td>
<td>6.6%</td>
<td>3.6%</td>
<td>5.1%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$ billion</th>
<th>Sahelian countries</th>
<th>Burkina Faso</th>
<th>Mali</th>
<th>Niger</th>
<th>Senegal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate finance needs from 2020 to 2030</td>
<td>40.8</td>
<td>5.5</td>
<td>12.3</td>
<td>9.9</td>
<td>13.0</td>
</tr>
<tr>
<td>Average annual climate finance needs</td>
<td>4.1</td>
<td>0.6</td>
<td>1.2</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>GDP (current $)</td>
<td>73.6</td>
<td>17.9</td>
<td>17.5</td>
<td>13.7</td>
<td>24.5</td>
</tr>
<tr>
<td>Average annual climate finance needs (% GDP)</td>
<td>5.5%</td>
<td>3.1%</td>
<td>7.1%</td>
<td>7.2%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Source: Updated country NDCs and World Development Indicators
OVERVIEW OF CLIMATE FINANCE IN THE WAEMU COUNTRIES BY AE ZONE AND COUNTRY

Of the $29.5 billion in annual climate finance flows to Africa, WAEMU has only been able to capture $3.5 billion (12%).

The coastal countries of the WAEMU zone (Benin, Côte d’Ivoire, Togo, Guinea Bissau) attract 41% of annual climate finance flows to Africa.

Sahelian countries (Senegal, Mali, Burkina Faso and Niger) capture 59% of annual climate finance flows.

In the coastal countries:

- more than two-thirds of the flows are directed to Côte d’Ivoire and one-quarter to Benin
- Guinea Bissau and, to a lesser extent, Togo have more difficulty attracting climate finance.

In the Sahelian countries, climate finance is distributed almost equally among Senegal, Burkina Faso and Niger (27% on average) to the detriment of Mali, which is a little behind (18%).

FIGURE 2: CLIMATE FLOW DISTRIBUTION IN AFRICA

FIGURE 3: CLIMATE FLOW AGRO-ECOLOGICAL DISTRIBUTION IN WAEMU COUNTRIES

Source: Authors based on CFI database

Source: Authors based on CFI database
FIGURE 4: CLIMATE FINANCE FLOW DISTRIBUTION IN WAEMU COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>25%</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>65%</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>1%</td>
</tr>
<tr>
<td>Togo</td>
<td>9%</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>28%</td>
</tr>
<tr>
<td>Mali</td>
<td>18%</td>
</tr>
<tr>
<td>Niger</td>
<td>27%</td>
</tr>
<tr>
<td>Senegal</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Authors based on CFI database

Livestock grazing on an island in the River Niger, as seen off a bridge in Niger’s capital, Niamey © ILRI/Stevie Mann
OVERVIEW OF CLIMATE FINANCE IN WAEMU AE ZONES BY SECTOR, USE AND SOURCE

FIGURE 5: CLIMATE FINANCE BY SECTOR, USE AND SOURCE IN COASTAL COUNTRIES

Source: Africa Landscape Data, CPI (2022)
In the coastal countries:

- the sources of climate financing are primarily from the public sector (91%), while the private sector has a relatively marginal share

- 83% of climate finance is earmarked to support adaptation and mitigation activities; 16% has multiple objectives

- one-third of climate finance addresses cross-cutting issues, although some focuses on water (22%), energy (21%) and primary sector (17%) issues.

In the Sahelian countries:

- like the coastal countries, climate finance for Sahelian countries in the WAEMU zone comes primarily from the public sector (89%); private sources account for 11% of the finance

- although the proportions dedicated to mitigation activities remain similar in the two AE zones, the Sahelian countries benefit from a more significant share dedicated to supporting adaptation activities (49%) to the detriment of cross-sectoral actions (9%). Furthermore, even though the energy sector remains the primary target (taking 32% of climate finance flows), the primary sector receives more attention compared to coastal countries.
OVERVIEW OF CLIMATE FINANCE DISTRIBUTION BY SOURCE IN WAEMU COUNTRIES

MAP 1: CLIMATE FINANCE SOURCES IN THE WAEMU

Source: Africa Landscape Data, CPI (2022)

Among the coastal countries, only Côte d’Ivoire and Togo do not exclusively depend on climate finance from public sources (88% and 86%, respectively), while Benin and Guinea Bissau attract almost no financing from the private sector.

Except for Niger, the other Sahelian countries of Burkina Faso, Senegal and Mali benefit from mixed-source climate finance (20%, 13% and 9%, respectively). Still, the proportions remain relatively low when compared to the private sector involvement.
Although they attract relatively small amounts of climate finance, Guinea Bissau and Benin devote more than two-thirds of their flows to climate change adaptation (82% and 68%, respectively). This differs from Côte d’Ivoire and Togo, which prioritise climate change mitigation actions by allocating almost half of the financial and monetary flows to these activities (48% and 49%, respectively).

In the Sahelian countries, Niger, Mali and Senegal have prioritised adaptation to climate change (68% and 51% for Niger and Mali, respectively) while Burkina Faso put more effort in mitigation.
OVERVIEW OF CLIMATE FINANCE DISTRIBUTION BY SECTOR IN WAEMU COUNTRIES

In coastal countries, climate finance’s most targeted sectors are: water, energy, the primary sector, transport and cross-sectoral programmes. Benin and Guinea Bissau have identified the primary sector and cross-sectoral programmes as their top two priorities, while Côte d’Ivoire and Togo are paying particular attention to water and energy issues.

In the Sahelian countries, energy-related issues are of great interest in Burkina Faso, Mali and Senegal, and to a lesser extent, the primary sector, which is the priority in Niger, ranked second in Burkina Faso, third in Mali and fourth in Senegal.

Only Guinea Bissau, Benin and Niger have seen climate finance flows mainly directed to the primary sector. Most other countries focused on energy systems seem to have a more systemic role and impact.
FIGURE 7: CLIMATE FINANCE BY SECTOR IN THE WAEMU (PERCENTAGES)

Coastal countries

**Benin**
- Energy systems: 34%
- Primary sector: 33%
- Others & Cross sectoral: 12%
- Water-related wastes: 11%
- Buildings & Infrastructure: 9%
- Transport: 1%
- ICT: 0%
- Industry: 0%

**Togo**
- Energy systems: 23%
- Water-related Wastes: 21%
- Primary sector: 11%
- Others & Cross sectoral: 0%
- Buildings & Infrastructure: 0%
- Transport: 0%
- Industry: 0%

**Côte d'Ivoire**
- Energy systems: 29%
- Primary sector: 27%
- Others & Cross sectoral: 11%
- Transport: 9%
- Buildings & Infrastructure: 1%
- ICT: 0%
- Industry: 0%

**Guinea Bissau**
- Energy systems: 21%
- Primary sector: 16%
- Others & Cross sectoral: 14%
- Transport: 2%
- Buildings & Infrastructure: 2%
- Water-related Wastes: 1%
- Energy systems: 0%
- ICT: 0%
- Industry: 0%

Sahelian countries

**Burkina Faso**
- Energy systems: 44%
- Primary sector: 26%
- Others & Cross sectoral: 17%
- Water-related wastes: 9%
- Buildings & Infrastructure: 2%
- Industry: 2%
- Transport: 1%
- ICT: 0%

**Mali**
- Energy systems: 24%
- Primary sector: 24%
- Others & Cross sectoral: 14%
- Water-related Wastes: 0%
- ICT: 0%
- Industry: 0%
- Buildings & Infrastructure: 0%

**Niger**
- Primary sector: 40%
- Others & Cross sectoral: 26%
- Energy systems: 23%
- Water-related Wastes: 8%
- Buildings & Infrastructure: 2%
- Transport: 2%
- ICT: 1%
- Industry: 0%

**Senegal**
- Energy systems: 26%
- Others & Cross sectoral: 25%
- Water-related Wastes: 22%
- Primary sector: 16%
- Transport: 10%
- Buildings & Infrastructure: 1%
- ICT: 0%
- Industry: 0%

Source: Authors based on CFI database
FUNDING OF CLIMATE FINANCE NEEDS

Most funding comes from international public sources (including bilateral and multilateral development funds, plus climate funds), domestic public sources (including eco-taxes or carbon taxes, national funds, and green or climate bonds), and international and domestic private investments.

International and domestic public sources of climate finance

FIGURE 8: PUBLIC SOURCES OF CLIMATE FINANCE

Public climate finance is sourced from multilateral, bilateral and national development finance institutions (DFIs), local governments, state-owned enterprises (SOEs) and state-owned financial institutions (SOFIs). According to CPI databases, the public climate finance flows to WAEMU member states amounted to $3.136 billion in 2020 (or 90% of climate finance flows).
For WAEMU countries, the multilateral component of public climate finance is predominant – it provided $1.783 billion in 2020 (or 57% of total climate finance from public sources, or 51% of total climate finance). Bilateral and national DFIs amounted to $820 million (or 26% of public-related climate finance, or 23% of total climate finance), and government contributions amounted to $306 million (or 16% of public-related climate finance, or 14% of total climate finance).

Governments of the Sahelian countries are slightly more engaged in investing in climate aspects due to the violent shocks they are currently facing.

Similar trends are observed in WAEMU agro-ecological regions.

**International and domestic private sources of climate finance**

**FIGURE 9: PRIVATE SOURCES OF CLIMATE FINANCE**

Climate finance flows from the private sector to WAEMU member states totalled $356 million (or 10% of total climate finance) – 35% went to WAEMU coastal countries and 65% to WAEMU Sahelian countries. Most private funds (55%) were provided by corporate firms targeting Sahelian countries (65% of financial flows). Meanwhile commerce-oriented financial institutions seemed more interested in coastal countries. These nations received 58% of funds, given their diversified economic structures and business opportunities.
More than two-thirds of climate finance (or 71%) is provided by the World Bank (WB), which plays a leading role in WAEMU countries. Another active partner is the AfDB, which contributes an average of 14% to climate finance, 6% to the GCF and 4% to the GEF.

The World Bank adopts a relatively balanced position between adaptation and mitigation activities by distributing its funds proportionally. That is not the case for other multilateral partners who strategically opt for one or the other. While the Grameen Foundation, Bill and Melinda Gates Foundation (BMG) and GCF focus exclusively on adaptation issues, the International Fund for Agricultural Development (IFAD), GEF and AfDB dedicate more than three-quarters of their funding to it. Only the Islamic Development Bank (IsDB) and the European Investment Bank (EIB) focus more on climate change mitigation (83% and 71% of their funds, respectively).
BOAD initiated a regional programme in 2021, dubbed the West African Facility for Financing Low Emission and Climate Change Resilient Agriculture (FOAFARCC). This initiative is perfectly aligned with the third operational axis of BOAD’s Djoliba Strategic Plan 2021–2025, which seeks to strengthen member countries’ resilience to climate change challenges. Indeed, FOAFARCC aims to promote innovative solutions developed in response to the key challenges facing WAEMU member countries.

The programme consists of technical assistance and a concessional funding line for private and public sector actors to:

- build capacity for low-emission and climate-resilient agribusiness
- strengthen climate risk assessment and management practices in the agriculture and agribusiness sector within financial institutions
- acquire and disseminate appropriate climate information and technologies.
The bilateral climate finance funds received by the WAEMU member states, as reported by the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD DAC) and Climate Funds between 2011 and 2018, are mainly provided by the 28 countries of the EU (27%) and are almost equally distributed between adaptation and mitigation funds. Going beyond its contribution to the EU, France provided an additional 27%, mainly comprised of adaptation funds (53%), while the US approved 24% with a clear preference for mitigation funds (63%).
Other donors include Germany with an additional 7% of climate finance flows, mainly in the form of mitigation funds, and Denmark with a relatively modest contribution of 3%, mainly comprised of adaptation funds (74%).

**FIGURE 13: BILATERAL CLIMATE FINANCE DISTRIBUTION REPORTED BY DONORS TO WAEMU AGRO-ECOLOGICAL AREAS**

<table>
<thead>
<tr>
<th></th>
<th>Coastal</th>
<th>Sahelian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>Belgium</td>
<td>14%</td>
<td>86%</td>
</tr>
<tr>
<td>Italy</td>
<td>7%</td>
<td>93%</td>
</tr>
<tr>
<td>Sweden</td>
<td>2%</td>
<td>98%</td>
</tr>
<tr>
<td>Canada</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Denmark</td>
<td>3%</td>
<td>97%</td>
</tr>
<tr>
<td>Germany</td>
<td>7%</td>
<td>93%</td>
</tr>
<tr>
<td>US</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>France</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>EU</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Source: OECD-DAC, 2020

The bilateral climate funds are intended for 75% of Sahelian countries where problems related to climate change and its effects on the vulnerability and fragility of these countries in terms of food, ecosystem, health and social inclusion are addressed.

In the context of WAEMU countries, some nations distribute their funds almost equally among the countries where they intervene, such as the Netherlands (50% for Coastal countries/50% for Sahelian countries) and to a lesser extent the EU (roughly 40/60), while others opted to concentrate on the Sahelian countries.
FIGURE 14: CLIMATE FINANCE INSTRUMENTS IN THE WAEMU AND AGRO-ECOLOGICAL REGIONS

Source: Authors based on CFI database
Overall, more than three-quarters of the funds are in the form of debt, whether concessional or non-concessional, in the WAEMU region. Grants represent only 25% of the transfers. This occurred in a budget deficit environment in a region where governments were struggling to cope with multiple shocks.

According to the International Monetary Fund (IMF (2022)), the debt level in WAEMU rose rapidly in the context of subdued growth, from 45.5% of GDP in 2019 to 52.1% in 2020. This was projected to reach 55.6% of GDP in 2021 due to unpredictable Covid-19-related, supportive measures to avoid an economic collapse.

Coastal countries received the most funding through debt flows (89% versus 58% for Sahelian countries) and the Sahelian countries benefited proportionally more from grants (32% versus 11% for Coastal countries) in the same period.

All countries are proceeding with grant mechanisms to channel climate finance on a bilateral basis. A notable exception is France, which in addition to contributing through the EU, has developed faith-based (76%) and non-concessional (15%) debt mechanisms.

Italy is also developing a mixed approach to blending finance, but to a lesser extent (24% faith-based debt and 76% grants).

FIGURE 15: BILATERAL CLIMATE FINANCE REPORTED BY DONORS TO WAEMU COUNTRIES BY INSTRUMENTS

Source: CPI and updated NDCs
VIABILITY GAPS IN CLIMATE FINANCE FOR THE WAEMU COUNTRIES

In finance, the concept of a viability gap facility means: a facility for providing grants or other financial support to projects that are economically but not financially viable. We borrow this concept to illustrate that, given their economic situations, WAEMU countries remain focused on priority sectors, so will need external support to make their economies viable.

A viability gap analysis here would require annualising the estimates during the 2020–2030 period for comparison purposes. However, this is tricky given that annual averages do not fully reflect the disparities in needs and resource mobilisation, which are subject to uncertainties of all kinds (climatic, financial, etc.). However, doing so gives an idea of the challenges facing African countries and the WAEMU region in accessing funds for climate change adaptation and mitigation.

Rough estimates reveal that although the whole continent of Africa is struggling to mobilise 11% of the required financial resources to address climate change, the situation in WAEMU, as an economic and monetary union, is better. Indeed, WAEMU manages to mobilise 32% of the financial resources needed to address climate change annually. However, two-thirds of its needs are not covered in order for their strategies to be viable.

The WAEMU coastal zone manages to cover 28% of its needs by resorting to climate finance, while the Sahel zone tends to attract 35%.

Among the coastal countries, Côte d’Ivoire and Benin have demonstrated more capacity to mobilise climate resources (31% and 26%, respectively).
FIGURE 16: VIABILITY GAP ANALYSIS IN AFRICA AND THE WAEMU REGION IN $ BILLION (ANNUAL AVERAGES)

Source: CPI and updated NDCs

FIGURE 17: VIABILITY GAP ANALYSIS IN WAEMU COASTAL COUNTRIES IN $ BILLION (ANNUAL AVERAGES)

Source: CPI and updated NDCs
As for the Sahelian countries, except for Burkina Faso, which manages to meet more than half of its needs with an option resolutely oriented towards mitigation projects, they tend to attract nearly one-third of the required climate resources.

FIGURE 18: VIABILITY GAP ANALYSIS IN WAEMU SAHELIAN COUNTRIES IN $ BILLION (ANNUAL AVERAGES)

Annually, an inhabitant of the WAEMU zone needs $72 to overcome the challenges posed by climate change. However, they receive only $32 from bilateral and multilateral partners. The gap between need and mobilisation of financial resources is much more marked in coastal areas where the average individual requires $79, while the amount received is $30. In the Sahelian countries, the figures stand at $67 and $33, respectively.

In view of the GDP per capita in the WAEMU zone and the coastal and Sahelian zones ($1,452, $1,764 and $1,203, respectively), it would be necessary to move towards greater integration of climate finance into national budgets, even with the current significant challenges in financing education, health, infrastructure, employment, etc. in these countries.
**TABLE 6: SELECTED CLIMATE FINANCE INDICATORS IN WAEMU COUNTRIES**

<table>
<thead>
<tr>
<th>WAEMU</th>
<th>Climate finance needs per capita ($)</th>
<th>72</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Climate finance needs (% GDP)</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Climate finance inflows per capita ($)</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Climate finance inflows (% GDP)</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>GDP per capita ($)</td>
<td>1,452</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coastal countries</th>
<th>Benin</th>
<th>Guinea Bissau</th>
<th>Côte d'Ivoire</th>
<th>Togo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate finance needs per capita ($)</td>
<td>79</td>
<td>85</td>
<td>37</td>
<td>83</td>
</tr>
<tr>
<td>Climate finance needs (% GDP)</td>
<td>4%</td>
<td>7%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Climate finance inflows per capita ($)</td>
<td>30</td>
<td>30</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Climate finance inflows (% GDP)</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>GDP per capita ($)</td>
<td>1,764</td>
<td>1,291</td>
<td>728</td>
<td>2,326</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sahelian countries</th>
<th>Burkina Faso</th>
<th>Mali</th>
<th>Niger</th>
<th>Senegal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate finance needs per capita ($)</td>
<td>67</td>
<td>26</td>
<td>61</td>
<td>41</td>
</tr>
<tr>
<td>Climate finance needs (% GDP)</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Climate finance inflows per capita ($)</td>
<td>33</td>
<td>27</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Climate finance inflows (% GDP)</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>GDP per capita ($)</td>
<td>1,203</td>
<td>858</td>
<td>862</td>
<td>568</td>
</tr>
</tbody>
</table>

Source: Updated country NDCs and World Development Indicators
FACTORS ASSOCIATED WITH ACCESS AND MOBILISATION OF CLIMATE FINANCE IN THE WAEMU REGION

FIGURE 19: SWOT ANALYSIS ON TYPES OF FACTORS ASSOCIATED WITH CLIMATE FINANCE ACCESS

Source: ECOWAS Commission (2020)

Lack of financial resources was cited by all countries as the main barrier to implementing the NDCs, with the bulk of funding expected from bilateral and multilateral climate finance. The mainstreaming of climate change into national policies and budgets is necessary to ensure the implementation of adaptation and mitigation activities contained in strategies, programmes and projects. Integrating adaptation and mitigation options into the budgeting process requires mastering the steps of the budgeting process and identifying activity points. It is important to establish a list of the activities necessary for the accomplishment of each adaptation option retained in the system of strategic development planning, to estimate the deadlines for completion, and to evaluate the respective costs with a view to incorporating these into the programming instruments, budgeting, and monitoring and evaluation.

There is generally no structured system for monitoring funding intended for the fight against climate change. Most WAEMU countries have not defined the architecture of their measurement, reporting and verification (MRV) system. However, the success of the Paris
Agreement is based on transparency and a pledge of trust between parties. Thus, a framework of transparency must be created to provide a clear picture of the activities and financial support (UN, 2015: Articles 12 and 13.5). The fact is that, usually, monitoring and evaluation systems are attached to the realisation of a project and stop working when the project ends. This means the ‘internal memory’ for the development of a future action report is lost, there is therefore an urgent need to institutionalise simple yet robust MRV systems.

Drafting of the NDCs also revealed other difficulties related to:

- assessing financial and human needs
- assessing the economic impacts and their co-benefits
- limited synchronisation between political and technical processes
- limited availability of information and technical expertise on available options
- lack of capacity or personnel at the national level.

Significant challenges remain: the creation and delimitation of the roles and responsibilities of various institutions in charge of adaptation and mitigation activities, and establishing a framework for coordinating initiatives on climate change. There is also need for technical assistance and advice to create favourable conditions for private and public investment and mobilisation of climate finance. In addition, countries highlighted the lack of access to reliable
and robust climate data and the capacity to analyse and produce data at national and local scales, as well as the lack of integration of NDCs in sectoral investment plans most conducive to private investments.

Potential sources of funding for the implementation of NDCs and national adaptation plans (NAPs) include the state (through the ministries of finance), bilateral and multilateral partners (World Bank, AfDB, BOAD, UNFCCC, GCF, the United Nations Environment Programme (UNEP), GEF, Adaptation Fund (AF), United Nations Educational, Scientific and Cultural Organization (UNESCO), Food and Agriculture Organization of the United Nations (FAO), World Food Programme (WFP), International Organization for Migration (IOM), the private sector, international and local non-governmental organisations (NGOs)/associations, and local authorities. Private, public and semi-public financial institutions constitute an essential link in the national system for mobilising these resources. To be operational, however, the resource mobilisation process requires tailor-made capacity-building. In addition, national funding mobilisation systems must consider the opportunities available within organisations such as the African Union (AU). Indeed, within the AU, there are regional funds dedicated to climate action such as the ClimDev Special Fund, the Africa Climate Change Fund (ACCF) and the African Risk Capacity Group. These regional funds offer innovative financing, thus enabling vulnerable countries to strengthen their climate resilience and disaster risk management systems. In addition, regional initiatives such as the ECOWAS Regional Climate Strategy also create opportunities for mobilising resources. Establishing one or more accredited entities with direct access to the GCF is a priority for all countries that do not yet have one; several support activities are available – the Capacity-building Initiative for Transparency (CBIT) of the UNDP, German Cooperation, AdaptAction, the GCF Readiness Programme and the Global Climate Change Alliance Plus. It is interesting to note that, in this respect, the strategies of the countries differ in terms of accreditation.

Moreover, having recognised that public international climate finance will not be sufficient to support the implementation of NDCs, several countries are exploring or deploying innovative financing mechanisms on a larger scale. Senegal is currently carrying out an opportunity study on carbon pricing. Furthermore, Senegal, which had clearly made it an objective in its NDC, mentions six new Clean Development Mechanism (CDM) projects: four having received the letter of approval and two registered by the CDM Executive Board. Togo officially validated its first national Reducing emissions from deforestation and forest degradation (REDD+) strategy in July 2018, with support from the World Bank. This eventually opened up the possibility of receiving payments for environmental services, and it joined the ‘club’ of West African REDD+ countries (with Côte d’Ivoire). The Green Bond Development Program initiative is supported by FSD Africa (UKAid).
### TABLE 7: SWOT ANALYSIS MATRIX ON DETERMINANT FACTORS AND KEY STRATEGIES FOR CLIMATE FINANCE IN THE WAEMU REGION

#### Strengths

1. Presence of development institutions
2. Regional institutions dedicated to climate change issues
3. Existence of national funds to mobilise climate finance
4. Existence of institutions accredited to the AF, GCF and GEF
5. Existence of a maritime platform dedicated to a sustainable blue economy
6. Creation of the West African Alliance on Carbon Markets and Climate Finance
7. Capacity-building on carbon pricing
8. Existence of initiatives to implement a carbon tax (Senegal, Côte d'Ivoire, Mali, Burkina Faso, Togo)
9. Experience with carbon pricing (Côte d'Ivoire, Senegal, Mali) and expression of interest (Guinea Bissau)
10. Existence of trained human resources in climate finance
11. Common ECOWAS strategy for Horizon 2030 for adaptation policies and low GHG emitting development trajectories (adoption in April 2022)

#### Weaknesses

1. Slow progress towards the adoption of a single currency among ECOWAS member states and limited institutional and financial management capacity
2. Insufficient capacity in climate project development
3. Few financial institutions with expertise in climate finance
4. Few financial institutions accredited to the AF, GCF and GEF
5. Lack of knowledge about the different climate funds and capacity to access these funds
6. Insufficient technical capacity to access financial sources from multilateral organisations
7. Weak intra-regional trade
8. Weak articulation of various key actors in climate finance activities, especially the private sector
9. Lack of readiness for green investment among the private sector
10. Unstable political environments
11. Difficulty in raising domestic climate finance and capital
12. Lack of understanding and confidence in the potential and objectives of climate finance, particularly among the private sector
13. Climate finance strategy in ECOWAS but effective implementation still on standby
14. Few countries with completed or approved projects under the CBIT
15. Scarcity of data on national public climate finance and fragmentation of such data where available
16. Lack of national mechanisms to track international flows of public climate finance
17. Lack of data and mechanism to track private finance flows to climate investments
18. Lack of mechanism to track funding received by NGOs
19. Lack of data and mechanism to track carbon market mechanism projects at the regional level
20. Lack of an MRV system to measure, report and verify climate finance, mitigation and adaptation actions
## Opportunities

1. Stimulate the emergence of an enabling environment.
2. To be more conducive to mobilising financing and accelerating private investments, enabling environments should include both formal and informal elements: public policies, governance structures, regulatory frameworks, investment programmes and other formal aspects of the policy environment.
3. Mobilise effective, innovative and appropriate financing for priority climate actions.
4. Strengthen institutional capacity and mechanisms at national and regional levels to coordinate the mobilisation of climate finance.
5. It is essential for WAEMU countries to develop robust investment promotion strategies by improving their national, plus regional, institutional and regulatory frameworks.
6. Existence of initiatives facilitating the establishment of monitoring mechanisms, such as the Climate Public Expenditure and Institutional Review.
7. Establishment of the Network for Greening the Financial System.

## Threats

1. Lack of access to finance for businesses, especially SMEs, high operating costs, high risks, lack of collateral, inability to align with investor requirements, lack of operational and governance mechanisms.
2. High tax rates and administrative burdens associated with paying taxes that reduce the ease of doing business.

## Strategies

- Stimulate the emergence of an enabling environment.
- To be more conducive to mobilising financing and accelerating private investments, enabling environments should include both formal and informal elements: public policies, governance structures, regulatory frameworks, investment programmes and other formal aspects of the policy environment.
- Mobilise effective, innovative and appropriate financing for priority climate actions.
- Strengthen institutional capacity and mechanisms at national and regional levels to coordinate the mobilisation of climate finance.
- Develop robust investment promotion strategies by improving WAEMU countries’ national, plus regional, institutional and regulatory frameworks.
- Technical capacity-building for the development and implementation of mitigation and adaptation projects.

Source: ECOWAS Commission Department of Agriculture, Environment and Natural Resources (2020)
STUDY-SPECIFIC RECOMMENDATIONS

A common understanding of adequate climate finance

Above all, it is crucial to have a common understanding of adequate climate finance due to the diversity of stakeholders, development finance communities, recipient countries, visions, strategies, priorities and development agendas, plus financial tools and instruments.

Develop a standard method of measuring the amount and distribution of climate finance needs in the WAEMU region

The gaps and challenges in measuring climate finance needs, in particular in WAEMU states, are multiple: (i) lack of standard verification; (ii) absence of common methodologies of climate finance needs; (iii) absence and inadequacy of sectoral quantitative data; (iv) substantial variability of the costs of technologies required to determine mitigation needs; (v) lack of tracking and monitoring systems for private sector investment; (vi) capacity-building needs are mostly based on climate change purposes while reforms focus on improving socioeconomic conditions; (vii) weak economic governance, trade, policy reforms, plus lack of development and promotion of private sector engagement; and (viii) training needs are often too generally described. Thus, there is an urgent need to establish a standard method to measure climate finance needs, notably in the WAEMU region.

This recommendation would be unique in three ways:

- It should contribute to the development of a common and consistent method of evaluating climate finance needs and resource mobilisation.

- It can motivate the measuring of climate finance flows as an indicator of adaptation and mitigation performance, thus contributing to a framework for climate change management performance.

- It should consider specific sectors that have not been comparatively addressed, for instance the agriculture, forestry and other land use (AFOLU) sector. This would help to produce evidence-based knowledge on the impact and contribution of climate finance to attract political attention.
For food and nutrition security reasons and their corollaries – health, economic recession and growing inequalities – the AFLOLU most vulnerable to climate change should be the core priority of climate finance in the WAEMU region

The primary sector contributed 0.7% to growth in 2020, compared to 1.1% in 2019. Rapid demographic and socioeconomic transformations, with population growth, urbanisation, rising incomes and rising demand for food, plus the predominance of youth and globalisation provide enormous opportunities to the primary sector of WAEMU countries. However, WAEMU’s agri-food system is still facing challenges, to which climate change is a direct contributor and an indirect factor of multifaceted shocks related to declining natural resources, recurrent natural and human-made disasters, institutional fragility and political instability. In addition, the dependence of WAEMU countries on Russia and Ukraine (agricultural inputs, supply chain and access challenges, trade barriers, export bans, etc.), which are in conflict, makes these countries even more food-vulnerable to external fluctuations and threatens the sociopolitical environment. Food and nutrition insecurity and their corollaries of health, economic recession and inequalities should lead to rethinking of AFLOLU in order of priorities.

Towards an enabling environment for sustainable climate finance

An enabling environment (i.e. policy, regulatory and governance frameworks) fundamentally affects the viability of investment in low-carbon and climate-resilient approaches. It is important to identify, assess, prioritise and manage multifaceted risks and barriers that stakeholders (particularly private sector actors) face in scaling up investments in solutions to climate change. Consistent policy-making, plus enforcement and implementation of regulations, can strengthen standard coping mechanisms and reduce vulnerability levels among WAEMU countries.

The primary public source of climate finance for WAEMU countries is problematic because its shortcomings appear particularly difficult to overcome

The historical record of international financing for development is not satisfactory, with the G20 countries unable to attain the promised 0.7% of gross national product. Their current budget deficits do not point to a better future. Other pledges, notably to the GCF, are not stable and constitute only a tiny proportion of expectations. New perspectives linked to the development of new carbon markets, such as in China, seem to have a national scope devoted to the needs of the country and are not favourable to North–South exchanges.

Identifying, developing and supporting transformative sustainable finance ideas

Public climate finance remains predominant in the WAEMU region, thus limiting the scope of the carbon market. This overrepresentation of the public sector illustrates a lack of attraction in the private sector, which seems to be constrained in contributing to the necessary transition to energy efficiency, renewable energy, sustainable transport, climate-smart agriculture and deforestation reduction.
Three options are possible to ensure the paradigm shift:

- Reducing the public source of climate finance by developing an environment conducive to mobilising financial flows and drastically increasing the private share of climate finance.

- Mobilising private climate capital within a sizeable market; scaling up or replicating in other contexts; and achieving socioeconomic, development and environmental impacts. A sound legal and financial system will also help raise domestic finance in WAEMU countries.

- Reducing the budgetary burden of national public financing in WAEMU countries by designing innovative ways to address the debt challenges of the smaller states, such as debt-for-nature swaps or debt relief for climate finance. This situation requires the WAEMU countries to negotiate agreements with their international creditors. For example, all or a portion of the debtor’s external debt could be forgiven in exchange for a commitment by the debtors to invest in specific climate projects within a commonly agreed period, using domestic currency. These market-related mechanisms provide the tremendous potential to transform debt into opportunities to reduce climate vulnerability and implement much-needed adaptation.

Companies from high-income economies that invest directly in developing countries, development banks and international NGOs have a crucial role to play in shifting the sources of climate finance and redirecting resources raised in private capital markets through the issuance of ‘green’ financial instruments.

**Mainstreaming climate change into national policies and budgets**

Owing to the GDP per capita ($1,452 per capita) – notwithstanding the achievement of targets in priority sectors such as education, health, infrastructure, employment and security in WAEMU countries, and in view of the relatively low need for climate finance per capita ($72 per capita) – there is need to mainstream climate change and climate finance in national policies as well as in the national budgets serving the countries of the region.
GENERAL RECOMMENDATIONS ON THE WAY FORWARD

Climate finance should be more inclusive and based on disaggregated indicators to mainstream the most fragile categories of the population, particularly youth and women

The total population of WAEMU grew from about 97 million inhabitants in 2010 to 131 million in 2020. The average population growth rate is around 3% per year. It was projected to reach about 135 million by 2021. In 2020, the proportion of males to females in the region was 49.96% to 50.1%.

West Africa’s population is predominantly young. More than 64% are younger than 24 years old. Young people are a tremendous resource for the region. To meet their expectations and potential in valorising the demographic dividend to face climate change, climate finance flows should be channelled to their education, health, civil participation and empowerment. Access to climate finance for young people in the WAEMU region is challenging, made even more difficult when established entities require documentation that youth organisations may not have. Reimagining and defining global climate finance in the inter-generational context is necessary.

Furthermore, the concept of climate finance from the perspective of young people may appear ambiguous, and they may not fully understand this subject, which restricts their accessibility. It is important to make climate finance initiatives more inclusive for youth and women by designing appropriate instruments beyond standard grants and scholarships.
REFERENCES


GLOSSARY

Climate finance terms

Climate action plan
A climate action plan (CAP) is a detailed and strategic framework for measuring, planning and reducing greenhouse gas (GHG) emissions and related climatic impacts. Local governments design and utilise CAPs as customised roadmaps for making informed decisions and understanding where and how to achieve the largest and most cost-effective emissions reductions that align with other municipal goals. CAPs, at a minimum, include an inventory of existing emissions, reduction goals or targets, and analysed and prioritised reduction actions. Ideally, a CAP includes an implementation strategy that identifies required resources and funding mechanisms.

Climate finance
Climate finance refers to local, national, or transnational financing – drawn from public, private and alternative sources of financing – that seeks to support mitigation and adaptation actions that will address climate change.

Concessional loan
A concessional loan is a financial instrument with unique features with no or lower interest and a more extended repayment schedule than the standard market.

Development finance institutions
National and international development finance institutions (DFIs) are specialised development banks or subsidiaries set up to support development projects and programmes in developing countries. They are usually majority-owned by national governments and source their capital from national or international development funds or benefit from government guarantees. This ensures their creditworthiness, which enables them to raise large amounts of money on international capital markets and provide financing on very competitive terms.

Financing mechanism
Developed-country parties shall provide financial resources to assist developing-country parties in implementing the UNFCCC Convention. To facilitate this, the Convention established a financial mechanism to provide funds to developing-country parties. The operation of the financial mechanism is entrusted to the Global Environment Facility (GEF) and Green Climate Fund (GCF).

Implementing entity
Generally, an implementing entity (IE) is responsible for vetting and endorsing project and programme proposals and disbursing funding from a fund when proposals are successful. The term, IE, can vary slightly depending on the fund.

2 UNFCCC website
4 Adapted from OECD website
- The Adaptation Fund (AF) accredits national, regional or multilateral IEs. The IE works with an executing entity, in charge of the day-to-day management and on-the-ground interventions.

- The equivalent of an IE for GEF is known as the implementing agency (IA). IAs can be national (e.g. Development Bank of Southern Africa), regional (e.g. West African Development Bank) or multilateral (e.g. United Nations Environment Programme). Non-governmental organisations (NGOs) can also be accredited as IAs (e.g. World Wildlife Fund). Similar to the AF, a GEF IA works with an executing entity.

- The equivalent of an IE for GCF is known as a delivery partner. The delivery partner may work with an executing entity.

**Leverage**

Leverage in the context of climate finance refers to public finance (e.g. from international finance institutions) that is used to encourage private investors to back the same project. This can be in the form of loans, risk guarantees and insurance or private equity. This is also intended to reduce the perceived risk for the private sector. Financial institutions apply the terminology ‘leveraging’ to understand how their core contributions (e.g. money provided by donor governments to a multilateral development bank) can be invested in capital markets to create an internal multiplier effect.\(^5\)

**Loan**

Loan is given in exchange for future repayment of the loan value amount along with interest or other finance charges. A loan may be for a specific, one-time amount or can be available as an open-ended line of credit up to a specified limit or ceiling amount.

**Multilateral development banks**\(^6\)

Multilateral development banks (MDBs) can be categorised in many ways. The key groups are ‘main’ and ‘sub-regional’ MDBs:

- **Main**: created by a group of countries to provide financing and professional advice for development (e.g. World Bank, Asian Development Bank and Inter-American Development Bank Group)

- **Sub-regional**: for a better deal, banks lend to their members while borrowing from the international capital markets. Since there is effectively shared responsibility for repayment, the banks can often borrow more cheaply than a single entity

- **Member nation** (e.g. Caribbean Development Bank, West African Development Bank)

**National adaptation plan**

The national adaptation plan (NAP) process was established under the Cancun Adaptation Framework. It enables parties to formulate and implement NAPs to identify medium- and long-term adaptation needs and develop and implement strategies and programmes to address those needs. It is a continuous, progressive and iterative process that follows a country-driven, gender-sensitive, participatory and fully transparent approach.\(^7\)

\(^5\) Definition from Government of Nepal (2014), Climate Finance Glossary

\(^6\) For more information: [http://www.iuc.eu/resources/](http://www.iuc.eu/resources/)

\(^7\) For more information: [https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans](https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans)
Nationally determined contributions
The Paris Agreement requires each party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures to achieve the objectives of such contributions.8

Official development assistance
Official development assistance (ODA) refers to financial assistance provided to developing countries and the multilateral institutions by official agencies, including state and local governments of developed countries to promote their economic development and welfare. In 1970, it was agreed that developed countries would provide 0.7% of their gross national income (GNI) as ODA to developing countries. ODA is also known as foreign aid.9

Public-private partnership
Public-private partnership is a general term for a contractual relationship between the public sector and private companies to finance, design, build and operate facilities such as roads, hospitals and schools. This form of financing is increasingly being explored to fund climate-related infrastructure. The aim of this relationship is to use public policies and regulations to leverage private sector financing, which will receive payments from the public entity for providing a defined service.10

Risk mitigation
The most common risk mitigation mechanisms are guarantees (e.g. risk guarantees and credit guarantees) and risk insurance (e.g. political risk insurance). Guarantees and risk insurance products can cover the failure of the public sector party to meet specific obligations within a project. Risk mitigation products are used to enhance the bankability of infrastructure projects by mitigating critical government performance risks for private investors.11

Special purpose vehicle
A special purpose vehicle (SPV), also known as a special purpose entity, is a subsidiary created to isolate financial risk. The SPV is a distinct company with its own assets, liabilities and legal status. As it is a separate legal entity, the particular purpose vehicle can carry its obligations if the parent company goes bankrupt.12

Subsidies
A subsidy is a form of financial aid or support extended to an economic sector (or institution, business or individual) generally to promote economic and social policy. Subsidies come in various forms including direct (cash grants, interest-free loans) and indirect (tax breaks, insurance, low-interest loans, depreciation write-offs and rent rebates).13

8 For more information: https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions
9 Definition from Government of Nepal (2014), Climate Finance Glossary
10 Definition from Government of Nepal (2014), Climate Finance Glossary
11 Adapted from the World Bank
12 For more information: Corporate Finance Institute’s Financial Analyst Training Program
13 Adapted from Collins Dictionary of Economics 2013
Cover: A farmer harvests rice at her farm in Ghana’s Upper West Region, which has suffered failed rains and rising temperatures.

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