International Journal of Applied Research in Business and Management (ISSN: 2700-8983)
an Open Access journal by Wohllebe & Ross Publishing, Germany.
Volume: 06 Issue: 01 Year: 2025
https://doi.org/10.51137/wrp.ijarbm.2025.sbar.45708

A Scoping Review of the Role of the African Union Regional Economic Communities in Climate Change Mitigation and Adaptation: Evidence of Existing Studies

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Abstract:

Regional organisations play a critical role in facilitating cross-border solutions to address climate change, including both adaptation and mitigation strategies. This paper evaluates the eight regional economic communities (RECs) established under the Abuja Treaty in 1991, with support from the African Union. In 2022, the Intergovernmental Panel on Climate Change (IPCC) released concerning findings regarding the global impacts of climate change, highlighting that even a minor increase of 1.1 degrees Celsius in temperature has begun to influence various regions. This situation underscores the growing global concern regarding climate emergencies and emphasises the essential participation of governments and key stakeholders, including international and continental organizations such as the African Union and its regional economic communities. Consequently, the primary objective of this study is to analyze the role of the African Union's regional economic groups in climate change mitigation and adaptation efforts. To accomplish this objective, a desktop research methodology was employed, utilizing secondary data through the analysis of published articles, government documents, reports, journals, and books, facilitated by a scoping review process. The findings suggest that the regional economic communities of the African Union are demonstrating substantial progress in climate change mitigation and adaptation, except the Arab Maghreb Union (AMU), which has been relatively slower in its initiatives. The theoretical implications of this study underscore its potential to create a foundation for future research on the contributions of public organizations to climate change mitigation and adaptation. Furthermore, the practical implications indicate that stakeholders in regional economic communities can gain valuable insights from the current practices aimed at addressing climate change within their areas of influence.

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Keywords:

Climate Change, African Union, Regional Economic Communities.

Submitted: 2025-02-08. Revised: 2025-02-20. Accepted: 2025-03-05.

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Introduction

The Intergovernmental Panel on Climate Change (IPCC) defines climate change as "the natural or human adjustments made in response to real or suspected climate stimuli or their effects, to reduce damage or improve outcomes." Without proactive measures, it is projected that climate change could push approximately 132 million individuals into extreme poverty over the next decade (Pörtner et al., 2022). Therefore, it is essential to recognise climate change as a significant challenge that demands urgent attention and action (Walters, Balint, Stewart, & Desai, 2011). This study aims to clarify the role of regional organizations in promoting transboundary solutions to climate change, with a particular emphasis on adaptation and mitigation efforts. Specifically, it will focus on the eight Regional Economic Communities (RECs) recognized by the African Union: the Arab Maghreb Union, the Common Market for Eastern and Southern Africa, the Community of Sahel-Saharan States (CEN-SAD), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and the Southern African Development Community (SADC). The literature review will examine the contributions of these regional economic communities in addressing climate change challenges through mitigation and adaptation strategies.

Literature Review

Climate Change and the African Union Development Agenda

There are four primary strategies outlined in the African Union's development process. The issue of climate change is addressed in the African Union Agenda 2063 (African Union, 2022a), which emphasizes the necessity of tackling climate change and prioritizes a transition towards mitigation efforts. The first significant focus aims for "African prosperity based on growth and economic development," acknowledging the increasing security challenges posed by climate change, including migration displacement and trade uncertainties that present substantial risks. The overarching goal of the African Union Climate Change and Resilience Strategy and Action Plan (2022-2032) is to realize the vision of Agenda 2063 by fostering resilience to the impacts of climate change. This strategy promotes adaptation to climate change and encourages collective action across Africa to address this issue.

Climate Change Agenda and African Union Regional Economic Communities

The regional economic communities (RECs) play a vital role in promoting collaboration among African nations and significantly contribute to the objectives of the African Union (AU). Each REC, established before the formation of the AU, operates independently and employs distinct roles and methodologies (African Union, 2024a). The primary goal of the RECs is to facilitate economic integration among

member states and advance the aspirations of the African Economic Community (AEC), as outlined in the Abuja Treaty of 1991. This treaty has been in effect since 1994 and aims to create a unified African economy through cooperative efforts among the RECs. According to Africa (2024b), the African Union recognizes eight RECs: the Arab Maghreb Union (UMA), the Common Market for Eastern and Southern Africa (COMESA), the Intergovernmental Authority on Development (IGAD), the East African Community (EAC), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC). Furthermore, the African Union has adopted a proactive stance on addressing climate change, which is one of the most pressing global challenges. This approach includes the implementation of the African Climate Strategy and the Sustainable Development Action Plan for 2022-2032. At the continental level, the RECs and other regional institutions actively engage in climate adaptation efforts through localized policies and initiatives. This literature review aims to provide insights into the role of the RECs within the African Union in mitigating and adapting to climate change.

Arab Maghreb Union (AMU)

Regional governance and cooperation in the Arab region possess significant potential to enhance the implementation of the Paris Agreement on Climate Change and the United Nations Sustainable Development Goal 13, which aims to address climate change and its impacts. However, this potential has not yet been fully realized or developed. Over the past decade, the focus on global development and domestic air quality has overshadowed the essential role of regional collaboration in supporting individual countries (IPCC, 2014). Furthermore, Al-Sarihi and Luomi (2018) note that the Arab Maghreb Organisation (AMU) is not known to engage in collaborative efforts on climate change with any regional climate change organisations or initiatives.

Common Market for Eastern and Southern Africa (COMESA)

The COMESA institution, comprising 20 member states, is actively working towards establishing a unified market for the Eastern and Southern African regions. Established in 1994 as a component of the African monetary network, it succeeded the Priority Trade Area for Eastern and Southern Africa, which had been in place since 1981 (Turner, 2013). The markets of eastern and Southern Africa are implementing programs aimed at adapting to and mitigating the effects of climate change. The COMESA Climate Change Initiative aligns with the African Continental Framework on climate change and currently focuses on developing and delivering African climate solutions, enhancing the development and negotiation of common positions, and strengthening the scientific basis for regional agreements on African climate solutions. Furthermore, initiatives have expanded to include Climate-Smart Agriculture (CSA) as a priority to enhance adaptation strategies for African agriculture. The COMESA member

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states have also developed comprehensive climate reporting strategies and agricultural frameworks supported by the COMESA Climate Change Program (COMESA, 2019).

Community of Sahel–Saharan States (CEN–SAD)

Sahelian Africa is facing significant challenges related to rainfall variability, which is a critical factor contributing to the region's vulnerability. The populations residing in the Sahel are among the most impoverished and susceptible to the impacts of climate fluctuations and land degradation. Their livelihoods are closely linked to healthy ecosystems that support rainfed agriculture, fisheries, and livestock management. These sectors are essential for employment in the area and account for approximately 40 per cent of the gross domestic product (GDP) in many countries. Additionally, ecosystem services play a vital role in providing essential livelihood products, such as fuelwood and bushmeat. However, increasing population pressures on food, fodder, and fuelwood, coupled with the region's vulnerabilities, have led to adverse effects on natural resources, particularly vegetation cover. Climate variability, along with recurrent droughts and inadequate management of surface and groundwater resources, has resulted in the drying up of rivers and lakes and has intensified soil erosion (The World Bank, 2010). In response to significant land degradation caused by climate change, Mbow (2017) indicates that 11 countries in the Sahel have agreed to collaborate in addressing policy, investment, and institutional barriers to establish a land rehabilitation program that targets climate change and land degradation. The Pan-African Initiative for the Great Green Wall (GGW) aims to combat desertification and environmental degradation in the Sahel region. This initiative seeks to enhance the livelihoods and resilience of small-scale farmers and pastoralists by implementing effective adaptive strategies focused on tree planting and environmental restoration. According to Samari (2011), Burkina Faso's economy is heavily reliant on local power plants for cotton production and exports, underscoring the ongoing challenges faced by the sector. As a member of the Sahel Network (CEN-SAD), Burkina Faso is actively engaged in addressing environmental issues and local challenges. However, despite these efforts, significant barriers remain, including technical limitations and critical informational and financial constraints that hinder comprehensive solutions. Holthuijzen (2011) notes that the CEN-SAD network focuses on enhancing agricultural production and providing support to farmers, emphasizing the importance of adopting culturally sensitive approaches to ensure sustainable development in the region.

East African Community (EAC)

Ateweberhan and McClanahan (2010) indicate that the East African region includes Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Tanzania, and Uganda. Countries in this area are already facing the effects of climate variability, such as droughts and floods, which have led to significant economic and social challenges. In response to the impacts of climate change within the East

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African Community (EAC), the EAC has developed the EAC Climate Change Policy (EACCP). This policy aims to promote strategic and collaborative actions to address climate change while maximizing the potential benefits of both current and emerging opportunities. Therefore, member states must collaborate in their efforts to tackle climate change for the benefit of present and future generations. This collaborative approach is informed by global environmental law standards, including the principles of sustainable development outlined in the objectives of the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol.

Economic Community of Central African States (ECCAS)

The Economic Community of Central African States (ECCAS) plays a pivotal role in addressing climate change mitigation and adaptation within the Central African region. Its efforts encompass several key areas firstly; by developing policy coordination and development approach, the Economic Community of Central African States (ECCAS) works in partnership with member states to harmonize climate policies and create comprehensive regional strategies. This collaboration involves the formulation of adaptation and mitigation plans that focus on key sectoral priorities, including agriculture, water resources, and natural resource management. By aligning national policies, ECCAS fosters a cohesive approach to addressing climate challenges throughout the region. (Economic Community of Central African States, 2024). In addition, the concept of capacity building and technical support: Through initiatives like the Regional Climate Action Transparency Hub (ReCATH), hosted at the Central Africa Climate Prediction and Application Centre in Douala, ECCAS enhances the technical capacities of member states. ReCATH serves as a platform for knowledge sharing, training, and the development of measurement, reporting, and verification mechanisms, thereby strengthening transparency and accountability in climate actions. (Economic Community of Central African States.n.d.). Equally important it is recognised that in their disaster risk management and climate resilience, ECCAS, in partnership with organizations such as the World Bank, implements projects aimed at strengthening disaster risk management and climate change adaptation. These projects focus on developing risk reduction measures, improving preparedness, and enhancing response strategies to climate-induced disasters, thereby building resilience among member states. (Global Facility for Disaster Reduction and Recovery. 2024).

Economic Community of West African States (ECOWAS)

Climate data indicates that West Africa is experiencing an accelerated rate of global warming compared to the global average. Average temperatures in the region have risen by 1°C to 3°C since the mid-1970s, especially in the Sahel, while rainfall patterns have become increasingly unpredictable. The region is expected to face significant alterations in rainfall, particularly in the Sahel and tropical West Africa.

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(Parmesan, Morecroft, and Trisurat,2022). Furthermore, climate change is likely to exacerbate challenges in addressing political conflicts and humanitarian crises.

In line with the preceding and in mitigating and adapting to climate change, ECOWAS member states are seeking a total of USD 294 billion to implement their Nationally Determined Contributions (NDCs) which will be done through The ECOWAS Climate Finance Mobilization and Access Strategy for 2022-2031 ("Strategy") outlines five key initiatives aimed at facilitating access to and leveraging climate finance to satisfy the needs of ECOWAS Member States. This initiative arises from the Needs-Based Financing (NBF) project, which is being implemented by the Economic Community of West African States (ECOWAS) Commission in partnership with the West African Carbon Markets and Climate Finance Alliance (WAACMCF), with support from the Ministry of Internal Security and the United Nations Framework Convention on Climate Change. The comprehensive plan presented in the Strategy focuses on the following five initiatives: (1) enhancing the enabling environment to support financing and promote private sector investment; (2) strengthening capacities and mechanisms for climate finance coordination at both national and regional levels. The Strategy serves as a regional action plan that has received approval from the environment and finance ministries of ECOWAS Member States, as well as from financial security experts within the region. Stakeholders involved in the implementation of the Strategy are expected to adhere to the following principles: (1) ECOWAS Member States should take ownership of the Strategy's implementation; (2) all actions and activities should align with national and regional economic development plans; (3) actions must ensure the integration of all relevant stakeholders; (4) strategic actions should be sustainable and effective; and (5) actions should facilitate the mainstreaming of climate change considerations into national development planning and budgeting processes. (African Health Observation,2022).

Intergovernmental Authority on Development (IGAD)

Climate change and its associated security risks present significant challenges to humanity and security across Africa. This phenomenon transcends national borders, leading to economic and security issues. Despite Africa's relatively low contribution to global greenhouse gas emissions, accounting for only 3.81, the adverse effects of climate change on food security and public health are substantial. (CDP. 2020.) These impacts contribute to economic strain and complicate transition processes, ultimately increasing conflicts. Consequently, climate change significantly influences development and peacebuilding efforts throughout the region. (Destrijcker et al. 2023).

The health and economic well-being of individuals in the IGAD region are closely tied to natural resources, particularly rainfed agriculture and livestock. However, climate-related risks pose significant challenges to these livelihoods. The region is susceptible to various climate-related hazards, including floods, inundations, and heatwaves. Since 2020, the area has faced five consecutive rainy seasons with

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insufficient water, which has further intensified the crisis. As a result, millions of people in the Horn of Africa are experiencing food insecurity. (Intergovernmental Authority on Development Centre of Excellence for Climate Adaptation and Environmental Protection, 2023)

In addressing the challenges that IGAD is encountering related to climate change, The community established the IGAD CEWARN Mechanism, the IGAD Climate Prediction and Application Centre (ICPAC), and the IGAD Centre for Livestock and Animal Husbandry Development (ICPALD) which are considered instrumental in evaluating and mitigating threats to peace and security, including those related to weather risks. These specialised organisations offer critical support to IGAD member countries. For instance, CEWARN delivers early warnings regarding potential conflicts, conducts thorough analyses, interprets signals, and facilitates informed responses, which include the provision of security-related information. (Aeby, 2024). According to Hulme et.al, (2001), global warming is having a significant impact on Africa and other regions, and its effects are anticipated to intensify in the coming years. The Southern African Development Community (SADC) sub-region is particularly vulnerable, being one of the most affected areas globally. The rural economies in Southern Africa rely heavily on natural resources, making them especially susceptible to the repercussions of climate change. Essential activities and resources vital for rural development, such as agriculture, water resources, ecosystems, and biodiversity, are already experiencing direct consequences from climate change. The region is also challenged by high levels of extreme poverty, widespread diseases, gender inequality, limited resources and services, outdated technology, governance issues, armed conflicts, inadequate healthcare services, low educational attainment, unstable water and food supplies, and frequent disasters including droughts and floods. Additionally, much of the economy of SADC member states — over 50% of their gross domestic product (GDP) — is derived from primary industries and climate-sensitive sectors such as agriculture, mining, forestry, and wildlife. A significant portion of the population depends on agriculture as their primary source of sustenance. The adverse effects of climate change on agriculture and manufacturing will pose risks to the entire rural economy in the region and could lead to serious macroeconomic vulnerabilities in agricultural-dependent countries. Projections indicate that three to four member states of the African Development Community may encounter significant water shortages within the next 20 to 30 years if the current trends persist. Furthermore, climate change is expected to adversely affect human health across the region, with rising temperatures impacting animal health, milk and meat production, and overall regional development. (UNECA,2012).

Southern African Development Community (SADC)

The member countries of the Southern African Development Community (SADC) are dedicated to integrating sustainable development with climate change adaptation and mitigation strategies. This dedication is evident in the SADC Agreement that established the organization, as well as in its active

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involvement in the negotiation and ratification of various environmental agreements. In this context, the SADC region has pledged to develop mechanisms for implementing key environmental agreements, including the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), and the Convention on Biological Diversity (CBD). The Environment and Climate Change Programme specifically aims to achieve the Regional Integrated Sustainable Development Goals (RISDP), align with the African Agenda 2063, and contribute to the Sustainable Development Goals (SDGs). Despite these commitments, the region's sustainable development efforts are adversely impacted by challenges such as climate change, land degradation, deforestation, loss of biodiversity, pollution, and limited access to clean water. The need for clean and well-maintained urban environments is also critical. These environmental and social challenges impede the economic development of the region and are associated with high poverty rates, wherein vulnerable populations frequently experience the consequences of environmental degradation while simultaneously contributing to it. The deterioration of the environment presents a substantial threat to economic growth and directly impacts the livelihoods of the population. (SADC). In alignment with the previous statements, the SADC Secretariat has implemented a range of measures across various sectors to mitigate and adapt to the effects of climate change.

Climate Change Adaptation Strategy for Water Sector in SADC

The effects of climate change on water management are influenced by three key interventions: political development, social development, and water management, which encompasses planning, management, and distribution. The tools utilised to enhance water management include water resource development, informed by relevant laws and regulations, as well as infrastructure, which involves the construction, financing, and integration of facilities related to water use, sanitation, and flood management.

SADC Protocol on Forestry

The policy emphasizes environmental protection by integrating sustainable forest management practices alongside relevant legislation and enforcement measures. It introduced a program known as the Southern African Development Community Programme to Support the Reduction of Emissions from Deforestation and Forest Degradation (REDD). The objective of this program is to mitigate greenhouse gas emissions and enhance forest management within the Southern African Development Community, while simultaneously addressing poverty and fostering sustainable development. (Kimaro, Gichu, Mogaka, Isabirye, and Woldearegay, 2015).

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Methods and Data

The study utilized secondary data and desktop research methodologies to identify pertinent published articles through a systematic review process. Searches were conducted using reputable academic databases, including GreenFile, Scopus, Springer, and EBSCOhost. The information sources consisted of government documents, publications, newspapers, and books. Throughout the study, specific inclusion and exclusion criteria were established. To ensure comprehensive coverage, only training courses that align with the roles and initiatives of the African Union Regional Economic Communities in climate change adaptation and mitigation were considered relevant. Articles that did not provide insights into the role of these communities in addressing climate change were excluded from the analysis.

Results and Discussion

The objective of this literature review is to illuminate the role of the African Union's regional economic communities in addressing and adapting to climate change. To achieve this, the study employs a scoping review of current literature, incorporating clearly defined inclusion and exclusion criteria for the articles examined. The findings from this research conceptualize climate change as "natural or anthropogenic alterations made in response to actual or perceived climatic stimuli or their consequences, aimed at reducing harm or enhancing outcomes." In the absence of proactive measures, it is anticipated that climate change could push approximately 132 million individuals into extreme poverty over the next decade (Pörtner et al., 2022). Furthermore, the results affirm the critical need for global organizations to play a significant role in mitigating and adapting to the impacts of climate change. This study considers the AU's regional economic communities, which are regarded as the pillars of the African Union.

The findings suggest that the overarching aim of the African Union Climate Change and Resilience Strategy and Action Plan (2022-2032) is to realize the vision of Agenda 2063 by fostering resilience to the effects of climate change. This strategy promotes adaptation to climate change and encourages collective action across Africa to address this pressing issue. The literature reviewed provides insights into the climate change agenda and the role of the African Union's regional economic communities, indicating that these communities serve as essential groupings of African nations and are pivotal to the functionality of the African Union. Established before the formation of the AU, each regional economic community operates with its distinct role and strategy (African Union, 2024b). The primary objective of these communities is to foster regional economic integration among member states, thereby advancing the goals of the African Economic Community (AEC) as articulated in the Treaty of Abuja (1991). This study aims to elucidate the role of each of the African Union's regional economic communities, specifically the Arab Maghreb Union (UMA), the Common Market for Eastern and Southern Africa (COMESA), the Community of Sahel-Saharan States (CEN-SAD), the East African Community (EAC),

the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and the Southern African Development Community (SADC) in climate change mitigation. The study reveals that all the aforementioned AU regional economic communities are actively engaged in climate change mitigation. For instance, findings from the reviewed literature indicate that the Arab Maghreb Union (UMA) has not been recognized for engaging in collaborative efforts on climate change with any regional climate change organizations or initiatives (Al-Sarihi and Luomi, 2018). The study also highlights that member states of COMESA, which are a vital part of the AU regional economic community, have developed common climate response and reporting strategies alongside agricultural frameworks supported by the COMESA Climate Change Programme (COMESA, 2019). In the case of the Community of Sahel-Saharan States (CEN-SAD), significant efforts in climate change mitigation and adaptation are evident. Mbow (2017) suggests that in response to severe land degradation resulting from climate change, eleven Sahelian nations have agreed to collaborate in overcoming policy, investment, and institutional barriers to establish a land-recovery program that addresses climate change and land degradation, known as the Pan-African Initiative for the Great Green Wall (GGW). The findings from the reviewed literature posit that the East African Community (EAC) has initiated the EAC Climate Change Policy (EACCCP) aimed at mitigating and adapting to climate change. This initiative seeks to encourage a more strategic and cooperative approach within the EAC region in responding to the impacts of climate change, maximizing potential benefits from changing climatic conditions, and capitalizing on existing and emerging opportunities. Furthermore, it is evident from the literature review that the ECOWAS regional community is performing notably well, having launched the ECOWAS Climate Finance Mobilization and Access Strategy for 2022-2031 ("Strategy"), which outlines five key tasks aimed at facilitating access to and leveraging climate finance to meet the needs of ECOWAS member states. This initiative stems from the Needs-Based Financing (NBF) project, implemented by the Economic Community of West African States (ECOWAS) Commission in partnership with the West African Carbon Markets and Climate Finance Alliance (WAACMCF), supported by the Ministry of Internal Security and the United Nations Framework Convention on Climate Change. The reviewed literature presents a compelling case that the African Union's regional economic communities are indeed making substantial efforts to mitigate and adapt to climate change. In response to the challenges associated with climate change, IGAD has established the IGAD CEWARN Mechanism, the IGAD Climate Prediction and Application Centre (ICPAC), and the IGAD Centre for Livestock and Animal Husbandry Development (ICPALD), which are considered instrumental in assessing and mitigating threats to peace and security, including those related to climate risks. These specialized institutions provide essential support to IGAD member countries.In the context of the Southern African Development Community (SADC), the scoping evaluation revealed that the regional economic community has undertaken efforts to combat climate

change, particularly through a climate adaptation strategy for the water sector within SADC. In this regard, the measures employed by SADC to enhance water management include the development of water resources, guided by relevant laws and regulations, as well as infrastructure development, which encompasses the construction, financing, and integration of facilities related to water usage, sanitation, and flood management. Furthermore, the literature review indicated that SADC has implemented a program known as the Southern African Development Community Programme to address deforestation, specifically aimed at reducing emissions from deforestation and forest degradation (REDD). The objective of this program is to mitigate greenhouse gas emissions and improve forest management within the Southern African Development Community while concurrently addressing poverty and promoting sustainable development (Kimaro, Gichu, Mogaka, Isabirye, and Woldearegay, 2015).

Conclusion

The study is a scoping review aimed at understanding the role of the African Union's regional economic communities in climate change mitigation and adaptation. It begins by clarifying the concepts of climate change and the African Union's development agenda. Additionally, information on the climate change agenda and the activities of African regional economic communities is presented. The findings indicate a significant role for the AU's regional economic communities in addressing climate change. Notably, these communities are making substantial investments and efforts toward climate change mitigation and adaptation, except for the Arab Maghreb Union (UMA), which has been identified as making limited contributions in this area. Following the previous statement, the theoretical implications of this study underscore its potential to create a foundation for future research on the contributions of public organizations to climate change mitigation and adaptation. Furthermore, the practical implications indicate that stakeholders in regional economic communities can gain valuable insights from the current practices aimed at addressing climate change within their areas of influence.

References

Aeby, M. (2024). High expectations: Civil society participation in conflict early warning and response systems of the AU, ECOWAS and IGAD. *South African Journal of International Affairs*, *31*(2), 167–190. https://doi.org/10.1080/10220461.2024.2385935

African Health Observatory. (2022). *Climate change and health*. Retrieved February 6, 2025, from https://aho.org/health-topics/climate-change-and-health/

African Union. (2022). African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032). Addis Ababa: African Union Commission.

African Union. (2024). *African Union Green Recovery Action Plan 2021–2027.* African Union. https://au.int/en/recs

Al-Sarihi, A. & Luomi, M. (2019). Climate Change Governance and Cooperation in the Arab Region New Governance for the Environment in the Arab Region Series. Emirates Diplomatic Academy. Emirates Diplomatic Academy.

Ateweberhan, M. & McClanahan, T. R. (2010). Relationship between historical sea-surface temperature variability and climate change-induced coral mortality in the western Indian Ocean. *Marine Pollution Bulletin*, *60*(7), 964–970. https://doi.org/10.1016/j.marpolbul.2010.03.033

COMESA. (2019). *COMESA Climate Change Programme*. https://www.comesa.int/wp-content/uploads/2022/1

Destrijcker, L., Yishak, M., Thomson, M., Traore, A., Xu, Y. A., & Kurnoth, H. (2023, July). *Climate, peace and security study: Somali Region, Ethiopia*.

Holthuijzen, W. S. (2011). Dry, Hot, and Brutal: climate change and desertification in the Sahel of Mali. *Journal of Sustainable Development in Africa, 13*(7), 245–268.

Hulme, M., Jones, P., Mearns, L., & Lowe, J. (2001). African climate change: 1900–2100. *Climate Research, 17*(2), 145-168. https://doi.org/10.3354/cr017145

Intergovernmental Authority on Development Centre of Excellence for Climate Adaptation and Environmental Protection. (2023). *The IGAD climate adaptation strategy (2023–2030).* IGAD.

Intergovernmental Panel on Climate Change. (2014). In Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the IPCC (p. 1122). Cambridge University Press.

Kimaro, D. N., Gichu, A. N., Mogaka, H., Isabirye, B. E., & Woldearegay, K. Climate Change Mitigation and Adaptation in ECA/SADC/COMESA region: Opportunities and Challenges. https://nru.uncst.go.ug/handle/123456789/5230

Mbow, C. (2017). The Great Green Wall in the Sahel. *Oxford Research Encyclopedia of Climate Science*, 1–33. https://doi.org/10.xxxx/xxxxxx

Parmesan, C., Morecroft, M. D., & Trisurat, Y. (2022). *Climate change 2022: Impacts, adaptation and vulnerability* [Research report]. GIEC. https://hal.science/hal-03774939

Pörtner, H.-O., Roberts, D., Tignor, M., Poloczanska, E., Mintenbeck, K., Alegría, A., Craig, M., Langsdorf, S., Löschke, S., Möller, V., Okem, A., Rama, B., Belling, D., Dieck, W., Götze, S., Kersher, T., Mangele, P., Maus, B., Mühle, A., & Weyer, N. (2022). *Climate Change 2022: Impacts, Adaptation*

and Vulnerability. Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC.

Southern African Development Community. (n.d.). *Home page*. Southern African Development Community. https://www.sadc.int

Samari, H. (2011). *State of climate change adaptation and mitigation efforts for agriculture in Burkina Faso*. CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS). Copenhagen, Denmark.

Turner, B. (2013). Common Market for Eastern and Southern Africa (COMESA). In B. Turner (Ed.), *The Statesman's Yearbook*. Palgrave Macmillan. https://doi.org/10.1007/978-1-349-59643-0_64

United Nations Economic Commission for Africa. (2012). *Climate change and the rural economy in Southern Africa: Issues, challenges and opportunities* (Issues Paper ECA-SA/TPUB/CLIMATE2012/2). United Nations Economic Commission for Africa, Sub-regional Office for Southern Africa. https://hdl.handle.net/10855/22243

Walters, L. Balint, P. Stewart, R. & Desai, A. (2011). Wicked Environmental Problems: Managing Uncertainty and Conflict. 10.5822/978-1-61091-047-7.

World Bank. (2010). *Cities and climate change: An urgent agenda* (Urban Development Series, Knowledge Papers No. 10). Washington, DC. [World Bank]. https://hdl.handle.net/10986/17381