Federal University Wukari General Studies Journal
Division of General Studies,
Federal University Wukari
Journal homepage: https://journal.quantapub.com/index.php/fuwgestj

Mutualizing Climate Finance Mechanisms towards Sustainable Futures in Nigeria.

Ekpete, Marshall Simon, PhD
Nigerian British University, Asa, Abia State
ekpete.marshal@nbu.edu.ng

Abstract

Nigeria's path to net-zero emissions by 2060 requires approximately $29.7 billion annually, yet current domestic and international climate finance totals only $2.5 billion—a $27.2 billion annual shortfall. This paper analyzes the critical challenges hindering climate investment in Africa, including high perceived risks, debt sustainability crises, and bureaucratic bottlenecks. Through a review of current international and local funding mechanisms, the study advocates for the mutualization of climate finance. This approach moves beyond traditional donor-recipient models toward a systemic blending of capital that integrates climate action with national development goals. Key objectives include utilizing public funds as "first-loss" guarantees to attract private investment and establishing regional risk-pooling facilities to manage climate-related shocks. The paper concludes that mutualization is not merely a financial necessity but a strategic imperative to ensure transparency, accountability, and a sustainable future for Nigeria in an era of increasing climate volatility.

Keywords: Net-zero emissions, Funding Mechanisms, Mutualization.

Introduction

Climate change is a global phenomenon that transcends national borders, which implies that Greenhouse Gas emissions released in one country affect all other countries and their impacts affect the entire planet. The phenomenon has been linked to various environmental, social and economic drivers, including changes in marine ecosystems, surface temperature, and precipitation patterns. These changes have significant implications for sea-level rise, biodiversity, ecosystem migration, agriculture, public health, and economic disruption, making them a critical area of concern for policymakers and researchers alike (Wijk et al., 2020). Africa contributes the least to global warming (roughly 4% of emissions) yet suffers the most from its effects. Limited resources and a dependence on rain-fed agriculture leave the continent uniquely exposed to volatile weather patterns. This creates a stark climate justice issue: those least responsible for the crisis are being forced to bear its heaviest burdens (AfDB, 2023, 2024).

The continent holds potential for green growth and significant natural carbon sinks (like the Congo Basin). Still, it faces challenges in accessing climate finance for adaptation and mitigation, despite its low historical contribution**.** It is a trite fact that only international climate finance (both public and private sources) is not enough to meet the vast needs for addressing climate change impacts in Africa; it falls far short of the estimated requirements, but local climate change Finance (both public and private sources) will complement. Africa receives only a fraction of the

financing required to implement its climate pledges and build resilience. This appears to be more reason we need to mutualise international and local finance to bridge the financing gaps towards tackling the climate change impacts.

Financing the Climate change gap, According to Climate Policy Initiate (2023) Africa accounts for only around 3-4% of global climate finance flows, highlighting a massive gap between what is provided and what is required, while it is estimated that about $2.8 trillion in total by 2030 to implement their climate action pledges, which equates to around $277 billion to $400 billion annually. Matching with a total annual climate finance flows to Africa, from both international and domestic sources, were approximately $43.7 billion in 2021/2022, still requiring a shortfall of about 11-23% of the funding required annually, leaving a massive funding gap of around 80%. Flows must at least quadruple annually to meet investment needs. (African Development Bank, 2023) records that Africa's adaptation gap in 2021/2022 was about $13 billion , against an estimated annual demand of at least $53 billion.

The complexities of systematic issues and challenges in accessing and utilising the Climate finance in Africa by Extension including Nigeria: (i) a significant portion of the finance is provided as loans rather than grants, which exacerbates the debt burden of many African countries. In 2021/2022, 51% of climate finance to Africa was in the form of debt. (ii) African countries often face complex, bureaucratic processes and high capacity constraints that make it difficult to access international climate funds and develop "bankable" project (iii) Private finance accounts for only around 18% of total climate flows in Africa, a much lower share than in other global regions, due to perceived risks and lack of effective incentives. (iv) funding is highly concentrated, with only ten countries receiving half of the total, leaving many of the most vulnerable nations severely underfunded. (v) Developed nations have a history of not meeting their collective climate finance pledges, undermining trust and making long-term planning difficult for African nations. (African Development Bank, 2023). The current system requires significant reform to unlock the necessary capital and ensure it reaches the communities that need it most to build resilience and transition to low-carbon economies.

Barnard, S., et al. (2022). Asserted that several challenges hinder access to climate finance in Sub-Saharan Africa, including: (i) much of the climate finance is provided as debt (up to 70% in some cases), exacerbating the continent's already high debt levels and raising debt sustainability issues. (ii) International investors often view African markets as high-risk due to factors like political instability, currency fluctuations, and weak regulatory frameworks, which limits private sector participation. (iii) African nations frequently face cumbersome, time-intensive application and accreditation processes for major global funds like the Green Climate Fund, along with a lack of localized technical and institutional capacity to develop bankable projects. (iv) A lack of essential climate data needed to design effective projects and track ongoing impacts further complicates the process of securing funds

That said, a mutualised climate finance approach is necessary for Nigeria's sustainable futures because traditional, fragmented financing mechanisms are inadequate to bridge the nation's multi-billion dollar climate finance gap and manage its systemic climate risks; pooling resources and sharing risk across public and private sectors is the most effective strategy to mobilize capital at scale, foster economic transformation, and align national development with Paris Agreement and Sustainable Development Goals mandates.The objectives of adopting a mutualized climate finance approach for sustainable futures in Nigeria are designed to strategically bridge the funding gap, manage systemic risks, and ensure holistic development. include:

- To mobilize capital at scale: The main goal is to substantially boost the total financial resources for climate action and sustainable development in Nigeria by aggregating funds from various public, private, and innovative sources to fulfill the multi-billion-dollar annual need [Barnard et al. (2022)].
- To mitigate financial risks for investors: this aims to strategically use public funds, like those from the NSIA, as a de-risking tool—such as "first-loss" guarantees—to encourage private sector investment in high-impact, climate-focused projects throughout Nigeria [Barnard et al. (2022)].
- To incorporate climate action into national development goals, the aim is to integrate climate finance into existing planning frameworks like the UNDP’s INFFs. This

ensures that investments support both NDCs and SDGs, maximizing co-benefits and maintaining policy consistency [UNDP (2024)].

- To build a robust and resilient financial system: This objective involves establishing effective risk-pooling mechanisms (e.g., regional insurance facilities) to manage the financial impacts of climate-related shocks, moving Nigeria from a reactive to a proactive financial management stance [African Risk Capacity].
- To ensure transparency and accountability: A key objective is to establish clear green taxonomies and robust monitoring, reporting, and verification standards for climate finance flows, building investor confidence and ensuring funds are effectively used for their intended sustainable outcomes [UNEP FI (2022)]

This paper is structured to entail an introduction, international and local climate finance sources, financing gaps, mutualisation, challenges, prospects, and challenges of climate Finance and policy recommendations

International Climate Finance

International Climate finance is grouped by whether the capital originates from public or private actors: Public Finance, which includes funds provided by governments and their agencies, including bilateral aid and contributions to multilateral organizations. While Private Finance is Capital mobilized from commercial banks, institutional investors, and corporations, often triggered by public "de-risking" interventions. it is the flow of resources from developed to developing countries to address climate change under the UNFCCC principle of common but differentiated responsibilities. Its architecture is complex, drawing upon public, private, and innovative sources to bridge a substantial funding gap. While global climate finance (including domestic flows) reached a record $1.9 trillion in 2023, international flows to emerging markets and developing economies remain a fraction of the actual needs.

International Public Sector Finance Sources

The public sector is the bedrock of international climate finance, providing the majority of concessionary funding. In 2022, public climate finance (bilateral and multilateral) accounted for nearly 80% of total international climate finance. (i) Developed Country Governments (Bilateral)**:** Direct government-to-government funding is a key source. In 2022, bilateral finance amounted to $41 billion. The US, for instance, scaled up its public climate finance to over $11 billion in fiscal year 2024 (preliminary estimates). (ii) Multilateral Development Banks, such as the World Bank and the African Development Bank, are major conduits, pooling capital and providing loans. MDBs were the top providers in Africa in 2021/2022, contributing $19 billion. In 2022, MDBs' climate finance commitments to low- and middle-income economies reached $60.7 billion. (iii) UNFCCC Funds**:** Dedicated funds like the Green Climate Fund (GCF) and the Adaptation Fund (AF) are essential for their high grant component, though they make up a small proportion of total flows, accounting for only $3.4 billion (3%) in 2022**.**

International Private Finance Sources

While public finance is critical, private capital is essential for achieving the required scale of investment. However, private finance to EMDEs remains limited compared to domestic flows within developed nations, they entail: (i) Mobilized Private Capital**,** in 2022, developed countries reported mobilizing $15 billion of private finance through public interventions. This figure grew by 52% from previous years, following a period of stagnation. (ii) Overall Private Flows**,** globally, private climate finance exceeded $1 trillion for the first time in 2023, largely driven by household spending on electric vehicles and solar panels in developed regions like East Asia, North America, and Western Europe. Cross-border private investment to EMDEs was much lower, around $42 billion in 2023.

Developed countries finally met the long-standing $100 billion annual goal for the first time in 2022**,** providing and mobilizing a total of $115.9 billion. This milestone was achieved two years later than the original 2020 target. Despite this achievement, a significant funding gap persists. ICF flows fall far short of the estimated needs of developing countries, which require between $2.3 trillion and $2.5 trillion annually by 2030 to meet their climate goals. The imbalance is particularly stark in adaptation finance, which reached $32.4 billion in 2022, a fraction of the estimated needs of $215 billion per year.

International Climate Finance Funding Gap

The International Climate Finance Funding Gap refers to the substantial shortfall between the financial resources needed to address climate change and build resilience, particularly in developing countries, and the actual funds mobilized and disbursed to date. To stay on a net-zero pathway, global investment in climate mitigation needs to reach an average of $7.6 trillion per year between 2024 and 2030. Total global climate finance flows reached approximately $1.9 trillion in 2023, leaving an average annual gap of approximately $5.7 trillion for mitigation alone.

The gap is most acute in emerging markets and developing economies. These countries (excluding China) need an estimated $2.4 trillion annually by 2030 for climate action, with about $1.3 trillion of that needed from international sources. Their investment needs are currently more than 8 times higher than 2023 climate finance flows to these regions. The gap for adaptation finance in developing countries is particularly "yawning". Needs are projected to be between $310 and $365 billion annually by 2035, but current international public flows are only around $26 billion per year as of 2023.This makes current adaptation finance flows 12 to 14 times less than what is needed.

Causes and Challenges of the funding gap are: Private capital, which is essential to closing the gap, is often deterred from investing in developing economies due to perceived risks and weak credit ratings; Many developing nations face high debt servicing costs (in some cases spending more on debt interest than health or education), limiting their fiscal space for climate investment; There is a lack of "bankable" or investment-ready climate projects in many developing countries, often due to a lack of technical capacity and robust policy frameworks; Developed countries have historically been slow to meet their climate finance pledges, such as the initial goal of mobilizing $100 billion per year by 2020 (finally met in 2022); The majority of climate finance historically goes to mitigation projects (which often have a clearer return on investment), with adaptation receiving a much smaller fraction of total funds, despite its critical importance for vulnerable nations.

International climate finance remains structurally dependent on public sector contributions, which play a vital role in de-risking investments and funding essential adaptation projects. While reaching the $100 billion target is a significant political milestone, it pales in comparison to the trillions required for a sustainable global transformation. Moving forward, the focus must shift towards implementing robust mechanisms, potentially within the framework of the new collective quantified goal (NCQG) agreed at COP29, to mobilize private capital at scale and ensure that funds are accessible, adequate, and effectively deployed in the most vulnerable nations. The new global climate finance goal is at least $300 billion annually by 2035. We can further analyze the feasibility of reaching this new target based on current mobilization trends and proposed reforms to MDBs.

Global climate finance mechanisms encompass multilateral funds, bilateral agreements, and private sector initiatives. The Green Climate Fund (GCF) has been instrumental in leveraging climate finance for developing countries, emphasizing the role of intermediaries in shaping climate finance (Chaudhury, 2020). The GCF has also implemented important institutional innovations, including country ownership and private sector engagement, which are unique for a major international organization (Kalinowski, 2020). Furthermore, the GCF's energy finance has been assessed in terms of global distributive justice, particularly in the context of sustainable energy for all (Dorman & Ciplet, 2022).

In addition to the GCF, the Global Environment Facility (GEF) has contributed significantly to sustainable land management projects, particularly in the Sahelian Great Green Wall countries, aiming to achieve land degradation neutrality (Mechiche-Alami et al., 2022). Moreover, the mobilization of private adaptation finance has been a focal point, with lessons learned from the GCF (Stoll et al., 2021).

Bilateral agreements also play a significant role in international climate finance. Developed countries have provided and mobilized climate finance through bilateral public climate finance and multilateral public climate finance ("Climate Finance Provided and Mobilised by Developed Countries in 2016-2020", 2022). These agreements have been crucial in assessing climate finance readiness in regions such as the Asia-Pacific, highlighting the importance of intermediaries in shaping climate finance in developing countries (Samuwai & Hills, 2018).

Private sector initiatives have increasingly become integral to climate action. Mobilizing private adaptation finance has been a key focus, with lessons learned from

the GCF (Stoll et al., 2021). The role of private finance in climate action has been emphasized, along with the challenges and trends in investment ("Climate Finance Provided and Mobilised by Developed Countries in 2016-2020", 2022). In conclusion, international climate finance mechanisms, including multilateral funds like the GCF and GEF, bilateral agreements, and private sector initiatives, are essential for addressing climate change. These mechanisms have played a pivotal role in leveraging finance, promoting sustainable land management, and addressing challenges in mobilizing private finance for climate action.

Local Climate finance

Nigeria's pursuit of a sustainable future, as outlined in its ambition for net-zero emissions by 2060 and its Nationally Determined Contributions (NDCs), is fundamentally dependent on mobilizing significant financial resources. While international climate finance receives substantial attention, Nigeria's domestic sources of climate finance are gradually emerging as critical drivers of sustainable development, even though the total amounts raised remain minimal compared to the estimated annual needs of approximately $29.7 billion. The current landscape is dominated by public sector initiatives and nascent private sector participation through innovative financial instruments.

The primary sources of Nigeria's local climate finance include budgetary allocations, sovereign green bonds, and private corporate investments, predominantly in renewable energy. (i) Public Budgetary Allocations: The Federal Government directs funds through its annual budget, mainly via the Federal Ministry of Environment. The allocation for the Ministry saw an increase to ₦86.44 billion (approx. $188 million USD based on 2023 **rates)** in the 2023 budget, up from ₦56.45 billion in 2022. A significant portion of this is for capital expenditure on projects related to agro-climate resilience and environmental management, though the funds are often centralized at the federal level with concerns about equitable distribution and utilization at state levels. (ii) Sovereign Green Bonds: Nigeria has been a pioneer in Africa's green bond market, issuing its first sovereign bond in 2017. To date, the Debt Management Office has issued multiple tranches. The third sovereign green bond offer in June 2025 aimed for ₦50 billion but was oversubscribed, raising approximately ₦91.42 billion (allotting ₦47.355 billion) for 2024 eligible projects. In total, previous issuances raised around ₦25.69 billion as of 2022. These funds have primarily financed afforestation, reforestation, and off-grid solar projects. (iii) Private Sector Investment**:** The private sector's contribution is growing but remains relatively low. Tracked private climate finance increased to $0.8 billion in 2021/22, up from $0.4 billion in 2019/20, accounting for about 30% of Nigeria's total climate finance in that period. Corporate investments have largely focused on small-scale solar PV systems and energy efficiency measures. Local corporate green bonds, like those issued by Access Bank and North Sout Power, have also contributed to the pool of domestic climate capital.

The Funding Gap and Challenges

Despite the growth in domestic sources, tracked local and international climate finance combined stood at only $2.5 billion in 2021/22, representing a substantial annual gap of $27.2 billion. The reliance on debt instruments for a large portion of this funding, along with ongoing fossil fuel subsidies, highlights challenges in mobilizing truly sustainable and sufficient capital.

Mutualisation of Climate Finance

Mutualized climate finance is necessary because traditional aid models have proven insufficient to address the scale and complexity of the global climate crisis, particularly for vulnerable developing nations. It aims to bridge the massive funding gap, leverage private capital, and ensure that climate action is integrated with long-term sustainable development goals for a more effective and equitable global response.

International and local climate finance are mutualized, or blended, primarily to bridge the immense funding gap required for global climate action, especially in developing countries. Governments and public sources alone cannot meet the vast financial needs, so blending public and private, domestic and international resources is a strategic necessity to mobilize capital at the necessary scale. *United Nations Development Programme* (2024)

According to Climate Policy Initiative *(2025) International Rescue Committee(2025),* Organisation for Economic Co-operation and Development *(2018),* United Nations Development Programme *(2024),* World Economic Forum, (2023) the Rationale for Mutualization includes (i) to unlock the trillions of

dollars in private capital needed to fund the transition to a low-carbon, climate-resilient economy. Public funds act as a catalyst to attract private investment that would otherwise not be available. (ii) to cushion private investors from potential losses, making projects more attractive and bankable. (iii) some climate initiatives, mostly adaptation measures like early warning systems or resilient infrastructure in vulnerable areas, may not offer commercially competitive returns for private investors. Public finance can ensure these essential, yet less profitable, projects get funded. (iv) Combining international and local finance, often involving local financial institutions, helps build expertise and confidence in local markets for green investments. This strengthens domestic financial systems and creates a pipeline of future climate projects. (v) ensuring alignment with national climate goals (vi) International climate finance from developed nations is also a matter of global justice and historical responsibility, acknowledging that developed countries are primarily responsible for the bulk of historical emissions. Providing financial support helps vulnerable nations cope with a crisis they did not create.

Mutualising climate finance involves pooling financial resources and coordinating strategies among nations and institutions to ensure a collective, integrated, and efficient approach to addressing climate change and achieving sustainable development. This approach aims to bridge the significant funding gaps, especially in developing countries, and align all financial flows with the goals of the Paris Agreement and the Sustainable Development Goals (SDGs). This approach is increasingly critical, particularly in developing countries that face immense vulnerability to climate change despite contributing minimally to its causes. UNDP (2024) an**d** (UNFCCC). (2022).

Aligishiev, Z., et al. (2022) Bhattacharya, A. (2022). Edet, S. E., Okonkwo, O. O., & Obasi, U. G. (2023) argue that mutualisation and effectiveness of climate finance entails : using public finance to de-risk investments and catalyze private capital, particularly in renewable energy and sustainable agriculture; Addressing Allocation Disparities through equitable distribution based on actual vulnerability and need, rather than economic or geopolitical interests, robust monitoring, reporting, and verification frameworks to ensure transparency and accountability; and synergies between climate action and development.

OECD (2025) report on mobilizing private finance for development, climate and biodiversity in emerging markets and developing countries accounts that Developing nations face a historic investment opportunity: delivering USD 7.5 trillion annually of investment to reignite growth, reduce poverty, and meet the broader set of Sustainable Development Goals. While public finance remains crucial, private finance must fill the bulk of the gap. Three critical barriers, however, constrain private investment flows to developing nations, including the lack of robust data and transparency on private finance, the shortcomings of development finance in mobilising private investment, as well as policy and regulatory frameworks that limit capital flows.

UNDP (2024) and LSE Grantham Institute (2020) Aligning mutualized climate finance with the Paris Agreement and Sustainable Development Goals works by deliberately creating an integrated, systemic financing strategy that exploits the strong interlinkages between climate action and development to achieve both sets of goals simultaneously. Instead of treating climate action (Paris Agreement) and development (SDGs) as separate endeavors, mutualized finance uses coordinated, holistic approaches to ensure sufficient support for a complete system transformation to net-zero and climate-resilient development.

According to Iacobută et al. (2022) ..One of such ways to align is through the Integrated National Financing Frameworks (INFFs) & Country Platforms**,** which Mutualized finance is often operationalized through platforms like the UNDP's INFFs or specific country platforms. These bring together governments, the private sector, and multilateral institutions (like Multilateral Development Banks) to coordinate finance behind shared, country-led visions. This ensures that investments support both climate action (e.g., renewable energy) and development goals (e.g., energy access, job creation). UNDP (2024), aligning mutualized climate finance with the Paris Agreement and SDGs provides integrated benefits that improve financial efficiency, enhance sustainability, and reduce overall systemic risk (de-risking investments) by ensuring investments address both climate action and development needs simultaneously.

Financial efficiency helps avoids duplication of efforts and leverages investments with multiple positive outcomes, such as funding renewable energy projects (Paris Alignment) also supports energy access (SDG 7),

economic growth (SDG 8), and improved health outcomes by reducing pollution [Iacobută et al. (2022)]. In climate finance mutualization, risk and resource pooling are central to managing the financial burdens of climate change by sharing potential costs and aggregating capital across a broad base of participants, especially vulnerable nations [Barnard et al. (2022)]. Risk Pooling is a mechanism that aggregates diverse climate hazards across different geographic areas to reduce individual exposure, including Diversification and Affordability and Predictable Payouts. While Resource Pooling involves combining financial contributions from various sources (public, private, philanthropic) into a common fund to finance large-scale climate projects or provide a safety net. It entails: Aggregating resources enables larger, more impactful investments that would be too big or risky for single investors. This improves operational efficiency and ensures consistent funding streams for climate action [UNDP (2024)]; and Attraction of Private Capital (Blended Finance); and Proactive Planning

Conclusively, In climate finance, mutualization fundamentally differs from traditional aid models by shifting from donor-driven, project-specific, and often debt-based approaches toward integrated, country-owned, and systemic financing strategies that blend various capital sources to achieve both climate and development goals simultaneously [UNDP (2024); Barnard et al. (2022)].

The Confluence of Challenges and Prospects in Mutualizing Climate Finance

The transition to a global, climate-resilient economy necessitates an unprecedented mobilization of capital. Traditional bilateral aid models have proved inadequate for this task, leading to increased interest in the paradigm of mutualized climate finance. Mutualization—the pooling of financial resources and the sharing of associated risks across diverse actors—offers a compelling pathway to bridge the significant financial gap. However, the operationalization of mutualized climate finance is fraught with substantial challenges, the resolution of which is crucial for realizing the immense prospects this model offers in aligning global financial flows with the Paris Agreement and Sustainable Development Goals .

Formidable Challenges to Implementation

The core challenges in mutualizing climate finance stem from the complex interplay of financial, political, and institutional barriers.

First, a persistent challenge is the high perceived risk of investments in many developing regions, particularly Sub-Saharan Africa. International private investors often view these markets as volatile due to political instability, currency fluctuations, and weak regulatory frameworks. This perception limits private sector participation, meaning mutualized climate finance struggles to achieve the critical mass of capital needed for scale [Barnard et al. (2022)]. While mutualization aims to de-risk investments through blended finance models, finding the right balance of public capital to catalyze private flows remains an intricate calibration exercise.

Second, the debt sustainability crisis is a major impediment. A significant portion of current climate finance, even when mutualized through multilateral development banks, is provided as concessional or market-rate loans. This exacerbates the existing debt burdens of low-income countries, creating a vicious cycle where the pursuit of climate resilience compromises fiscal stability. The challenge lies in structuring mutualized climate finance vehicles that offer adequate grant components or innovative debt instruments (like debt-for-climate swaps) that do not simply add to national liabilities [Barnard et al. (2022)].

Third, institutional and technical capacity gaps within recipient countries hinder the development of "bankable" projects. Cumbersome application processes for major global funds (e.g., the Green Climate Fund) and a lack of local expertise in designing complex, integrated financial proposals slow down disbursement and implementation. Effective mutualization requires robust governance and coordination mechanisms, which are currently underdeveloped in many contexts [UNDP (2024)].

Finally, a lack of standardized data and metrics for measuring climate impact complicates the alignment of mutualized climate finance with specific targets under the Paris Agreement and Sustainable Development Goals. Without a clear global taxonomy, comparing project outcomes and ensuring true additionality of funds remains difficult, potentially leading to greenwashing concerns among investors [UNEP FI (2022)].

Transformative Prospects and Opportunities

Despite these hurdles, the potential benefits of successful mutualized climate finance implementation are substantial, offering a transformative alternative to traditional aid models.

The primary prospect is the ability to mobilize capital at scale. By aggregating resources into large pools, mutualized climate finance achieves economies of scale and efficiency not possible with fragmented aid [UNDP (2024)]. This mechanism can effectively channel the estimated $2.4 trillion in domestic assets under management in Africa towards productive, climate-aligned investments, unlocking a vital source of internal funding [Barnard et al. (2022)].

Furthermore, mutualized climate finance facilitates a holistic, system-wide transformation. Unlike traditional project-based aid, mutualization operates within frameworks like Integrated National Financing Frameworks (INFFs), which ensure policy coherence and alignment across all national economic planning [UNDP (2024)]. This approach exploits co-benefits—for example, investments in sustainable agriculture simultaneously address food security (SDG 2) and emission reduction (Paris Agreement)—maximizing impact per dollar spent [Iacobută et al. (2022)].

Finally, risk pooling mechanisms enhance global resilience. By adopting insurance-based principles, regional risk pools (like the African Risk Capacity) provide rapid, predictable liquidity after climate shocks. This shifts the paradigm from reactive disaster fundraising to proactive financial risk management, safeguarding development gains and ensuring continuity in the face of escalating climate impacts.

Conclusively, mutualized climate finance represents a critical and necessary evolution in global climate governance. While significant challenges related to risk perception, debt, and capacity must be navigated, the prospects of achieving massive scale, ensuring policy coherence, and managing systemic risks are unparalleled. Overcoming these barriers requires political will, innovative financial architecture, and a commitment to genuine partnership, ultimately positioning mutualized climate finance as the crucial financial engine for achieving a sustainable and equitable global future.

Policy Recommendations

Nigeria stands at a critical juncture, facing dual challenges of climate vulnerability and a pressing need for sustainable economic development. The current reliance on fragmented aid and volatile oil revenues is insufficient to fund a resilient future. Mutualizing climate finance offers a promising strategy by pooling risk and resources across public and private sectors to achieve the Paris Agreement and Sustainable Development Goals. For this model to succeed in the Nigerian context, specific policy reforms are essential to build investor confidence, strengthen governance, and unlock the nation's vast potential for green growth.

1. Establish a Strong, Coherent Governance and Regulatory Framework: Nigeria must accelerate the finalization and implementation of a comprehensive National Green Taxonomy and mandatory climate-related financial disclosure standards. This will provide clarity for investors on what constitutes a "green" or "sustainable" investment in Nigeria, mitigating greenwashing risks and reducing perceived regulatory uncertainty. A clear taxonomy, aligned with international best practices, builds trust and facilitates the flow of international capital into credible mutualization schemes. the Central Bank of Nigeria and the Securities and Exchange Commission to enforce these standards across the financial sector

2. Leverage Sovereign Resources to De-Risk Private Investment: Utilize Nigeria's sovereign wealth fund, the Nigeria Sovereign Investment Authority, to provide "first-loss" guarantees and blended finance facilities for key climate sectors (e.g., renewable energy infrastructure, climate-smart agriculture.

3. Develop and Deepen Domestic Capital Markets for Green Finance: Promote the issuance of Sovereign and Sub-Sovereign Green Bonds and encourage the development of a vibrant secondary market for these instruments.

4. Build Institutional Capacity for Project Origination and Data Management: Establish a dedicated Climate Finance and Project Preparation Facility housed within a relevant ministry (e.g., Ministry of Finance or Environment) to provide technical assistance to project developers.

Conclusion

Ultimately, mutualizing climate finance is not merely a supplementary funding strategy for Nigeria; it is a critical paradigm shift required to bridge the massive resource gap that traditional aid and volatile oil revenues cannot cover [Barnard et al. (2022)]. By systematically pooling risks and resources through integrated frameworks like the UNDP's INFFs, Nigeria can transition from a reactive, debt-dependent approach to a

proactive, country-owned, and resilient financial architecture [UNDP (2024)]. The success of this model hinges on the nation's commitment to implementing key policy reforms, such as establishing clear green taxonomies and strategically deploying sovereign guarantees to catalyze private capital. While challenges in governance and capacity are real, the prospects of mobilizing domestic capital and ensuring that every investment delivers on both the Paris Agreement and the SDGs offer a viable pathway to a sustainable and prosperous Nigerian future.

Reference

African Development Bank (2023), "Country Focus Report 2023 - Nigeria"

African Development Bank (2024). *Sustainable Energy Fund for Africa (SEFA) Annual Report* .

African Development Bank. (2023). *Africa economic outlook 2023: Mobilizing private sector financing for climate and green growth in Africa*. https://www.afdb.org/

Aligishiev, Z., Bellon, M., & Massetti, E. (2022). *Macro-fiscal implications of adaptation to climate change*. International Monetary Fund.

Aligishiev, Z., et al**.** (2022). "Climate Change Adaptation Finance in Developing Countries," *Journal of Environmental Economics*.

Barnard, S., et al. (2022)**.** *Mobilizing Climate Finance in Sub-Saharan Africa: Challenges and Opportunities, Climate Policy Journal.*

Barnard, S., Nakhooda, S., & Thwaites, J. (2022). *Climate finance: Challenges and opportunities in Sub-Saharan Africa*. Overseas Development Institute (ODI).

Bhattacharya, A. (2022). *Climate Finance: A CGE Analysis of the $100 Billion Goal.* OECD Publishing.

Bhattacharya, A., Dooley, M., Kharas, H., & Taylor, C. (2022). *Financing a big investment push in emerging markets and developing economies*. Grantham Research Institute on Climate Change and the Environment.

Buchner, B., et al. (2019). *Global Landscape of Climate Finance 2019.* Climate Policy Initiative

BudgIT (2023) "Climate Financing in Nigeria's Public Budgeting" report.

Chaudhury, A. S. (2020). Role of intermediaries in shaping climate finance in developing countries: Lessons from the Green Climate Fund. *Current Opinion in Environmental Sustainability*, *45*, 55–62. https://doi.org/10.1016/j.cosust.2020.09.006

Climate Policy Initiative (2023) "Finance Flows to Africa" report, 2023. [2] *African Development Bank (AfDB)*, "Africa Climate Change Needs" report.

Climate Policy Initiative (2024), "Landscape of Climate Finance in Nigeria 2024"

Climate Policy Initiative (2025), "Landscape of Climate Finance in Nigeria 2025" report.

Climate Policy Initiative (2025), "Unlocking Climate Finance for Least Developed Countries"

Climate Policy Initiative. (2023). *Global landscape of climate finance 2023*. https://www.climatepolicyinitiative.org/

Connected Development (CODE), Oxfam Nigeria, and INKA Consult, "The State of Climate Finance in Nigeria" report (2025).

Doku, G., Richardson, M., & Essah, P. (2022). "The effects of German bilateral climate finance on food security in 35 Sub-Saharan African countries," *Food Security* .

Dorman, J., & Ciplet, D. (2022). Global distributive justice and the Green Climate Fund: A processual assessment of energy finance. *Global Environmental Politics*, *22*(2), 64–86.

Edet, S. E., Okonkwo, O. O., & Obasi, U. G. (2023). Climate finance and sustainable development in Nigeria: Issues and prospects. *Journal of African Political Economy and Development*, *8*(1), 112–129.

Edet, S. E., Okonkwo, O. O., & Obasi, U. G. (2023). "Green finance and sustainable development in Sub-Saharan African countries," *African Business and Finance Review* .

Iacobută, G. I., Brandi, C., Dzebo, A., & Durán-Quiroz, S. S. (2022). Aligning climate and sustainable development finance through an integrated approach. *Climate Policy*, *22*(4), 443–459. https://doi.org/10.1080/14693062.2022.2054767

International Rescue Committee (2024) "What is climate finance and why is it so important?" .

Kalinowski, T. (2020). The Green Climate Fund and the institutionalization of climate finance. *Global*

Governance: A Review of Multilateralism and International Organizations, *26*(4), 633–654.
LSE Grantham Institute (2020). *Aligning financial flows with the Paris Agreement: what and how?*
LSE Grantham Institute (2020): A report that discusses the necessity of aligning all financial flows, not just specific projects, with the Paris Agreement's Article 2.1(c) for a complete system transformation.
OECD (2022). *Climate Finance Provided and Mobilised by Developed Countries: Aggregate Trends Update*. OECD Publishing, Paris.

OECD. (2022). *Climate finance provided and mobilised by developed countries in 2016-2020*. OECD Publishing. https://doi.org/10.1787/d28f0005-en
Organisation for Economic Co-operation and Development (2018), "Blending finance for climate and poverty".

Samuwai, J., & Hills, J. M. (2018). Assessing climate finance readiness in the Asia-Pacific region. *Journal of Environmental Management*, *223*, 111–120.
Schmidt, T. S., et al. (2021). "The effectiveness of multilateral climate funds in advancing mitigation goals," *Nature Climate Change*.

Stoll, P., Fuessler, J., & Bridle, R. (2021). *Mobilizing private adaptation finance: Lessons learned from the Green Climate Fund*. International Institute for Sustainable Development (IISD).
UNDP (2024). "Mutualizing Finance within the Climate-Development Nexus," *SDG Finance Publication*.
UNEP FI **(2022)** Guidelines for banks on setting targets and developing action plans to align their portfolios with the Paris Agreement, emphasizing the role of the financial sector in facilitating systemic change.

UNEP FI. (2022). *Climate change and the financial sector: A roadmap for transparency and accountability*. United Nations Environment Programme Finance Initiative.
United Nations (2025), "Causes and Effects of Climate Change"
United Nations (2025), "What Is Climate Change?"
United Nations Development Programme (UNDP), "Nigeria Unveils its NDC Climate Action 3.0 at UNGA" (2025)
United Nations Development Programme. (2024). *Integrated national financing frameworks: A guide for climate action*. UNDP.
United Nations Framework Convention on Climate Change (UNFCCC) (2022). *Introduction to Climate Finance*. UNFCCC Secretariat

Wijk, M., Hammond, J., & van Wijk, S. (2020). Climate change impacts on agriculture and food security: A global perspective. *Environmental Research Letters*, *15*(11).
World Economic Forum (2023), "How national-level blended finance can catalyse climate action"
World Health Organization (2023), "Climate change"

Article inflow
Received: 5th October, 2025
Accepted: 30th November, 2025
Published 31st December, 2025