International Journal of Scientific and Management Research
Volume 8 Issue 1 (January) 2025
ISSN: 2581-6888
Page: 121-136

A Review of Sustainable Finance Literature in Sub-Saharan Africa

Christelle Simo[1] & Clement Ndindah Ndifor[2]
[1]Assistant Lecturer Department of Accounting and Finance University of Ngaoundéré, **Cameroon**
[2] Head of Business Department, School of Doctoral Studies, Unicaf University Cyprus, **Cyprus**
DOI - http://doi.org/10.37502/IJSMR.2025.8106

Abstract

Sustainable finance is an emerging field that aims to integrate environmental, social, and governance (ESG) criteria into investment decision-making processes. This approach enables investors to customise their investments to align with projects that consider these ESG factors. Consequently, sustainable finance can be regarded as a significant instrument through which funders and investors can leverage their capital to optimise social impact in Sub-Saharan Africa. This study aims to contribute to the understanding of sustainable finance by conducting a systematic review of the extant literature. This study was designed using a qualitative approach through a comprehensive literature review. Reviews on sustainable finance in sub-Saharan Africa were conducted by reading and analysing 20 peer-reviewed journal articles and summarised in two tables, namely article journal and article category based on topic. The literature used in this review was sourced from multiple databases across the continent. The findings of this study are that governments should prioritise environmental regulation, transparency, and public participation and explore climate finance sources. Prioritising domestic savings, discouraging capital flight, and promoting environmental cooperation can stimulate long-term economic growth. Finally, fintech has an important role to play in promoting inclusive finance, economic development, and reducing inequality, although a gradual approach is needed to fully realise its potential. In conclusion, policies that promote sustainable investment are needed to attract investors and foster a favourable investment environment.

Keyword's: Sustainable Finance, Investments, Green Financing, Environmental Protection

1. Introduction

In Africa, pursuing sustainable development goals is a formidable challenge and an urgent imperative. Sustainable development in Africa means development that ensures marginalised individuals and communities are granted access (financially, educationally, etc.) to participate in the economy in a manner that ensures their future generations remain active participants in the economy while preserving cultural practices in a manner that respects the need to protect the environment for future use (Nkume, 2018). Since the inception of the 17 Sustainable Development Goals (SDGs) in 2000, the continent has made notable strides towards their attainment. Recognizing the multifaceted nature of sustainable development, African nations grapple with a myriad of obstacles on the path to prosperity. Chief among these challenges are

conflicts, which disrupt communities, undermine governance structures, and impede development efforts. Additionally, insufficient investment in key sectors and limited market access opportunities further exacerbate the struggle to achieve the SDGs (Zhang, 2024). The emphasis on economic and physical wealth in the pursuit of development has proven to be unsustainable not only from an environmental perspective, but also from an economic, social and employment perspective, as it is resource intensive, hence the need to pursue Sustainable Development (SD) (Ahenkan and Osei-Kojo, 2014). The promotion of an enabling environment for job creation and entrepreneurship, together with efficient fiscal policies, will be instrumental in building resilient and inclusive economies, which will ultimately pave the way for sustainable development and shared prosperity in Africa (Kakeu et al. 2024).

In sub-Saharan Africa, the environment appears to have long been neglected in development issues. Naturally, the environment has an epidemiologic or determinant role when it comes to sustainable development (Mhlanga and Adegbayibi, 2024). African countries face economic constraints, largely dependent on commodity exports, making them vulnerable to price fluctuations and limiting innovation for sustainable development goals, despite UN advice. The Sustainable Development Goals (SDGs) require significant financial investments, with social safety nets costing around $66 billion annually and infrastructure improvements potentially costing up to $7 trillion. Most developed countries have not met their international aid targets in the last 40 years, highlighting the need for increased funding (Omisore, 2018). According to the UN Economic Commission for Africa (ECA) 2020 report, a central challenge for Africa to meet the SDGs and achieve sustainable and inclusive development is to mobilise the investment needed in key sectors such as health, energy, transport, construction, agriculture, education, and manufacturing. Large investment gaps exist, particularly in sectors such as infrastructure (even while that sector has immense potential to drive economic growth). Africa needs reforms at the level of multilateral agencies, development banks and national governments to close the gaps in sustainable investment. National governments can mobilise sustainable finance through environmental taxes and partnerships. Encouraging governments to mobilise domestic resources and private sources, ensuring more efficient international development financing, and leveraging climate financing will help bridge the substantial development financing gaps. Advancing the private sector and mobilising private capital presents a transformative approach to achieving development goals (ECA 2020).

The SDGs emphasise the obligations of governments to their populations, particularly at the local level: The SDGs highlight the obligations of governments to their populations, particularly at the local level. As part of their everyday responsibilities, local authorities implement policies and measures that, while not always formally labelled as SDGs, directly affect people's access to infrastructure, services, and livelihoods (Annan-Aggrey and Arku, 2021). Development in Africa has previously been financed by huge funds from the public sector. This has been the case for many decades, and only in the last decade was there a rising shift in discourse, that is, aiming to involve the private sector as a key player in the development narrative, specifically for raising finance to fund development. Considering that low-resource nations' dependence on donor agencies has not yielded the desired results, the private sector must take on more financing and service delivery gaps to achieve the goals. The private sector can become a key partner in this process, while large-scale government funding remains essential. Different types of private sector engagement should be employed to find the appropriate financing source for each goal. As a joint effort, the financial services (FS) industry

also has a key role to play in helping fund the SDGs. This can unlock significant new investment and business opportunities and help mitigate sustainability risks. The FS industry has a responsibility to identify potential funds to promote sustainability, and to embed this in everyday practice, it needs to understand and support the business case for supporting the SDGs. Sub-Saharan Africa's financial and economic sectors are at the forefront of global discussions on green finance and sustainable development, especially after the 2020 recession and the 2022 crisis caused by COVID-19 and the Russian invasion of Ukraine (Udoh, et al., 2023). It is expected that the support and development of a sustainable financing model will accelerate the transition period by creating an enabling economy across all economic sectors (industrial and non-industrial). In this context, this paper aims to review the mini-literature on sustainable finance from various sources and to summarise and draw conclusions based on the findings.

2. Materials and methods used

We followed the procedure for a systematic review, and our inclusion criteria were original empirical research papers, and the exclusion criteria were mini-case review papers. The literature searches were carried out in six databases: Google Scholar, Web of Sciences, Scopus, Sustainability Research International Documents, Google Scholar, and ProQuest (for dissertations). In the search, we included grey literature such as white papers, technical reports, unpublished theses, and dissertations to reduce publication bias. In addition, we used the snowball method, adding articles that either cited or were cited by an article in our list if they met our search criteria and had not yet been identified by the general search. We carried out a keyword search in all of the databases. In the first part, we used the terms 'sustainable investment,' 'sustainable responsible investment,' 'sustainable development,' 'sustainable financialisation,' 'ethical investment,' and 'impact investment.'. In a second approach, we used terms related to environmental finance, such as "green investment, green bonds, green finance," and "climate finance."

We concentrated our study on studies published in English in the 2000s, as the Global Reporting Initiative was established in the late 1990s to define sustainability reporting criteria. This program urged corporations to report their environmental, social, and governance performance, giving investors more complete information to help them make decisions. The search and data extraction were carried out between September 13, 2023, and December 17, 2023. This search resulted in the identification of 103 papers. A careful screening of these retrieved articles led to the elimination of 83 articles. The articles selected had to properly address the issue of sustainable finance on the African continent using primary data. Twenty peer-reviewed journal articles were read and analysed for the mini-review on sustainable finance. These articles are summarised in the following tables. The first table provides information about the journal article in terms of title, authors, and year of publication. The second table shows the content of the journal article, including the objectives of the study, the results, and the recommendations.

Table 1: Journal and Publisher Information

1	Green Finance and Sustainable Development Nexus in Sub-Saharan Africa	Edet, I. V., Udo, E. S., Jack, A. E., & Abner, I. P.	Journal of Social Sciences, 18(2)	2024
2	Unlocking climate finance potential and policy barriers—A case of	Mungai, E. M., Ndiritu, S.	Resources, Environment and Sustainability,Vol.18,	2022

	renewable energy and energy efficiency in Sub-Saharan Africa.	W., & Da Silva, I.	No.2, 78-90	
3	Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects.	Chiyemura, F., Shen, W., & Chen, Y. (2021).	Open Research Online	2021
4	Do green finance and digital technology matter for sustainable agricultural development?	Addai, K., Yufenyuy, M., & Kifem, F. L.	Discover Agriculture, 2(1), 29.	2024
5	Financing sustainable development of small and medium enterprises in Cameroon.	Ayuk, J. A., Bystryakov, A. Y., & Karpenko, O. A.	International Journal of Environmental and Science Education, 11(15), 8062-8076.	2016
6	Financing sustainable development goals in Sub-Saharan Africa: Does international capital flows matter?.	Slimani, S., Omri, A., & Abbassi, A.	Sustainable Development, 32(6), 6656-6685.	2024
7	Taking stock of sustainable development finance in Sub-Saharan Africa. Testing New Policy Approaches.	Oyejide, T. A.	Proceedings of the Fifth Expert Group Meeting on Finance for Sustainable Development, Nairobi, Kenya, 1-4 December 1999	2002
8	Financing sustainable agriculture in sub-saharan africa: a review of the role of financial technologies.	Mapanje, O., Karuaihe, S., Machethe, C., & Amis, M.	. Sustainability, 15(5), 4587	2023
9	Towards the achievement of SDG 7 in sub-Saharan Africa: Creating synergies between Power Africa, Sustainable Energy for All and climate finance in-order to achieve universal energy access before 2030.	Chirambo, D	Renewable and Sustainable Energy Reviews, 94, 600-608.	2018
10	Sub-Saharan Africa's debt-financed growth: How sustainable and inclusive?.	Olaoye, O. O.	African Development Review, 34(4), 443-458.	(2022).
11	The impact of foreign investment in financing sustainable development in Sub-Saharan African countries.	Alhassan, T. F., Ansah, E. O., Niyazbekova, S. U., & Blokhina, T. K.	Russian Journal of Economics, 10(1), 60-83.	2024
12	Innovative and mission-oriented financing of renewable energy in Sub-Saharan Africa: A review and conceptual framework.	Soumonni, O., & Ojah, K.	Wiley Interdisciplinary Reviews: Energy and Environment, 11(1), e416.	2022
13	Climate finance in sub-Saharan Africa.	Nakhooda, S., Caravani, A., Bird, N., Schalatek, L., & America, H. B. S. N. (2011)	Climate Finance Policy Brief.	2022
14	The relevance of financial inclusion on sustainable economic growth in sub-saharan African Nations. .	Chima, M. M., Babajide, A. A., Adegboye, A., Kehinde, S., & Fasheyitan, O.	Sustainability, 13(10), 5581	2021
15	Debt Distress and Climate-Resilient Development in Sub-Saharan Africa.	Gallagher, K. P., Ramos, L., Were, A., & Marques, M. Z. .	Journal of African Economies, 33 (Supplement_2), ii8-ii25.	2024
16	Achieving sustainability: Unravelling the role of financial development and foreign direct investment in sub-Saharan Africa.	Yeboah, K. E., Abbass, K., Jamatutu, S. A., Feng, B., & Feng, J.	In Natural Resources Forum. Oxford, UK: Blackwell Publishing Ltd.	2024
17	Exploring the complications of climate change funding in Sub-Saharan African countries.	Adom, R. K., Mukoki, P., Ngwenya, N., & Simatele, M. D. (2024).	Mitigation and Adaptation Strategies for Global Change, 29(6), 58.	2024

18	. Fractured fiscal authority and fragmented infrastructures: Financing sustainable urban development in Sub-Saharan Africa.	Cirolia, L. R.	Habitat International, 104, 102233.	2020
19	Financing Sustainable Energy Access with Oil Revenues in Sub-Saharan Africa: Trends and Strategies.	Ackah, I.	Financing Sustainable Development in Africa, 197-229.	2018
20	Does financialization enhance renewable energy development in Sub-Saharan African countries?	Appiah, M., Ashraf, S., Tiwari, A. K., Gyamfi, B. A., & Onifade, S. T. (2023).	Energy Economics, 125, 106898.	2023

Table 2: Articles and Findings

No	Article Name	Objectives	Findings	Recommendations
1	Green Finance and Sustainable Development Nexus in Sub-Saharan Africa	To comprehensively assesses the influence of green finance on sustainable development in sub-Saharan African countries from 1999-2023.	Green finance, involving private sector bank credit, promotes sustainable practices and investments in industries. However, negative impacts of green gas emissions and FDI inflows may arise due to lax environmental regulations. Finally investing in post-primary education in SSA countries can lead to sustainable environmental quality.	In light of these findings, this study recommends aligning investments with sustainable development goals, enhancing regulatory oversight to improve environmental quality, and balancing economic growth and environmental stewardship through sustainable development strategies, given their countries' vulnerability to climate change
2	Unlocking climate finance potential and policy barriers—A case of renewable energy and energy efficiency in Sub-Saharan Africa.	To assess the renewable energy (RE) and energy-efficient (E.E.) investment potential as well as policy barriers in Sub-Saharan Africa (SSA).	The result of the study indicates a promising yet very susceptible future for the implementation of RE and E.E. in SSA. To enhance access to electricity, promote energy security, and propel economic growth in an environmentally friendly approach, SSA has to overcome the significant challenge of inadequate private and public funding for the energy sector	Mobilizing financial resources for renewable energy and energy efficiency is crucial for the African energy sector. Resolving financial and economic barriers can attract private sector investments, promoting sustainable development. However, lack of policy reforms and poor implementation of electrification practices hinder the achievement of sustainable development goals.
3	Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects.	To investigate, from both ends, the barriers and potential solutions to scaling China's engagement with the SSA's non-	The scaling of Chinese wind and solar energy projects in the SSA region is hindered by institutional, material, and discursive factors. These include the	Chinese and African governments should consider two strategies to address challenges in the solar energy sector: promoting changes in existing regulatory,

		hydro renewable energy market.	Chinese policy community's inflexible project screening process, lack of business engagement, skepticism about rensewable energy, and the political economy's influence on institutions and ideologies in the sector.	financial, and business models, and promoting innovative solutions for large-scale projects. African governments should demonstrate ambition for a clean energy transition, encourage Chinese partners, open up renewable energy sectors to private players, and address challenges such as capital and technical expertise.
4	Do green finance and digital technology matter for sustainable agricultural development?	To investigates the significance of green finance and digital technologies on green agricultural growth in sub-Saharan Africa (SSA) from 2003 to 2018.	the study reveals that mitigated green finance (MGF), internet and mobile phone use (IMU), as well as sustainable energy utilization (RE), individually and collectively exert a positive effect on agriculture, forestry and fishing.	For policy insights, the AU could urge member states to implement macro-policies to increase agricultural green credit to sustain food production and employment generation. Similarly, the FAO and AU could provide technical support in digital agricultural research and value chains towards ensuring sustainable agriculture development in SSA.
5	Financing sustainable development of small and medium enterprises in Cameroon.	To understand the financing and sustainability challenges in the small and medium-sized enterprise sector in Cameroon	Financing is a necessary but not a sufficient condition for SMEs' sustainable development. sustainable development, as the situation of the Cameroonian economy clearly shows. The study reveals a highly liquid financial system with low financial depth. The failure of this liquidity to attract investment or investors is proof of the need for a reallocation mechanism in the economy.	Developing countries require financing, financial infrastructure, and an entrepreneurial mindset for sustainable development and real growth. They need domestic finance sources and innovative systems to combine entrepreneurship and financing at minimum cost, enabling sustained and inclusive SME development in nations without a strong private sector.
6	Financing sustainable development goals in Sub-Saharan Africa: Does international capital flows matter?.	To investigates the role of international capital flows in financing the Sustainable Development Goals (SDGs) in Sub-Saharan Africa (SSA).	The results underline the crucial importance of international capital flows as a major source of financing for SSA countries. FDI is found to contribute to economic and social sustainability at the disaggregated level but	The study emphasizes the need for SSA policymakers to maximize FDI benefits while addressing its negative impact on environmental sustainability. It calls for strengthening policies directing remittances

			harm environmental sustainability. Conversely, remittances are found to contribute positively to economic and social sustainability at the disaggregated level. However, the impact of international capital flows on the aggregate SDGI is found to be insignificantly positive.	towards sustainable investments, advancing SDGs, and enhancing regulatory capacities in environmental matters. Governments should also prioritize transparency, public participation, and robust enforcement mechanisms to balance environmental protection with economic needs.
7	Taking stock of sustainable development finance in Sub-Saharan Africa. Testing New Policy Approaches.	To Take stock of long-term finance for sustainable development in Sub-Saharan Africa (SSA). Specifically reviewing the broad trends in investment and savings in Africa, examining the investment-savings gap that suggests the need for external resource inflows, and identifying the key components of external resource flows to SSA. Finally, to discuss the impact and the effectiveness of external resource inflows and draws some policy conclusions.	The paper argues that SSA region's poor economic growth since the mid-1970s is attributed to low investment rates and insufficient domestic savings. The region has historically relied heavily on external resource inflows, including ODA (Official Development Assistance) inflows, to finance its development. However, both types of flows are concentrated in a few SSA countries, making them unsuitable for sustainable development. The decrease in ODA flows could lead to macroeconomic instability and real exchange rate appreciation in heavily dependent countries, potentially affecting their export competitiveness. Hence, increased investment and FDI inflows are crucial for sustainable development in the region.	The SSA countries should primarily rely on domestic savings for long-term financing to boost investment and economic growth. Policies that discourage capital flight and encourage African wealth-holders to invest in Africa, as well as reforming financial institutions and markets, can help mobilize domestic savings for development. Key policies include fully funded public and private sector pension arrangements. The experience of other developed and developing regions suggests that long-term financing for sustainable development comes largely from domestic resources.
8	Financing sustainable agriculture in sub-saharan africa: a review of the role of financial technologies.	To clarify the important role that FinTech can play in financing sustainability in agriculture in sub-Saharan Africa (SSA).	The results confirm that FinTech has the opportunity to become the much needed 'support system' for sustainable agriculture in SSA. Most of the financial products accessed by smallholder farmers in the selected	To promote the financing of sustainable agriculture at scale, there is a need to train the farmers about the functionality of digital platforms, and policymakers need to address challenges such as gaps in infrastructure between the urban and

			countries helped the farmers in addressing production and marketing challenges in agriculture. The technologies can also help to improve efficiency in financing smallholder agriculture, enabling wider adoption of sustainable agricultural practices.	rural areas.
9	Towards the achievement of SDG 7 in sub-Saharan Africa: Creating synergies between Power Africa, Sustainable Energy for All and climate finance in-order to achieve universal energy access before 2030.	To investigate the policies, strategies and innovations that could help expedite SSA's progress towards universal energy access before 2030.	The study suggests that rural electrification and energy access linking to agriculture and irrigation could diversify African economies and counter negative perceptions of Africa's growth prospects. Power Africa, SE4All, and China can improve energy sector financing and regulatory frameworks or constrain economic development in SSA by promoting rent-seeking and corruption, which culminates in a 'climate finance curse.'.	The initiatives can only facilitate inclusive growth as envisioned in the SDGs if SSA develops or strengthens its institutions to coordinate and harmonise investments and aid from such autonomous diverse sources.the need for more business models and strategies to incentivise project developers to these slow performing countries.
10	Sub-Saharan Africa's debt-financed growth: How sustainable and inclusive?.	To examine the sustainability and inclusiveness of economic growth SSA countries, over a period of 38 years, while taking into account the diversity of the continent's institutional quality, income growth and resource endowment.	The result shows that the recent increase in the economic growth rate in SSA is not sustainable and inclusive. This is well-founded since if economic growth is debt induced, more money will be spent on servicing public debt, thus depriving governments of funds for critical intervention programs. Lastly, the study found a public debt/ gross domestic product ratio threshold of 34% beyond which public debt impairs growth inclusiveness across SSA.	This study suggests that governments in the SSA should reduce public debt accumulation and adhere to a debt/GDP limit of 34% to promote inclusive growth. To achieve sustainable public debt, governments should adopt a counter-cyclical fiscal policy, reducing spending during economic booms and increasing spending or reducing taxes during recessions. Additionally, they should implement policies like budgetary reforms, transparency measures, and reduce income inequality through social protection programs.
11	The impact of foreign investment in financing	To outline the features of	The study revealed a positive correlation	This paper recommends that policies tailored to

	sustainable development in Sub-Saharan African countries.	financing investment development in Sub-Saharan African countries	between economic growth and bank loans as well as official development assistance. The results of the model indicate that bank loans and remittances significantly increase economic growth. However, both foreign direct investment and official development assistance (ODA) were found to be ineffective in promoting development. Bank loans were found to be the most influential in promoting sustainable growth in the region.	local economies be developed to stimulate and promote the banking industry with fintech, such as the widely used mobile money banking and payment system in the area. Policymakers should implement practical growth strategies.
12	Innovative and mission-oriented financing of renewable energy in Sub-Saharan Africa: A review and conceptual framework.	Consequently, we set out in this work to identify, from To identify the relative suitability of financing models for achieving the mission of sustainable universal electricity access in SSA through renewable energy innovation.	The study reveals the mission of energy access in the SSA electricity sector aligns with the first goal of the electricity sector. Energy transitions and scientific research in renewable energy promote growth. Renewable energy (RE) is the dominant theme in financing instruments, followed by consumer financing, concessional financing, government financing, communal financing, and donor/aid financing. R&D expenditure and climate investment funds are least prominent. Energy technology innovation is primarily adoption, with secondary innovation and scientific R&D being less prominent.	The paper recommends the need for innovative financing models like blended finance, crowdfunding schemes, and informal savings schemes. The multidimensional nature of electricity provision necessitates the identification of actors and funding sources most likely to finance renewable energy innovation directed towards critical missions, informed by historical path dependence.
13	Climate finance in sub-Saharan Africa.	To review general trends in African climate finance.	The study reveals that funding that is currently delivered is far from fulfilling the demonstrated needs of SSA. There is a particular need to increase finance for adaptation. There are serious challenges associated with	The study recommends Strengthening adaptation financing, focusing on poor, vulnerable, and women- and indigenous groups, is crucial. Allocating resources and ensuring equity in funding distribution are essential. Developing small-scale programs targeting the

			directing finance to the sectors and people most vulnerable to climate change.Overall, the countries of SSA, particularly the least developed countries, face challenges at each stage of climate finance delivery. These need to be addressed to improve the effectiveness and equitable distribution of funding for climate action in the region. Further policy attention needs to be directed at the following issues:	poor, supporting national development plans, and synchronizing disbursal practices are also essential.
14	The relevance of financial inclusion on sustainable economic growth in Sub-Saharan African Nations.	To investigate the relationship between inclusive finance and growth in economic terms for countries in SSA.	The study finds a positive relationship between inclusive finance and economic progress in SSA. In other words, it is possible to achieve sustainable long-term growth through the targeted expansion of financial technology and services. The study also highlights the under-funding and inequality of the education sector. Finally, the study shows the underdevelopment of mobile technology in SSA.	The study encourages investment into the telecommunication industry and other associated industries that may also provide tax holidays to aid productions for this sector in Sub-Saharan Africa. To stimulate economic development in the SSA, the government and policymakers need to strengthen access to financial services. It is further advised that serious efforts should be taken towards mitigating the high rate of inflation in Sub-Saharan Africa.
315	Debt Distress and Climate-Resilient Development in Sub-Saharan Africa.	This paper outlines the relative levels of sovereign external debt and service payments between now and 2030 for SSA countries	The Sub-Saharan African region's external debt has tripled since 2008, with 60% coming from Multilateral Development Banks and private bondholders, with China and the Paris Club owed 12 and 5% respectively. This debt service covers 93% of average countries' climate financing needs, with only ten countries having the borrowing space to finance these needs.	The region requires new forms of development finance, including concessional and grant-based options, to stimulate low-cost private finance and provide significant debt relief for countries in debt distress, aligning with the Paris Agreement and Sustainable Development Goals. MDBs must provide between $2.4 and $34.5 billion in relief without compromising their preferred creditor status.
16	Achieving	To examine the	The study shows that	The findings suggest the

	sustainability: Unravelling the role of financial development and foreign direct investment in sub-Saharan Africa.	effect of financial development (foreign direct investment [FDI]) on CO2 emissions in achieving sustainability in SSA	environmental taxes and FDI play a role in reducing carbon emissions. Trade openness, natural resource rent, and consumption cause carbon emissions to rise. Furthermore, the study explores causation between variables using Dumitrescu–Hurling panel causality tests. A bidirectional causality exists between ecological footprint and CO2 emissions while a unidirectional causality exists between financial development, FDI, and CO2 emissions.	adoption of enhanced environmental taxation policies and the encouragement of sustainable FDI. The study further recommends the introduction of green fiscal policies to stimulate renewable energy investments, promote responsible consumption and trade practices, and green innovative financing.
17	Exploring the complications of climate change funding in Sub-Saharan African countries.	To explore the complexities and constraints of sourcing climate change funding and the mechanisms of distribution funds across the continent.	The findings unearthed that climate funding lacks transparency and equitable distribution; furthermore, there are substantial bureaucratic processes, capacity constraints and immense conflicting priorities among countries on the continent	The study recommends innovative funding structures that catalyse technical assistance programmes to support the creation of new avenues for climate finance as well as reforming global financial institutions, emphasising debt reductions, freeing up additional funding for climate change mitigation and adaptation, and channelling private finance to both climate and sustainable development, particularly in the more vulnerable countries.
18	Financing sustainable urban development in Sub-Saharan Africa.	To develop a chronological understanding of how urban governance and city infrastructure patterns have emerged in the African context.	The paper makes three arguments. First, African cities experience fractured fiscal authority. Decentralization reforms have resulted in contested and complex city governance arrangements. Second, large scale infrastructure investments have been the focus of donors and investors. This has resulted in fragmented networks and systems.	The study recommends that new models of infrastructure finance are developed to respond to the fractured fiscal authority, fragmented infrastructure networks, and hybrid service delivery patterns which characterise African cities. The study further argues that instead of trying to mobilize as much money as possible to plug the often cited gap in African cities' infrastructure systems, the

			Finally, these two processes together have created fertile ground for the emergence of hybrid systems of service delivery in cities.	financing agenda for sustainable urban development must work with these existing systems, building fiscal and financial systems which reflect the governance and material configurations on the ground
19	Financing Sustainable Energy Access with Oil Revenues in Sub-Saharan Africa:	To provide an overview of energy access, energy production and required energy investment in sub-Saharan Africa.	The study argues that oil revenue invested should be prioritised and targeted at energy access especially rural access and other pro-poor sectors, such as agriculture, health, and education. These investments can promote local economy activity, reduce inequality, and alleviate povert	To improve energy access, measures should be implemented to develop investment plans, reduce bureaucracies, diversify into other sectors, increase tax revenues, and invest in infrastructure. Proper accountability mechanisms, citizen oversight, and punitive measures are crucial. Governments should create "PROSUMERS" by encouraging citizens and institutions to invest in renewable energy sources and adopt net metering systems.
20	Does financialization enhance renewable energy development in Sub-Saharan African countries?	The study examines the influence of financial development, fiscal policy, and foreign capital on renewable energy development in 21 Sub-Saharan African nations from 2000 to 2021.	The study reveals that financial development and fiscal policy hinder renewable energy development in Sub-Saharan Africa, while foreign capital positively contributes.The study also observes a declining trend in Sub-Saharan Africa's share of renewable development due to industrialization and institutional quality in the long term. The findings offer insights for attracting foreign capital and investing in renewables.	The study offers consumers cost-competitive choices and strive towards extending high-value-added facilities within a sustainable environment.

3. Results and Discussion

The mini-review systematically summarises these studies by identifying the context and implications of the articles. A variety of results have been obtained. Firstly, the issue of sustainable funding in Sub-Saharan Africa is a matter of pressing concern. The mini-review

systematically summarises these studies by identifying the context and implications of the articles. A variety of results have been obtained. Firstly, the issue of sustainable funding in Sub-Saharan Africa is a matter of pressing concern. The region is in urgent need of novel forms of liquidity, concessional and grant-based development finance that can catalyse low-cost private finance, and sustainable funding (climate finance) that is both transparent and equitable in its distribution. These are issues that are further compounded by substantial bureaucratic processes, capacity constraints, and immense conflicting priorities among the various countries on the continent (Adom et al., 2024). While government support through developmental regulatory policies is not the only determinant of achieving sustainable development goals, governments are urged to prioritise strengthening environmental regulatory capacity through investment in modern technologies and appropriate standards to balance environmental protection with economic needs (Adom et al., 2024). They should also prioritise transparency, public participation, and robust enforcement mechanisms. Slimani et al., 2024).The exploration of key sources of government financing in the context of climate change, including concessional financing, climate change-related debt instruments, international carbon crediting schemes, and climate-related insurance schemes, which could also be used for private sector adaptation and mitigation (Belianska et al., 2022), is of interest. Furthermore, in order to achieve sustainable economic growth in SSA, it is essential to reduce public debt accumulation, adopt countercyclical fiscal policies, and maintain fiscal space for productive activities (Olaoye, 2022).

Furthermore, FDI may not be an optimal solution for achieving sustainable development goals in Africa (Chiyemura et al., 2021). Bokpin (2017) affirms that, for FDI to positively impact environmental sustainability, there needs to be strong governance and quality institutions in place to check the conduct of businesses financed through the FDI flows. A heavy reliance on external resource flows may be associated with other undesirable effects, such as macroeconomic instability and real exchange rate appreciation, which could significantly undermine the export competitiveness of SSA countries (Oyejide, 2002). This highlights the need for a redistribution mechanism in an economy increasingly reliant on domestic sources of finance. In developing countries, there is a need for capital, financial infrastructure, and an entrepreneurial mindset that can effectively utilise domestic resources to propel the economy towards a more prosperous trajectory of "real growth" and sustainable development (Ayuk et al., 2016). SSA countries should prioritise reliance on domestic savings for long-term financing to stimulate investment and economic growth. Policies that discourage capital flight, encourage African wealth-holders to invest, and stimulate domestic savings through reforming financial institutions and markets can help mobilise these savings (Oyejide, 2002). Other studies have proposed a joint effort by encouraging environmentally friendly foreign investments and promoting regional and international cooperation as crucial steps towards effectively managing local environmental challenges (Slimani et al., 2024).

Finally, in the context of SSA, mobile money accounts have emerged as a prevalent formal savings method. The potential of financial technology (FinTech) to promote inclusive finance, economic development, and the reduction of inequality has been identified as a driving force in the ongoing technological revolution (Alhassan et al., 2023). The potential for FinTech to function as a crucial 'support system' for sustainable agriculture in SSA is significant. Further studies indicate that fintech and financial inclusion can significantly contribute to achieving the Sustainable Development Goals by promoting economic growth, reducing hunger,

improving education, and fostering innovation (Choudhary et al., 2025). The technologies have been found to assist farmers in addressing production and marketing challenges in agriculture (Alhassan et al., 2023). Furthermore, they can also help to improve efficiency in financing smallholder agriculture, enabling wider adoption of sustainable agricultural practices. However, a gradual and forward-looking approach focused on building the necessary infrastructure for digital financial transformation is crucial to fully harness the potential of fintech in support of the SDGs (Mapanje et al., 2023). Fintech therefore has the potential to accelerate investments in poverty eradication and reduce income inequality. These contributions are aligned with specific SDGs and show that FinTech is an appropriate new technology for financial services (Hasan et al., 2024).

4. Conclusion

Given finance's crucial role in allocating resources and facilitating development, governments in Sub-Saharan African countries are very much interested in using their regulatory powers to allocate proper resources for the UN Sustainable Development Goals. Both the private and public sectors are expected to provide the required finance to support the transition to a more sustainable economy and, at the same time, also protect themselves from risks. Studies have shown that some countries in SSA are already reorienting their resources to investments classified and recognised as sustainable investments. Furthermore, governments have already introduced policies and laws to enable the private sector to redirect investment to the most sustainable projects. Policies must be introduced that reflect a shared vision and that engender a favourable investment environment. Such policies would serve to motivate investors from the continent and from abroad to invest in the continent more sustainably, as it is evident that the majority of foreign investments on the African continent are orientated towards the pursuit of short-term profit maximisation and the extraction of mineral resources.

References

1) Addai, K., Yufenyuy, M., & Kifem, F. L. (2024). Do green finance and digital technology matter for sustainable agricultural development? Insights from sub-Saharan Africa. Discover Agriculture, 2(1), 29.
2) Adom, R. K., Mukoki, P., Ngwenya, N., & Simatele, M. D. (2024). Exploring the complications of climate change funding in Sub-Saharan African countries. Mitigation and Adaptation Strategies for Global Change, 29(6), 58.
3) Ahenkan, A., & Osei-Kojo, A. (2014). Achieving sustainable development in Africa: Progress, challenges and prospects. International Journal of Development and Sustainability, 3(1), 162-176.
4) Alhassan, T. F., Ansah, E. O., Niyazbekova, S. U., & Blokhina, T. K. (2024). The impact of foreign investment in financing sustainable development in Sub Saharan African countries. Russian Journal of Economics, 10(1), 60-83.
5) Annan-Aggrey, E., Bandauko, E., & Arku, G. (2021). Localising the Sustainable Development Goals in Africa: implementation challenges and opportunities. Commonwealth Journal of Local Governance, (24), 4-23.
6) Ayuk, J. A., Bystryakov, A. Y., & Karpenko, O. A. (2016). Financing sustainable development of small and medium enterprises in Cameroon. International Journal of Environmental and Science Education, 11(15), 8062-8076.

7) Bokpin, G. A. (2017). Foreign direct investment and environmental sustainability in Africa: The role of institutions and governance. Research in International Business and Finance, 39, 239-247.
8) Belianska, A., Bohme, N., Cai, K., Diallo, Y., Jain, S., Melina, M. G., ... & Zerbo, S. (2022). Climate change and select financial instruments: an overview of opportunities and challenges for Sub-Saharan Africa.
9) Choudhary, P., Ghosh, C., & Thenmozhi, M. (2025). Impact of fintech and financial inclusion on sustainable development goals: Evidence from cross country analysis. Finance Research Letters, 72, 106573.
10) Chima, M. M., Babajide, A. A., Adegboye, A., Kehinde, S., & Fasheyitan, O. (2021). The relevance of financial inclusion on sustainable economic growth in sub-saharan African Nations. Sustainability, 13(10), 5581.
11) Chiyemura, F., Shen, W., & Chen, Y. (2021). Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects.
12) Edet, I. V., Udo, E. S., Jack, A. E., & Abner, I. P. (2024). Green Finance and Sustainable Development Nexus in Sub-Saharan Africa. FWU Journal of Social Sciences, 18(2).
13) Efobi, U. R., & Asongu, S. (Eds.). (2018). Financing sustainable development in Africa. London: Palgrave Macmillan.
14) Gallagher, K. P., Ramos, L., Were, A., & Marques, M. Z. (2024). Debt Distress and Climate-Resilient Development in Sub-Saharan Africa. Journal of African Economies, 33(Supplement_2), ii8-ii25.
15) Hasan, M., Hoque, A., Abedin, M. Z., & Gasbarro, D. (2024). FinTech and sustainable development: A systematic thematic analysis using human-and machine-generated processing. International review of financial analysis, 95, 103473.
16) https://uneca.org/chapter/economic-report-africa-2020/long-term-financing-sustainable-development-africa
17) Kakeu C, Wendji C, Kouhomou C, Kamdoum G (2024) Can technological innovations contribute to more overcome the issue of poverty reduction in africa? Technol Soc 76:102463.
18) Mallek R, Awad A, Ozturk I, Douissa I (2024) Infrastructure development and poverty eradication in sub-Saharan Africa; Its effect and transmission channels. Cities 144:104658
19) Mapanje, O., Karuaihe, S., Machethe, C., & Amis, M. (2023). Financing sustainable agriculture in sub-saharan africa: a review of the role of financial technologies. Sustainability, 15(5), 4587.
20) Mhlanga, D., & Adegbayibi, A. T. (2024). Promoting Sustainable Finance for Enhanced Economic Growth in Sub-Saharan Africa. In Sustainable Finance and Business in Sub-Saharan Africa (pp. 473-492). Springer, Cham.
21) Mungai, E. M., Ndiritu, S. W., & Da Silva, I. (2022). Unlocking climate finance potential and policy barriers—A case of renewable energy and energy efficiency in Sub-Saharan Africa. Resources, Environment and Sustainability, 7, 100043.
22) Nakhooda, S., Caravani, A., Bird, N., Schalatek, L., & America, H. B. S. N. (2011). Climate finance in sub-Saharan Africa. Climate Finance Policy Brief.
23) Nkume, N. (2018). Financing Mechanisms African Governments Should Pursue in Financing Sustainable Development in the Next 20 Years. Financing Sustainable Development in Africa, 13-37

24) Olaoye, O. O. (2022). Sub-Saharan Africa's debt-financed growth: How sustainable and inclusive?. African Development Review, 34(4), 443-458.
25) Omisore, A. G. (2018). Attaining Sustainable Development Goals in sub-Saharan Africa; The need to address environmental challenges. Environmental development, 25, 138-145.
26) Owusu-Manu, D. G., Babon-Ayeng, P., Kissi, E., & Aigbavboa, C. (2023). Green Financing of Infrastructure Projects in the Construction Industry: Case of Sub-Saharan Africa. In Emerging Debates in the Construction Industry (pp. 78-97). Routledge.
27) Oyejide, T. A. (2002). Taking stock of sustainable development finance in Sub-Saharan Africa. Testing New Policy Approaches, 29.
28) Slimani, S., Omri, A., & Abbassi, A. (2024). Financing sustainable development goals in Sub-Saharan Africa: Does international capital flows matter?. Sustainable Development, 32(6), 6656-6685.
29) Soumonni, O., & Ojah, K. (2022). Innovative and m ission-oriented financing of renewable energy in Sub-Saharan Africa: A review and conceptual framework. Wiley Interdisciplinary Reviews: Energy and Environment, 11(1), e416.
30) Udo, E, S., Abner, I, P., Ndubuaku, V., Udoh, B, E. & Okoh, J. I, (2023) Effect of FinTech on Cash Holding: Quarterly Evidence from Nigeria: The Economics and Finance Letters, 10 (2)
31) Wambui, R. (2022). Scaling up sustainable finance and investment in the Global South: A case study of sub-Saharan Africa. Scaling Up Sustainable Finance and Investment in the Global South.
32) Yeboah, K. E., Abbass, K., Jamatutu, S. A., Feng, B., & Feng, J. (2024). Achieving sustainability: Unravelling the role of financial development and foreign direct investment in sub-Saharan Africa. In Natural Resources Forum. Oxford, UK: Blackwell Publishing Ltd.
33) Zhang, X. (2024). Sustainable development in African countries: evidence from the impacts of education and poverty ratio. Humanities and Social Sciences Communications, 11(1), 1-8.