ISSN No:-2456-2165

# Implications of Climate Change on Regional Integration in Africa

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Abstract:- Regional integration in Africa is hamstrung by a multiplicity of factors, ranging from the ideological schools (gradualist or radicalist) which African leaders ascribe to as well as the weak operational parameters which regulates the mandate of the African Union. In recognizing that the objective of effective regional integration can be achieved if the relevant policy and institutional support is harnessed, it is increasingly being recognized that climate change is a formidable modifier of regional integration in Africa. The specificity of climate change within the context of regional integration in Africa is that its poses an existentialist threat to the very survival of Africa if appropriate adaptation and mitigation strategies are not rapidly activated. This paper seeks to explain the inter-linkages between climate change on the one hand and regional integration on the other. Apart from exacerbating droughts, famine, landslides and other natural disasters as well as patterns of human settlements and welfare, climate change has been emerged to become a permanent fixture of international policy making and development planning. The paper's structure is divided into two parts. It opens with a detailed introduction and proceeds to the first part which briefly explain the operational context of regional integration and climate change. The second part focuses on how climate change influences the trajectory of regional integration. To be fair in our analysis, we also attempt to show how climate change can become a catalyst for regional integration seeing that it is being tackled at the national, sub-regional and regional levels with assistance from international funding agencies and partners. This paper makes use of secondary sources of data and applies purely qualitative analysis.

**Keywords:-** Climate Change, Regional Integration, Africa, Climate Governance, Adaptation and Mitigation

### I. INTRODUCTION

Regional Integration represents the one true route through which African countries can develop and achieve the most vaunted goal of continental unity, and by extension continental development (African Union Commission [AUC], 2015; K. Nkrumah, 1964). Even though the African continent is the lowest contributor to environmental pollution, it represent the most vulnerable region exposed to climate

change effects. The increasing tide of environmental disasters resulting from climate change is cause for concern and has as such catapulted climate change discourse to the forefront of decision-making in policy circles. Though the debate on climate change is full of polemics and political gear shifting, the reality is that climate change is exacting serious negative externalities on many African countries such as Kenya, Ethiopia and Somalia in the Horn of Africa which have been battling serious droughts (OCHA, 2023). As a concept, the definition of climate change is not immune from contradictions. That notwithstanding, this paper prefers the definition of climate change provided by the United Nations, (2019) which looks at the concepts as "a natural process where temperature, rainfall, wind and other elements vary over decades or more". Even though the skeptics are fanning the flame of disillusionment vis-à-vis the severity of climate change (Toulmin, 2009:6), it has increasingly become evident that climate change and its negative effects on Africa can no longer be treated with surface level political commitment. Drawing inspiration from the European Union which serves as a yardstick for Regional Organization and inspired by the ideology of pan- Africanism, African states have arrived at the conclusion that, regional integration in the continent is a condition sine-qua-non for continental development. This paper will predominantly focus on climate change's relationship vis-à-vis regional integration in Africa and make an attempt to show how that relationship intersects to influence regional integration and continental development.

Climate change poses a significant threat to regional integration in Africa's development and industrialization reason why increasingly a number of global, regional, subregional and national mechanisms and instruments have been established and activated as a response to this threat. From the global framework on climate change made up of the United Nations Convention Framework on Climate Change (UNFCCC), the Kyoto Protocol, the Paris Agreement and the Sustainable Development Goals (SDGs) with emphasis on SDG 13, African countries have committed to addressing the climate crises. Climate change governance which refers to the integration of climate concerns and "exercise of power and authority by formal institutions of governments with a view to minimize the impacts of climate change on communities, ecosystems and the wider environment in general" is on the rise in the continent (African Union Commission [AUC], 2014:27). It can be asserted that climate change negatively

impacts regional integration in Africa through the increased prioritization that it has necessitated at the continental policy level, requiring human and financial resource that could have been invested in other integration-enhancing initiatives. Also, climate change has inter-state implications in Africa as well as intra-state relations especially if we take into consideration the situation in the Horn of Africa where climate change has increased the likelihood of violence in many countries in that region. Vulnerable populations fleeing drought and famine caused by changing climatic patterns, have been forced to move from one state to another for survival, and in most cases such movements are often of an illicit nature which further strains inter-state relations. In addition, food crises, drought and famine caused by climate change, currently plaguing some states in the continent implies that rather than dedicate time and resources towards developing relations with other states, these states are preoccupied with resolving the looming famine, drought and food crisis that confronts their populations.

This paper's point of departure asserts that climate change retards African unity and integration. That much is evident. It further stresses that, the debate on climate change which has laid emphasis on climate adaptation, should also focus on climate mitigation, for in so doing, the continent will be able to respond in a proactive manner to the challenges occasioned by climate change. In addition, the paper emphasizes that climate change negatively impinges on Agriculture in Africa, which is the backbone of the African economy (Juma, 2011; Collier et al., 2008:338; Inter-Governmental Panel on Climate Change [IPCC], 2009:435). The importance of agriculture in Africa is epitomized by the Comprehensive Africa Agriculture Program (CAADP), which recognizes the strategic role of agriculture in African economies. Agriculture and food security are therefore threatened seeing that increased levels of precipitation and changing climatic patterns offset agricultural systems which are predominantly influenced by natural elements. A continent that cannot feed itself is a continent that cannot develop, thoughtless of unite. While Africa's inability to be food selfsufficient cannot be wholly blamed on climate change, it is argued that, the effects of the latter have rendered the region more vulnerable, making it susceptible to famine, food crises, drought, destruction of livestock and agricultural land among other climatic hazards.

On the other hand, the advent of climate change and the increased incidence of climate triggered hazards, have been able to trigger and enhance multi-stakeholder mobilizing in Africa. In that regard, regional mechanisms and instruments have been developed and deployed as a response to climate change. In looking at the increased levels of collaboration and networking among AU member states at the regional, subregional as well as national levels, it can concluded that, climate change has been able to promote, to an extent, regional integration. Even though this cannot be easily assessed at a substantive level, climate change has been able to

up the ante with regards to the frequency and intensity of continental networking, which in and of itself is an indication of integration. Furthermore, the implementation of the recommendations of the African Union vis-à-vis climate change implies that the continental organization has been able to work in synergy with other stakeholders to arrive a consensus on climate change.

In terms of methodology, the paper employs a qualitative descriptive approach with emphasis on content analysis. Data sources are predominantly secondary, composed of books, online articles, organizational publications, newspapers etc. The first part of the paper focuses on operationalizing regional integration and climate change within the African context. Identifying the historico-ideologico-theoretical basis and state of regional integration are briefly touched in the second part. Part three looks at the ways in which climate change retards regional integration in Africa while the last section makes an attempt to show how regional stakeholders have mobilized for climate change. The conclusion posits that in order to minimize the threat of climate change to regional integration in Africa, policy makers in collaboration with relevant stakeholders (Civil Society Organizations-CSOs, Common Initiative Groups-CIGs, Youth Organizations, Research Institutes, Private Sector etc) must adopt proactive climate action policies which incorporate climate smart technologies so as to address climate adaptation and mitigation. That for African integration, unity and development to be promoted, the continent will need to develop a robust and dynamic program composed of practical climate adaption and mitigation strategies.

# II. OPERATIONAL CONTEXT OF CLIMATE CHANGE AND REGIONAL INTEGRATION IN AFRICA

Climate change and regional integration are themes which have been at the center of policy debates in Africa from the moment the continent attained independence, even though the intensity of such debates have varied across time and space.

### ➤ Regional Integration

Regional Integration (RI) has been defined numerously by different authors. Among the many streams of definition that exist we can define RI from an economic perspective as"... a state of affairs or a process which involves the amalgamation of separate economies into large free trading regions" (El-Agraa, 1999:1). This definition captures regional integration in purely economic terms seeing that it implicitly ascribes trade to its definition. In some cases, regional integration has been approached from an ideological perspective. This approach can be identified in the pronouncements of Nkwame Nkrumah who contextualized RI within the framework of Pan Africanism and African Unity (Khadigiala, 2013; Nkrumah, 1964)). Generally, the emphasis on regional integration and the nature of a United Africa, is

ISSN No:-2456-2165

usually discussed within the context of colonialism and the new states which emerged as bi-products of this experience. The European partition of Africa, coupled with violations of the colonial experience *par-excellence*, instilled in the immediate post-independence African leadership an ideological dispensation for continental unity.

To be fair, the desire to achieve a united Africa has not been equally shared by the leaders of all fifty four states in Africa, in the course of their existence (Muchie, 2000). Evidence of the latter view can be observed from the divisions which have plagued discussions surrounding regional integration and hamstrung any meaningful headway in that direction. From the polarized positions of the Casablanca and Monrovia groups at the nascent stages of regional integration discourse in the 1960's to the personality conflicts of the early 2000's when the transition from the Organization of African Unity (OAU) to the African Union (AU) was being negotiated, one can identify a pattern of entrenched divergent views on the topic of continental unity and regional integration. Even though the organic context of Regional Integration in the continent is grounded in the ideals of Pan Africanism supported and promoted by the likes of Kwame Nkrumah during the era of the OAU and Colonel Muhamar Ghaddafi during the era of the AU, the present context and content of regional integration in Africa follows the model of the European Union which adopts a gradualist approach to regional integration.

### ➤ Climate Change

Climate change on the other hand has emerged to increasingly occupy a focal position in Africa's policy arena at national, sub-regional and regional levels (AUC, 2014). Even though Africa has the lowest levels of emissions of Green House Gases (GHG)-a major contributor to global warming and hence climate change-the continent is one of the most vulnerable regions susceptible to climate change hazards. It has been observed that "...Africa also stands out as the continent that has contributed the least amount of greenhouse gases to the atmosphere in terms of current flows and existing stocks" (Toulmin, 2009:7).

[A]frica's role in emission of carbon is atypically minor. Its past economic activity has not contributed to the accumulated global stock of carbon, its current activity accounts for only a trivial proportion of global emissions, and future projections suggest that it will continue to be marginal. (Collier et al., 2008:337)

International agreements on climate change such as the 1992 United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol adopted in 1995 and the Paris Agreement of 2015 have been hamstrung in their ability to effectively reduce the emission levels of GHGs. In addition, the non-binding nature of these agreements have ensured that, parties to the agreement can walk out at any time without any repercussions. Furthermore, most of these

agreements have more often than not, treated African countries with the barest of consideration despite the fact that there is evidence to suggest Africa is warming up faster than the global average (Collier et al., 2008:338; AUC, 2014:10). Toulmin belabors the exclusion of Africa in international climate negotiation and governance platforms and asserts that those people who are most likely to be hardest hit by global warming have little or no voice, since they have nothing to trade. In the past, African countries have been forced to 'take' whatever agreements and rules that are established by world leaders, rather than having a seat at the table at which the rules are made (2009:8).

According to the 2016 Report on Trends in Global CO<sub>2</sub> Emissions, "[T]he six largest emitting countries/regions in 2015 were: China (with 29% share in the global total), the United States (14%), the European Union (EU-28) (10%), India (7%), the Russian Federation (5%) and Japan (3.5%)." (Olivier et al., 2016:13) From the preceding report, it is obvious that Africa as a region does not feature among the largest emitting countries. Climate plays a very important role in the day-to-day life of Africa and in its economic development "particularly for agriculture and water-resource sectors, at regional, local and household scales" (IPCC, 2007:435). This implies that climate change has real life implications for the most part of African whose lives depend on their environments for sustenance. The situation is especially precarious for the hardest hit areas which are predominantly agriculture.

Impacts of climate change on the continent has led to calls for climate justice which basically implies that the higher emitting countries should help the most vulnerable countries cope with the effects of climate change, which for the most part is through no fault of theirs. In terms of the historic responsibility for GHG in the atmosphere, Africa is starkly at odds with the rest of the world, having contributed 2.3 per cent of CO2 emissions by 2004 in comparison with 11 per cent for the EU15, 20.9 per cent for the USA and 17.3 per cent for China. In a fair world, in which all people have equal rights to the atmosphere, this should mean that Africa has considerable rights to emit, which have not yet been exercised (Toulmin, 2009:8). But one of the contra-distinctions of the climate change negotiations is that it is the big emitters who exercise power - the USA, the EU, China, India and Brazil (Ibid.). It is they who can hold the rest of the world to ransom, by debating over 5 or 10 per cent targets, or by trying to shift the calculation of target reductions from a 1990 baseline to one more accommodating of their interests, such as 2008. Climate justice therefore insists on ensuring some kind of reparation from the big emitters which is redeployed towards adaptation and mitigation strategies so as to cushion the effects of climate change. In a nutshell, the context of climate change in Africa, though riddled with polemics, conjecture and superficial political rhetoric;

ISSN No:-2456-2165

...recognizes that the reason Africa is the most impacted continent by climate change is the level of the continent's development and its low adaptive and risk management and reduction capacities, making the entire economy vulnerable to climate change and over-reliance on climate sensitive sectors. Reduction of vulnerability is envisaged to occur through enhancement of the continent's adaptive capacities, including climate proofing of the continent development and shifting from short term disaster relief interventions to longer term management. International and continental institutional response adaptation should comprise a mechanism to address the unavoidable loss and damage resulting from the adverse effects of climate change, and associated lost opportunities for development. (AUC, 2014:28)

# III. CLIMATE CHANGE IN AFRICA: WHAT IMPLICATIONS FOR REGIONAL INTEGRATION?

In the following section, we present the various arguments which inform discussions on climate change vis-àvis regional integration in Africa. In the first part of this section, climate change is approached from the point of view that it retards regional integration. In the second part, climate change is presented as a catalyst for regional integration.

### ➤ Obstructing Regional Integration Imperatives; Climate Change

Regional integration in Africa has followed and continues to traverse a long, ardors and winding path. In the process of agitating for continental integration, states in Africa have most often been preoccupied with issues of a national dimension. From the nascent stages of regional integration to the present dispensation, some progress has been realized especially with the powers accorded to the African Union. Though having recorded some progress and made headway from the early stages of regional integration, this progress can be qualified as timid. From the Lagos Plan of Action in 1980 and the Abuja Treaty of 1991 to the current dispensation of the Constitutive Act of the African Union, adopted in unanimity in 2002, proclamations of African Unity through regional integration have been strong with little practical realizations to back up the rhetoric. The slow rate of regional integration in Africa has been attributed to a number of factors among which is climate change. Climate change is one of Africa's biggest challenges, a fact that has been amply demonstrated in the previous sections of this paper.

Climate change challenges imply serious negative externalities for the continent which has weak adaptive and reactive capacities to cushion the effects posed by the latter. In addition, climate change is endangering the livelihood of Africans who predominantly depend on climate and the natural environment for sustenance. Similarly, the phenomenon has exacerbated the frequency of famine, food crises, desertification, droughts etc. among other natural disasters in Africa (IMF, 2003:62). Countries across sub-

Saharan Africa exhibit different levels of vulnerability to droughts, epidemics, floods, and storms. Droughts are more frequent in the Sahel region and eastern and southern Africa. About a dozen countries reported six or more droughts since 1990, with Ethiopia, Kenya, and Mozambique experiencing frequent droughts. Droughts are strongly correlated with El Niño (heat waves). Reflecting the high frequency of droughts, the Sahel region and eastern and southern Africa have the highest percentage of population affected. While not affected as frequently, Lesotho and Swaziland have a high share of population impacted. Epidemics tend to be concentrated around the equator. Floods occur throughout the continent, with many countries averaging more than one flood event per year. Countries with the highest human cost are evenly dispersed throughout the continent. With such a high percentage of natural disasters, triggered for the most part by climate change, regional integration in the continent as a policy priority suffers. Resources that could have been channeled towards other sectors and regional initiatives are redeployed to manage these natural disasters. Regional integration schemes whether at the level of RECs (Regional Economic Communities), or at the regional level, are therefore seriously impacted by these natural disasters, caused by climate change.

Furthermore, it can be argued that the politics of climate change mitigation has rendered Africa vulnerable to the machinations of international aid agencies and bilateral as well as multilateral partners. This therefore exacerbates the continent's already weak status in global governance as it relates to sustainable development. With funding policies destined to mitigate the effects of climate change principally coming from the west, African governments and the African Union have clamored to secure funding. Every African country other than Libya has submitted a pledge internationally for climate financing (Bishop, 2017). This shows the extent to which African countries are desperate to secure funding for their climate governance. Funding for climate change has therefore given foreign countries and donor agencies leverage over African countries, and this situation has implied that the agendas of foreign countries are pursued at the expense of African integration and development. According to the website of climate funds update, the majority of funders of climate change are countries from the west (http://www.climatefundsupdate.org/the-funds). Organization for Economic Cooperation Development (OECD) notes that "In general, once a climatededicated fund is established, it can either invest in countries, programs or projects and companies directly...' (OECD, 2015:3). Foreign controlled funding can negatively impact regional integration in Africa seeing that, local solutions and priorities which reflect and respond to local realities are more often than not sidelined to lay emphasis on the funding priorities imposed by global finance brokers and agencies. Moreover, in competing to secure climate change funding, western donors and agencies can use this opportunity to sow rivalry among and between African countries through

selective accordance of funding grants. At the regional level, such rivalries may take on different forms, thus rendering regional cooperation, collaboration and integration virtually impossible.

In addition, climate change has made conflicts over resources such as land for agriculture and water to gain ascendancy in Africa. Conflicts are not new in Africa, but such conflicts were usually not caused or triggered by climate change. However, conflicts in the continent have increasingly been influenced by climate change as more and more people are rendered vulnerable due to disruptions of their natural habitats. Agriculture which is the backbone of most African economies accounts for as much as 40% of the total export earnings and employs 60-90% of the total labour force in SSA (UNEP, n.d.). Over 50% of household food needs and an equivalent share of income emanate from agriculture. The bulk of agricultural systems is climate dependent, with for example most of sub-Sahara relying primarily on rain-fed agriculture. Climate change hence intensifies food insecurity as productivity decreases and prices go up in countries already suffering insecurities and other pressures. Hunger victims have been on the increase mainly as a result of extreme weather events with climate triggered humanitarian situations brewing in the Horn of Africa region. Projected loses in cereal production potential in SSA will be about 33% by 2060 (UNEP, n.d:3). Also, the damage from climate change and the necessity to implement adaptation measures will weigh heavily on national and regional budgets. The disruptions that will emanate from climate change will be higher for coastal cities than it will be for cities further inland.

Natural systems are the main foundations of most economies with the poor being particularly dependent on nature for basic needs, food, medicine, shelter, fuel etc. similarly, rapid urbanization in many African cities implies that the effects of climate change may influence Africa's growing urban population in quite distinct ways. Nkrumah, (2019:306) has observed that the activities linked to urbanization such as construction of power grids, buildings, shopping malls, transport, among others contribute to climate change since they contribute to the production of greenhouse gases.

Climate change and variability are major threats to poverty alleviation, especially due to the pre-existing context which may trigger conflicts as the case in Somalia and other neighboring countries in the horn of Africa demonstrate. Climate change is expected to place about 96 million people in Africa at the risk of hunger. Many poor already reside in degraded areas which climate change, extreme weather events and increasing temperature will erode even further, hence reducing productivity and in extreme cases, causing floods. The poor will tend to live in weather vulnerable squatters susceptible to floods, and storms (UNEP, n.d.) or will prefer to seek shelter and a better life in neighboring countries or countries within the specific sub-regions. Climate change will

force people to move to less arid or drought-prone areas inhabited by other people, as predicted in the Horn of Africa. People have always moved to better livelihood places, either as a result of human or naturally induced pressures (Popovski, 2017).

### ➤ Mobilizing for Regional Integration through Climate Change Governance

It is upheld that climate change adaptation and mitigation represents one of the focal areas of the African Union as well as other sub-regional organizations and national governments (African Union Commission [AUC], 2015). For example, the Southern African Development Community (SADC, 2015) has responded to Climate crises by developing a comprehensive Climate Change and Strategy Action Plan which prioritizes adaptation measures in the domains of water, agriculture, human health and security, human settlements, biodiversity management among others. A similar strategy has been developed by the Inter-Governmental Authority on Development (IGAD, 2023) which encompasses an integral and holistic approach to address climate change issues in the region. It is important to note that IGAD represents one of the few in not the only Regional Economic Community (REC) in Africa which was birthed from a desire to address regional climate concerns. In the original name of the institution was Inter-Governmental Authority on Drought and Development (IGADD)-later changed in 1996 to IGAD. The commitment of IGAD to address climate change concerns evident in the region can be observed by the measures the organization has implemented in that regard some which include the IGAD Climate Prediction and Applications Centre (ICPAC) as well as various institutional mechanisms which have been promulgated and are implemented by member states. Perhaps the emphasis placed on climate change by IGAD stems from the highly vulnerable nature of the region its member countries are located which has been experiencing a continuous drop in rainfall levels in the last few years (OCHA, 2023).

Threats posed by climate unpredictability occasioned by climate change such as low agricultural yields, floods, landslides, desertification, famine etc. have acted as a catalyst for regional integration schemes and policy responses at the continental and regional levels. Africa as a continent is taking leadership internationally to fight climate change by seeking policy solutions that can address the extent to which the phenomenon may negatively affect the continent. Coordinating for progressive action, the African Union has supported coordinated negotiating positions through the Conference of African Heads of State and Government on Climate Change (CAHOSCC). In addition, African countries have been participating in the Group of 77, the collection of over 130 developing countries, at the U.N. climate change conferences which among other things aims to ensure the sustainable achievement of the SDGs. Concerns for Africa, however, remain— particularly around finance, technology transfer, and mechanisms for equitable contributions for

dealing with climate risk as well as developing climate smart technologies (Bishop, 2017).

In addition, there has also been national leadership from some African countries which approached climate change issues seriously in national development planning and implementation across multiple sectors for some time-Ghana, Ethiopia, Morocco, and South Africa stand out-with important lessons for other countries in the sub-region. For example, Ethiopia in 2011 developed a Climate Resilient Green Economy Strategy and has since set up a climate finance fund within its ministry of finance for climate compatible investment. Part of the reason for this leadership is the recognition that climate action and wider approaches to development can go hand in hand—not just for adapting to climate change but also promoting low-carbon growth (Bishop, 2017). At the sub-regional level, the Lake Chad Basin Commission (LCBC) which brings together Nigeria. Cameroon, Chad and Niger, has also taken steps to fight the receding level of Lake Chad. At the continental level, the African Union Strategy on Climate Change outlines an ambitious program to fight climate change through adaptation and mitigation strategies. The Conference of African Heads of State and Government on Climate Change is also directly implicated in climate change governance at the continental level.

### IV. CONCLUSION

Climate change and regional integration are important policy areas in Africa. The former is guided by the Pan Africanist school of thought and political orientation, which aspires to restore the continent to its pre-1885 status as one undivided continent. It is believed that, only through integration will Africa be able to attain the most elusive goal of economic development, which so far has remained only a dream for the continent. While some progress has been realized in the regional integration trajectory of the continent, much work remains to be done. Apart from the existence of the African Union and the powers contained in its constitutive Act, other hall marks of regional integration such as a single currency, free movement of people and goods, and an Economic Community are all conspicuously absent.

Climate change on the other hand poses an existentialist threat to the very survival of the continent as can be observed from the increased frequency of environmental disasters which have wreaked havoc on the continent and continue to plague her. The paradox of climate change discourse in Africa is that, Africa is the least emitter of Green House Gases (GHS), yet due to its low adaptive capacity and over dependence on natural elements for agriculture, it is the most vulnerable of regions to climate change. As such, the necessity to respond to climate change and its implications on Africa has provoked a multiplicity of stakeholders from national, sub-regional, regional and international in both formal and informal sectors to collaborate. The importance of climate change in policy

arenas can be seen from its inclusion in the sustainable development goals and Agenda 2063 of the African Union. One of the solutions that have arrived at is a Green Climate Fund (GCF) which seeks to provide funds to developing countries which are most vulnerable to climate change.

The interaction between climate change and regional integration give off mixed signals. On the one hand, it can be clearly observed that climate change is bad for regional integration especially if we look at the threats it poses to national, sub-regional and regional stability and development. Climate change can be accused of being responsible for conflicts in the horn of Africa which pits Somalia and Kenya on opposite sides. Former United Nations Secretary General, Ban-Ki Moon called the Darfur conflict as a climate change conflict. Climate change therefore impedes regional integration seeing that it deprives the African Union, RECs and national governments from engaging in other regional integration enhancing areas. In addition, it places an extra budgetary constraints on a continent that is in great need of all the financial resources it can get. Moreover, negatively affects agriculture which is the mainstay of many African economies. Basing on the foregoing perspective, it can be readily concluded that climate change has an inverse relationship to regional integration. However, it can also be argued that climate change can serve as a catalyst for regional integration in Africa. It is increasingly being realized that climate change governance can be better managed from a regional perspective. It is in this light that there is an Assembly of Heads of State and Government on Climate Change, which operates on a regional level to provide solutions to climate change. In addition, there is an African Strategy on Climate Change developed by the African Union. We can therefore conclude by noting that, while climate change has short term disadvantages on regional integration and retards the integration process, it represents a unique opportunity that can be exploited by African leaders passionate about African integration.

### REFERENCES

- [1]. African Union Commission [AUC]. (2014). African Strategy on Climate Change. https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAIQw7AJahc KEwiItt7318KAAxUAAAAHQAAAAAQAw&url=https%3A%2F%2Faiccra.cgiar.org%2Fnews%2Fafricasnew-climate-change-strategy-offers-continental-roadmap&psig=AOvVaw2MW2zA9pCJz
- [2]. African Union Commission [AUC]. (2015). *Agenda* 2063: The Africa We Want (Issue April). https://au.int/sites/default/files/documents/36204-docagenda2063\_popular\_version\_fr.pdf
- [3]. Collier, P., Conway, G., & Venables, T. (2008). Climate change and Africa. *Oxford Review of Economic Policy*, 24(2), 337–353. http://www.jstor.org/stable/pdf/23606648.pdf?refreqid=e

- xcelsior:cfdd6092ffec018b83ee87cc28f14cdb
- [4]. El-Agraa, A. (1999). *Regional Integration: Experience, Theory and Measurement*. Macmillan Press Ltd.
- [5]. IGAD. (2023). *IGAD Regional Climate Change Strategy and Action Plan* (2023-2030) (Issue April 2022). https://www.icpac.net/publications/igad-regional-climate-change-strategy-and-action-plan-2023-2030/
- [6]. Inter-Governmental Panel on Climate Change [IPCC]. (2009). Climate Change 2007: Impacts, Adaptation and Vulnerability Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. In *International Encyclopedia of Human Geography*. https://doi.org/10.1016/B978-008044910-4.00250-9
- [7]. Juma, C. (2011). *The New Harvest: Agricultural Transformation in Africa*. New York, USA: Oxford University Press, Inc.
- [8]. Khadigala, G., M. (2013). "Pan-Africanism and Regional Integration" in *Routledge Handbook of African Politics*, Cheeseman, N., Anderson, D., M. & Scheibler, A. (eds.) from https://www.researchgate.net/publication/236108877\_PanAfricanism\_and\_Regional\_Integration
- [9]. Low, P., S. (2005). *Climate Change and Africa*, Cambridge, United Kingdom: Cambridge University Press.
- [10]. Muchie, M. (2000). "Towards a Theory for Reframing Pan-Africanism: An Idea Whose Time Has Come." Research Center on Development and International Relations, Working Paper No.83.
- [11]. Nkrumah, B. (2019). Beyond climate change adaptation in Urban Africa: A synthesis of urban food (In)Security. In P. B. Cobbinah & M. Addaney (Eds.), *The Geography* of climate change adaptation in Urban Africa (pp. 305– 329). https://doi.org/https://doi.org/10.1007/978-3-030-04873-0
- [12]. Nkrumah, K. (1964). *Africa Must Unite*. Frederick A. Praeger.
- [13]. OCHA. (2023). Horn of Africa Drought Regional Humanitarian Overview and Call to Action. Informing Humanitarians Worldwide. https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-26-may-2023
- [14]. Olivier J.G.J., Janssens-Maenhout G., Muntean M. and Peters J.A.H.W. (2016). *Trends in global*
- [15]. CO2 emissions; 2016 Report. The Hague: PBL Netherlands Environmental Assessment Agency; Ispra: European Commission, Joint Research Centre.
- [16]. Organization for Economic Cooperation and Development [OECD]. (2015, August). Climate Fund Inventory: Report on the G20 Finance Study Group Prepared by the Organization for Economic Cooperation and Development. OECD. Retrieved from https://www.oecd.org/env/cc/Climate-Fund-Inventory-Background-report-OECD.pdf

- [17]. Olivier J.G.J., Janssens-Maenhout G., Muntean M. and Peters J.A.H.W. (2016), *Trends in Global*
- [18]. CO2 Emissions; 2016 Report, The Hague: PBL Netherlands Environmental Assessment Agency; Ispra: European Commission, Joint Research Centre. Retrieved from http://edgar.jrc.ec.europa.eu/news\_docs/jrc-2016-trends-in-global-co2-emissions-2016-report-103425.pdf
- [19]. Popovski, V. (2007, January 20). "Foresight Africa Viewpoint: Does Climate Change Cause
- [20]. Conflict?" Foresight Africa: Top Priorities for the Continent in 2017. Retrieved from, https://www.brookings.edu/blog/africa-in-focus/2017/01/20/does-climate-change-cause-conflict/
- [21]. Southern African Development Community (SADC). (2015). Southern African Development Community (SADC) Climate Change Strategy and Action Plan (Issue July).
  - https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAIQw7AJahcKEwiI6s7qn8KAAxUAAAAHQAAAAAQAw&url=https%3A%2F%2Fwww.sadc.int%2Fsites%2Fdefault%2Ffiles%2F2021-
  - 11%2FSADC\_Climate\_Change\_Strategy\_and\_Action\_P lan-English.pdf&psi
- [22]. Toulmin, C. (2009). *Climate Change in Africa*. New York, USA: Zed Books.
- [23]. United Nations. (2019). What is climate change? CLimate Action: Fast Facts. https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAIQw7AJahc KEwjww5j20cKAAxUAAAAHQAAAAQAw&url= https%3A%2F%2Fwww.un.org%2Fsites%2Fun2.un.org%2Ffiles%2Ffastfacts-what-is-climate-change.pdf&psig=AOvVaw30we9DM1n3PoxHexocwqs