Assessing Community Partnership for Sustainable Development of Kenya Government Efforts on Climate Change Mitigation and Adaptation

Wanderi Paul Mwaura
St. Paul's University

Abstract

Many countries the world over have faced hard economic times occasioned by many factors, including the COVID-19 pandemic, wars, climate change, and poor policy decisions by the leadership, among other factors. With these hard realities, it is becoming complicated to single-handedly implement development programmes for the citizens' benefit without building the necessary stakeholder partnerships both locally and abroad. Community partnership has a greater impact on sustainable development, as recognized by goal 17 of the United Nations Development Goals, which aims to strengthen the means of implementation and revitalize the global partnership for sustainable development. This study aimed to assess the local community partnership on the efforts of the Kenyan government towards mitigating climate change outcomes, establishing efficiency, and identifying existing gaps. The specific objectives were to assess the current community partnership strategies on climate change mitigation and adaptation, to examine some of the benefits of Community partnerships for Climate Change mitigation and adaptation, and to determine the challenges of community partnerships for climate change mitigation and adaptation. Key findings are that many strategies, such as community uptake of climate-resilient technology, use of indigenous knowledge on climate change, and establishment and enforcement of policies, were noted to be important in dealing with climate change. Some of the benefits of community partnerships are awareness, participation in decision-making, and the sustainability of local projects. Challenges revealed by the study include poor and incoherent policies that guide climate change mitigation, partnership gaps between the government and local communities, poor funding, and minimal resource allocation toward mitigating climate change. Some of the recommendations suggested by this study are to strengthen national policies, community partnerships, and funding allocations to better climate change mitigation actions.

Key Words: *Community Partnerships, Climate Change, Policies, Financing.*

1.0 Introduction

This paper emanated from the main theme of the conference, which was: Leveraging the Research, Technology, and Innovation in the new economy for sustainable Development. The subject of this presentation paper is " ***Community partnerships for sustainable development: A systemic review of the Kenyan government's efforts in mitigating climate change.*** The aim of this paper was, therefore, to assess the local community partnership efforts by the Kenyan government towards mitigating the climate change outcomes.

The United Nations (1994) defines climate change as the long-term shifts in temperatures and weather patterns, which has been generally occasioned by human activities primarily due to the burning of fossil fuel like coal, oil, and gas. According to the United Nations, some of its long-term adverse effects are more frequent and intense droughts, storms, heat waves, rising sea levels, melting glaciers, warming oceans, all of which

have resulted in directly harming humans and animals and wreaking havoc to even livelihoods and communities.
The climate change crisis in the world calls for synergies among multiple partners, such as community groups, scholars, and think tanks, among other stakeholders, for sustainable development.(Miles-Novelo & Anderson, 2023).

Partnership for sustainable development is part of the global agenda under the Sustainable Development Goals (SDGS) 2030. This is in recognition of the weight of the huge 17 development goals. The global nations in 2015 called for combined efforts, especially to deal with the climate change issues, as well as the other goals set out for the betterment of the world(*SDG 2030*, n.d.). Partnerships have further been given more leverage by the advancement of technology, interconnectivity of institutions, and ease of modern travel methods compared to the past.

The Africa Agenda 2063 developed in 2015 also recognizes the need for strategic partnership for sustainable development of the continent with several partnerships already initiated such as Africa-European Union partnership, Africa South-American partnerships, Africa China Partnership, Africa Japan Partnership and Africa-United States partnership among others.(*Africa Agenda 2063*, n.d.)The Africa agenda further recognizes the need to shift from the past practices of partnerships, which heavily leaned on Africa donor relations to a 'win' and co-development relationship for the development of Africa people.(*Africa Agenda 2063*, n.d.).

Some of the efforts already undertaken by both the international community and local governments and community partnership initiatives as advocated for by the United Nations include but are not limited to the following: transitioning renewal of energy sources; enhancing energy efficiency; adopting regenerating agricultural practices; protecting and restoring forests; and adopting green energy.

This paper adopts the research methodology based on an empirical literature review to come out with findings and recommendations to achieve the goal of the study. Just like other regions and other parts of the world, East Africa and Kenya have experienced more devastating impacts of climate change. Examined, though not exhaustive, are some of the most prevalent impacts:

Human and Animal Health Degradation -Human and animal health gets affected most by the issues of climate change to a greater extent more than any other thing on earth. The far-reaching effects of climate change on human and animal health may include air pollution, heat stress, vector-borne diseases, water and tick-borne diseases, and even asthma (*Africa Agenda 2063.Pdf*, n.d..). It's also recorded that climate change may result in climate variability and extreme weather events, which in turn are very critical as predisposing factors to such diseases as malaria epidemics in East Africa (Zhou et al., 2004). Animal health is not spared either since the prevalence of long periods of droughts result in lack of water and nutrition for the animals, eventually reducing the survival of the animals among the pastoralist communities more so in the northern pasts of Kenya(*Casestudy_kenya_impacts_climaterefugees.Pdf*, n.d.-a).

Rainfall Variability Patterns and Water Disasters: Impacts of climate change also manifest in some rainfall variability patterns where, specifically, projections of climate change within East Africa suggest that from 2050, the region might experience warmer temperatures and a rainfall increase of about 20% and other extreme events of droughts (*Casestudy_kenya_impacts_climate refugees.Pdf*, n.d.-b). Likewise, annual rainfall season patterns within the East Africa Community have been variable for the last 60 years with a significant recorded decrease leading to unpredictable patterns of droughts in the region. (*ClimateActionWaterSectorKenyaStatusReview.Pdf*, n.d.). As a result, Indian Ocean surface temperatures

have also increased by 1°C since the 1960s, which in turn affects things the human population depends on from water. (Casado-Asensio & Steurer, 2016).

Agriculture and Food Security Decline: The link between climate change and agriculture, which determines food security, cannot be underestimated given the unpredictable weather patterns, unpredictable rainfall seasons, and the amount of rainfall, which sometimes variably is minimal or too much for crops. In the East Africa region and Kenya, agriculture contributes to almost 40% of the Gross Domestic Product (GDP) of the region and provides livelihood for almost 80% of the region's population (Intergovernmental Change for Climate Change, 2020). The impact of climate change has impacted scenarios such as an increase in temperature and rainfall, and as a result, the region has been experiencing declined crop production from the year 1996 in almost all countries across the East Africa region, posing a threat to household food security and livelihoods (*KenyaClimateChangeAdaptationprogrammeproposalfull.Pdf*, n.d.-a)

Rise in Water Sea Levels: As a result of the global warming, ice water at the sea, lakes and oceans melts and eventually increases the sea water level resulting in the rise of water along the coastal areas and in case there are high population along these coastal lines, there is likelihood to occur disruption of economic activities such as tourism and fisheries along the lakes. At the same time, the increase in sea temperatures can easily lead to coral reef loss, coastal erosion, and the threat of fish water, which eventually causes a far-reaching effect on the economic activities of those who rely on fishing for survival (*KenyaClimateChangeAdaptationprogrammeproposalfull.Pdf*, n.d.-a).

Destruction of Ecosystems: Climate change has a serious impact on biodiversity, such as natural resources within the larger ecosystem dynamics characterized by destruction of the natural habitats of various species both living on land and water.(Ongugo et al., 2014). Some plant and animal species may not be in a position to adapt to the circumstances of climate change within the environment, and this could easily lead to the extinction of some of the animal and plant species. (An et al., 2022). At the same time, climate change has also resulted in a situation where some of the dramatic shifts in geographical distribution of some specifies due to migrations probably to keep with climate changes and this might deprive other contexts the opportunity to sustain the availability of some unique species of plants or animals which could be very significant in attracting tourism to generate economic revenues.(*Africa Agenda 2063.Pdf*, n.d.).

Prolonged Droughts and Extreme Weather patterns: Impacts of climate change are also in circumstances associated with extreme weather events such as heavy rainstorms, flooding, fires, El Nino, and even sometimes hurricanes (*Casestudy_kenya_impacts_climaterefugees.Pdf*, n.d.-b). These could, in turn, lead to the ravaging of coastal areas and cause a serious rise in the sea level, which can easily remove protective natural buffers of the sea and ocean.(Omari-Motsumi et al., n.d.). Serious storms and uncontrolled flooding are also destructive to humans, safety, activities, and crops, as has been witnessed in most regions in Kenya, like the areas of the Northern and mostly Western part of Kenya.(Radeny, n.d.).

Kenya, like any other country in other parts of the world, is facing serious challenges posed by the adverse effects of climate change. Various countries have various ways of dealing with and mitigating the effects of climate change depending on the geographical position or climate change context of the region. Kenya, in particular, within the east African region, suffers from climate change effects and, as a result, has come up with several ways through which it can mitigate the effects of the same. One of the key mechanisms Kenya has adopted towards achieving this is developing community partnerships and various national and sectoral policy frameworks.

Though there could be several policies and community partnerships initiated by the government of Kenya, quite a number has revolved around the following areas: forging partnerships with local communities and CSOs in areas like planting trees and protection of forests, protection of indigenous forests and biodiversity, and agricultural resilient interventions. Likewise, there are several aggressive policies the government has already adopted in the past to help guide interventions in mitigating climate change. Some of these policies are: The Kenya vision 2030; Kenya medium term plans; Kenya national adaptation plans; Kenya national climate change policy Act,2016 and national climate change policy.

However, because of the increase in the prevalence of the impacts of climate change in Kenya and the region generally, there is still doubt whether the policies, strategies, and community partnership interventions are yielding much towards effective mitigation of climate change locally. Nevertheless, most of the interventions and strategies adopted by various countries have undergone assessment through various studies by different stakeholders to establish whether they have been fully effective or not in mitigation of the climate change problems. When looking at the Kenya context, and to put this into context, several study assessments have been conducted before in Kenya which reveals some insights and scenarios regarding this matter.(Mutimba & Wanyoike, n.d.).

Ogugo et all; (2014) conducted a review study on the Kenya's national policies relevant to climate change and adaptation in a paper series, this study targeted the population of Mount Elgon region where it focused on the review and discussions regarding the implications of the of the national policies designed for mitigating and partnering with communities. The study findings identified several serious conflicts in the policies available to guide the mitigation of climate change. Therefore, this study suggested approaches and recommendations for mainstreaming climate change adaptations into sectors and counties in cross-cutting phases. Further, there is a need for translations of these policies in the language that can benefit local communities in the management and local partnership towards climate change mitigation.

In another study to establish the coherence and cost-effective policy response to climate change in Kenya to assess the degree of integration of climate change adaptation approaches in different national and sectoral policies in Kenya, Mutumba and Wanyoike mention in the study report that there still exists incoherence among the available policies. They suggest that there would be a need for effective national policy coordination and monitoring mechanisms that track progress on future agendas based around sustainable development goals. (Mutimba & Wanyoike, n.d.).

The government has historically partnered with the local community directly and indirectly through institutions such as CSOs, FBOs, CBOs, and indigenous communities in a combined and supplementary effort to mitigate climate change in Kenya. Several studies in this area point to some scenarios. Woerner (2024) in a study to evaluate the role of Civil Society Organizations regarding climate change policy in Kenya, a study administered among the CSOs groups at the sub county and national level for the purposes to find out how governments partner with local community and its accountability in fighting climate change brings some interesting issues in the study findings. The finding of the study suggests that though there is a greater effort by the local CSOs in engaging on matters mitigating climate change, the government partnership in terms of training the community and funding mechanisms is still very weak and recommends that if this could be strengthened at the community level, then the fight against devastating effects of climate change could be more effective.

Likewise, Stiftung (2019) and Forum SYD (2017) in a study in Kenya almost on the same subject on finding out the shrinking space and the broken link between the Civil Society Organizations and the government of Kenya towards combined effort in mitigating climate change impacts don't take a departure from the above

author. The finding of the two studies points to the glaring disconnect in partnership based on policy incoherence and lack of fund consolidation towards common goals but rather points of competition among the partners in trying to achieve common goals independently. Studies suggest the consolidation of funding and accountability in a clear and open approach mechanism, which can improve the empowerment of the local communities' participation as opposed to competition in policy implementation and funding the common initiatives.

2.0 Methodology

This study used a systematic literature review as its research method in a bid to establish the level of knowledge in the broad area of community partnership and climate change. The main journals reviewed were restricted to between the years 2019 and 2024, except for a few that were allowed due to their unique contribution to the literature review. The research is therefore based on data purely collected from secondary sources. The data sources are from St. Paul's University Library databases such as EBCO Host, JSTOR, ResearchGate, PubMed.gov, and Emerald Insight. The selection considered articles that had been peer-reviewed and published in reputable journals in different countries.

The study strived to focus on recent studies undertaken in the last five years on the broader area of community partnership and climate change, with more than 99% of the articles having been published between 2019 and 2024. Generally, articles related to broad literature review focus areas were excluded based on not being published between 2019 and 2024. This was to ensure that more recent and not outdated literature in the area of community partnership and climate change is given priority.

3.0 Findings and Discussion

Government Policies and Strategies on Climate Action

Though the climate change issues have spanned over decades which necessitated United Nations to come up with several conventions and protocols to assist in advocacy for the member countries to take actions on mitigations, Kenya started to aggressively develop climate change and mitigation policies at around 2013 just two years after the promulgation of the new Kenya constitution of 2010. In the beginning, Kenya started by conducting consultations and analyses on better options to reduce carbon emissions as a pathway for mitigation. Generally, afterwards, some of the Key policies Kenya has so far adopted to inform and guide some of the actions in mitigating and managing climate change problems are outlined as follows: The Constitution of Kenya 2010; The Kenya vision 2030; Kenya's Climate Change Act 2016; The Kenya National Adaptation Plan 2015-2030; and the Kenya Medium Term Plans.

The Constitution of Kenya 2010 provides a very firm basis and foundation to address the challenges of climate change to attain the development goals of Kenya's Vision 2030. This sets out legal commitments through Article 42, which guarantees the right to a clean and healthy environment, including the right to have the environment protected for the benefit of current and future generations(*Ken127322.Pdf*, n.d.).

The constitution of Kenya (2010) outlines the Kenya National Climate Change Act 2016. Additionally, there is already a legislated 2023 Act that applies to the development, management, implementation, and regulation of the mechanisms to enhance climate. The Act includes change resilience and low carbon development for the sustainable development of Kenya. The Act is hinged on the Climate Change Amendment Act of 2016,

and it introduces new definitions that cover emerging change scenarios of climate change dynamics over time. (*ClimateChangeActNo11of2016.Pdf*, n.d.).

Vision 2030 is the Kenya government's long-term development blueprint, which creates a globally competitive and prosperous nation with a better quality of life by 2030. The vision aims to transform Kenya into a newly industrializing, middle-income country that provides a high quality of life to all its citizens in a clean and secure environment. At the same time, the government aims to reduce Honking's carbon intensity by 65% to 70% by the year 2030(*final-edited-vision-2030-flagship-project-progress-report_170820221-1.Pdf*, n.d.).

The Fourth Medium-Term Plan (2023-2027) sets out comprehensive development programs, activities, and projects initiated by the government through covered entities to support and give direction to the government on efforts as a bridge to short-term and long-term development plans. (*MTP-IV-2023-2027.Pdf*, n.d.). They cover a period of one to five years, and the first medium-term plan in Kenya was developed for the period 2008-2012. The fourth medium-term plan runs from 2023 to 2027, and it guides the final phase of Vision 2030. The role of medium-term plans in climate change mitigation is critical in that it outlines action plans at various stages, which links to the goals of climate change within the vision 2030.

Kenya National Adaptation Plan (2015-2030) is a national policy framework developed by the Ministry of Environment and Natural Resources in 2015 to highlight the importance of climate change adaptation and resilience. It also aimed at building actions for purposes of integrating climate change adaptations into national and county level development planning and budgeting processes as a matter of enhancing resilience of public and private sector investments in mitigating climate change.(*8KenyaClimateChangeAdaptationprogrammeproposalfull.Pdf*, n.d.-a)It acts as an economic and social pillar of vision 2030 to climate shocks as well as enhancing synergies between adaptation and mitigation actions to attain a low carbon climate-resilient economy.

Community Initiatives and Best Practices of Traditional Knowledge Application to Climate Change

There are some Community initiatives at the local level playing significant roles in mitigating the climate change effects, though sometimes they go unnoticed. These initiatives may include engaging in sustainable land management initiatives such as soil and water conservation, water harvesting, and activities meant to prevent soil erosion at the community level, such as contour farming. (Kwanya, 2014). The author asserts that sharing of knowledge and training among the rural farmers has also been successful in sensitizing the local population on the awareness of the climate change and various local interventions which can be undertaken to control the same. Moreover, adopting innovative strategies in areas to do with agroforestry, renewable energy farming, sustainable land management, and use of solar energy panels as a source of energy are just but few areas in which the local community is trying to cope with the climate change impacts. (Kirui & Kibue, 2024)

There have been recorded best practices of traditional knowledge among the local communities, which has immensely contributed to efforts of mitigating climate change outcomes. Indigenous communities in Kenya are always portrayed as victims of climate change, but on the contrary, these people have precious hidden nuggets of knowledge and strategies to cope with the situations of climate change. Some of the best practices among some specific communities in some parts of Kenya are outlined below:

The natives of Lamu, such as the Boni, Koreni, and Oderma, are some of the people whose farmers are applying the intersection of old farming practices alongside modern practices to mitigate the adverse effects

of coastal climatic change, which has become harsh for sustainable farming. (Muigua, 2020). The author notes that in the olden days, these populations did not use fertilizers as the land was naturally fertile, but because of the long devastation of the farmlands due to climate change, they have embraced the use of modern fertilizer as a means of ensuring high crop yields.

The other best practice can be seen among the Sengwer people. This community is famous for being the custodians of the forest. However, they are now facing the imminent challenge of losing their forest, which acts as their source of livelihood and settlement, as a result of the devastating effects of climate change activities. (Nason, 2024). This community, through their advocacy, has maintained to stay put in the forest and their home and has advocated for the government to intervene to protect the forest where they live. The author explains further that through their initiative, they have decided to devise a mechanism of managing the forest by dividing it into three sections: an area for traditional practice, living space, and untouched areas as a way of respecting the environment.

The Turkana people have a success story as they are also challenged by the harsh realities of climate change. Unfortunately, it has received minimal attention from the national government, nor have there been any solutions offered towards this end.(*8737.Pdf*, n.d.). However, the Turkana community has braved it by integrating traditional mechanisms of coping and managing some of the adverse effects of climate change affecting their cattle and human health.

Summary of the strategies for community partnerships for climate change action:

1. Engagement in green and climate-smart activities such as planting trees and protecting forests, indigenous forests and biodiversity, and agricultural resilient interventions.
2. Grassroots Activism and Citizen Science -Empowering local communities
3. Building Collaborative Partnership (Quadra-Helix Models)-Addressing climate change requires a multi-stakeholder approach. Governments, NGOs, businesses, Academia, and communities must collaborate to leverage diverse resources and expertise
4. Inclusivity and Diversity in Decision-making- By actively involving marginalized groups, indigenous communities, and disadvantaged populations, community engagement strategies can be more comprehensive and equitable in addressing climate challenges
5. Building Local Climate Resilience - Local climate resilience initiatives can include early warning systems, flood protection measures, and sustainable urban planning
6. Harnessing Technology and social media- Online platforms can facilitate information dissemination, foster discussions, and connect like-minded individuals.

Benefits of Community Partnerships

1. Community awareness translates to more resilience
2. Local people with skills and knowledge to identify climate change issues
3. Provides a rare opportunity for community members to contribute to decision-making in prioritization
4. Support the flow of information between national and local organisations and help to develop and maintain local networks of organisations
5. They support the flow of information between national and local organisations and also help to develop and maintain local networks of organisations
6. They act as knowledge brokers between different networks and organisations

7. They provide a forum to consider cross-boundary issues; effective management of local climate impacts may only be achieved, for example, through consideration of wider processes affecting whole river catchments and conurbations.

Challenges of Community Partnerships

There are several barriers and challenges on the pathway towards effectively managing climate change mitigation in Kenya and the region at large. The challenges and barriers may be numerous but the most notable argued are: minimal funding by the international community and the national governments towards resources required for managing the same; Incoherent and policy gaps in respond to the actions required to tackle the climate change; minimal local partnership between the government and the local communities in joining efforts towards dealing with climate change effects; Minimal knowledge and training in dealing with climate change; and gaps in legal frameworks to tackle some of the emerging new scenarios of managing climate change like carbon trading. (*EAS-Climate-Change-Adaptation-and-Mitigation-EFAT.Pdf*, n.d.)

Selected Case Studies of Community Partnership Models

Community-Based Mangrove Forest Restoration in Kenya

The restoration of the mangrove forest: for two years, 127 people in four groups planted 137,000 mangrove seedlings. Since the formal closure of the project, another 56,000 seedlings have been planted. The second case relates to seaweed farming, which provides alternative livelihoods to fishing, agriculture, or coal production, activities that put pressure on natural resources already under stress. The cultivation of algae is non-invasive, non-polluting, and, if done correctly, is an environmentally sustainable subsistence activity. The third action concerns the replanting of trees: two community groups and two schools planted a total of 15,360 seedlings at various sites across the four communities. The restoration of mangrove forests and the growth of algae have protected the coasts from flooding, storm surges, and coastal erosion. Inland, replanting of trees helps reduce the risk of soil erosion. Strong community involvement was vital for the success of the project. The project aimed to promote a sense of ownership of the local natural capital and transparency in its management, enhancing and strengthening the existing traditions, knowledge, and capacity of the local population to identify solutions. Participatory approaches have strengthened the sense of ownership of the project activities and helped to create a solid foundation for sustainability.(Ambrosino et al., 2021)Local government cooperation is particularly important to ensure that ongoing technical support and innovation are promoted to local groups and to ensure that approaches and evidence inform policy, regulatory, and legal changes.

Climate Livestock Insurance (BIMA)

On 5th September 2023, during Africa Climate Week, project Climate Adaptation and Resilience (CLARE) was launched. This was meant to be a gender responsive livestock insurance scheme to cushion pastoralists from climate change risks in arid and semi-arid areas in Kenya. It was launched and was meant to be piloted in Tana River County in the next 42 months, with a possibility of its replication in other areas in the Country*(Rawden & Carter, n.d.).* The project is supported by the UK Commonwealth and Development Office and the Canada International Development Research Centre. It combines livestock coverage with other asset

products. The initiative has local collaboration with the International Livestock Research Institute (ILRI) and other government agencies.

Alternative Livelihoods through Dryland Agriculture in Mandera

Off-farm services are also available to pastoralists and agro-pastoralists to increase their adaptive capacity. This entails weather forecasts, including long and short rains assessments, livestock insurance schemes, and formation of farmer/pastoralist groups/ cooperatives for easy access to loans, inputs, and improved bargaining power for better prices for their products and inputs. The adaptive capacity of the county's population is hampered by high poverty and illiteracy levels, adverse climatic conditions, poor road infrastructure, outbreaks of livestock diseases, environmental degradation, and insecurity.(Abdullahi & Studies, n.d.). Involvement of actors such as National Drought Management Authority (NDMA), the Agency for Technical Cooperation and Development (ACTED), World Food Programme (WFP) and faith-based organizations such as Islamic Relief through a stake holder's forum led by the County Steering Group continues to be a key pillar of resilience in the community. However, there is a need to strengthen collaboration among stakeholders for optimal use of resources, reduction of duplication, and ultimately more efficient and effective response to the hazards in the County.

4.0 Conclusion and Recommendations

There are poor and incoherent national policies by the government that are responsive to guiding the community partnership frameworks for effectively managing the climate change actions in Kenya: I recommend in this scenario that the government should strengthen policies to be coherent and responsive towards collective effort to effectively manage the situation of climate change.

There is a partnership gap between the government and community institutions like NGOs, FBOs, CBOs, and local community members towards better and joint coordination and interventions to manage climate change effects.

Poor funding and minimal resources allocated towards managing climate change effects is still a serious challenge towards effectively achieving the goal. My recommendation is that there should be more budget allocation by the international community and national government towards achieving the goal.

Community partnership and participation in climate change mitigation should not be a case of ticking boxes as required by the country's Constitution and funding institutions on any development project implementation. It should form the heart of every development agenda if sustainable development is to be achieved.

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