

Climate Change, Migration, andInsecurity in West Africa: The Case of Senegal

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**KAIPTC** Occasional Paper 52

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This publication was supported by the Government of Norway to undertake action research to dientify the interlinkages among climate change, migration, demographical change and insecurity in West Africa.
Cover Photo: Getty Images
Design and Typesetting: KAIPTC Design and Production Unit.

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#### **Abstract**

West Africa is one of the regions of the world most affected by climate and environmental changes. Similar to other West African and Sahelian countries, climate change poses a risk to lives and livelihoods and by extension, the security of Senegal. In an already volatile region with a high propensity for conflict and insecurity, studies show that in Senegal, the impact of climate change has led to a drop in rainfall, rising temperatures and sea levels, and disruptions to accessing cultivable lands. Decreasing rainfall patterns, an increase in average temperatures, rising sea levels, and disturbances in the availability of cultivable lands. This paper provides an analysis of climate change in Senegal using primary and secondary data to establish the links between climate change and insecurity. This paper also demonstrates that women and children are among the most affected by the impact of climate change in that country. Additionally, the phenomenon has also become a major driver of migration as livelihoods are impacted. Due to the security interdependence of the neighbouring countries, this paper argues that efforts towards addressing the effects of climate change must be coordinated for maximum impact.

Keywords: Climate change, Conflict, (In)security, Migration, Impact.

#### Introduction

Senegal's urban coastal zone is home to roughly 67 per cent of the population and 90 per cent of the country's industrial production. This low-lying zone is characterised by high-population settlements, high water tables, and poor drainage systems; putting the area at risk from flooding and erosion. Rising temperatures and decreasing rainfall threaten the agricultural sector, which is already stressed by overexploitation and degraded soil. These stressors also have negative implications for the health of coastal mangrove ecosystems and fisheries.1

According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change poses a threat to Senegal's socio-economic development. Several studies carried out in the country provide information on the consequences of climate change and its impact, including decreasing trends in rainfall, an increase in average temperatures. a rise in sea levels, and disturbances in the availability of cultivable areas and hydraulic resources.<sup>2</sup>

Additionally, regions in the north of Senegal are most likely to be affected by the increasing risk of extreme drought, with the region of Saint Louis showing the most intensive risk. Whilst an increased risk of extreme wet event is greater for the areas located to the north and east of Senegal in places such as Matam, Tambacounda, and Louga. Moreover, climate change risks, including desertification, are predicted to have adverse effects on food security, access to drinking water, public health, and livelihoods. Its productive fishing waters have reduced significantly as the country's ecosystems are in decline due to climate change. Furthermore, regular floods affect more and more people.4

The aforementioned suggests that Senegal, as other West Africa and Sahelian countries, is most at risk of climate change and its effects. Climate change is occurring in a region that is volatile and has a high propensity for conflict and insecurity. Thus, it has impacted security as it has often reduced community resilience to prevent conflict. Another aspect of climate change is that populations most at risk of its impacts are moving to areas perceived to be less impacted by it. This is causing friction among locals and residents who are struggling with socioeconomic challenges and thus, the competition for scarce resources has aggravated an already stressed society.

The aim of this paper is to assess the nature of the

USAID. (2022). Senegal: Climate Change Country Profile-Fact Sheet-November 15, 2022. Retrieved from https://www.usaid.gov/ climate/country-profiles/senegal

<sup>&</sup>lt;sup>2</sup>GRID-Geneva. (nd). Senegal: Climate Change - Drivers. Interactive Country Fiches. Retrieved from https://dicf.unepgrid.ch/senegal/

<sup>&</sup>lt;sup>3</sup>GRID-Geneva. (nd). Senegal: Climate Change - Impacts. Interactive Country Fiches. Retrieved from https://dicf.unepgrid.ch/senegal/ climate-change#section-impacts; United Nations Climate Change. (nd).

Nationally Determined Contributions Registry. Retrieved from https://unfccc.int/NDCREG <sup>4</sup>lbid.

impact of climate change on peace and security in West Africa; focusing specifically on Senegal. It begins with a general overview of climate change and its impact on West Africa. It then delves into the specific case of Senegal to understand the extent of the effects of climate change in the country and how these link to insecurity. It continues with the situation of vulnerable groups arguing that women, children, and the elderly are among those most affected by climate change and its impact. The paper concludes with its main reflections and recommendations based on its analyses of the situation in Senegal with respect to climate change, migration, and insecurity. The paper argues that among those most affected by climate change are women and other vulnerable groups such as children and the aged. It asserts that while several efforts have been instituted by states to address these challenges, these are often deemed insufficient. The paper also puts forward that addressing or reducing the impact of climate change in Senegal without addressing it in The Gambia, Mauritania, Mali, Guinea, and Guinea-Bissau nullifies any progress that will be made, due to the security interdependence of these neighbouring countries.

This paper adopts a case study research design in its analysis of climate change in Senegal using primary and secondary data collection methods. Primary data was collected in December 2022 using qualitative methods, through which unstructured interviews were conducted with relevant state, civil society, and international actors. Secondary data consisted of statistics from the UNFCCC and other bodies that have calculated climate change indices of Senegal over the years, as well as information from journal articles, books, and internet resources.

#### Climate Change in Senegal and West Africa

Climate change is severely affecting West Africa as witnessed through more frequent droughts, retreating coastlines, which in turn affect property, farmland, beaches, tourism infrastructure, and reduced fishing productivity. Climate change also significantly affects

the entire African continent as a result of its high vulnerability and low adaptive capacity.5 This is against the fact that the region has the lowest overall contribution to the causes that trigger climate change.

West Africa is considered one of the world's regions that is presumed would be highly affected by climate and environmental changes in the future.6

Specifically, the coasts of West Africa have serious challenges with flooding and coastal erosion due to rising sea levels. In the past two decades, especially, the Senegalese shoreline has retreated at an average of 1 to 2 metres per year.<sup>7</sup> Coastal retreat has also caused severe damage to tourism structures and to destroyed beaches--the region's main tourist attraction—leading to the loss of visitors and related jobs, as has already happened in Saly.8 What is more, in several Senegalese coastal communities, artisanal fishing is the mainstay of their economy; yet, their fishing infrastructure has also been destroyed also by the coastal retreat.9

This had several effects such as a fall in living standards in the region and sheer despondency, particularly among the young population. These effects, in turn, have led to an increase in migration as young people do not see a future for themselves in the country.<sup>10</sup> Thus, climate change has become a driver of migration, which is compounded by an idealisation of migration, often seen as a form of social promotion. Therefore, young people spend their savings and risk their lives to embark on the perilous journey by road and sea to Europe.

In addition to the effects of climate change on migration, the phenomenon has had a major impact on regional rainfall. This has resulted in uncertainties in rainfall patterns in the region. So, as one respondent indicated, "when it rains here, it rains hard and for many hours; when it is dry, it is very dry." In Senegal, this comes with "negative and positive anomalies (the former dominating), but most models point to a general drying up of Senegal with high interannual variability and an increase in the occurrence

<sup>&</sup>lt;sup>5</sup>IPCC. (2007). Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: IPCC.

<sup>&</sup>lt;sup>6</sup>IPCC. (2007). Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: IPCC.

<sup>&</sup>lt;sup>7</sup>Bakhoum P. W., Ndour A., Niang I., Sambou B., Traore V. B., Diaw A. T., Sambou H., & Ndiaye M. L. (2017). Coastline Mobility of Goree Island (Senegal), from 1942 to 2011. Marine Science, 7(1), 1-9.

<sup>&</sup>lt;sup>8</sup>Croitoru, L., Miranda, J. J., & Sarraf, M. (2011). The Cost of Coastal Zone Degradation in West Africa: Benin, Côte d'Ivoire, Senegal and Togo. Washington DC: World Bank Group. Retrieved from https://documents1.worldbank.org/curated/ en/822421552504665834/pdf/The-Cost-of-Coastal-Zone-Degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Senegal-and-Togo.pdf/degradation-in-West-Africa-Benin-Cote-dlvoire-Benin<sup>9</sup>Kifani, S., Quansah, E., Masski, H., Houssa, R., & Hilmi, K. (2019). Climate Change Impacts, Vulnerabilities and Adaptations: Eastern Central Atlantic Marine Fisheries. In M. Barange, T. Bahri, M.C.M. Beveridge, K.L. Cochrane, S. Funge-Smith, & F. Poulain, eds. Impacts of Climate Change on Fisheries and Aquaculture: Synthesis of Current Knowledge, Adaptation and Mitigation Options. FAO Fisheries and Aquaculture Technical Paper No. 627, 159. Rome: FAO.

<sup>&</sup>lt;sup>10</sup>Interview with Civil Society Expert. December 02, 2022.

<sup>11</sup>ibid

of climate extremes". 12 There are similar cases in Mali and Mauritania, in which drought and rainfall patterns have also become increasingly erratic. This has, thus, triggered migration by populations from these countries into Senegal to seek "drying greener pastures."13

Yet, Senegal has its own internal challenges. On the one hand, it has the largest regional population, strong growth, and the second highest gross domestic product (GDP) per capita, but on the other hand, it also has one of the lowest GDP growth rates. With an unemployment rate of 10.8 per cent and with 60.3 per cent of the population between 15 and 34 years unemployed,14 means that youth unemployment is high. The population is young—18 on average—with 52.1per per cent under 20.15 Nearly half of the population—46.7 per cent—lives below the poverty line; therefore, the propensity for people to move in search of greener pastures is high. For example, in 2018, emigration reached 4 per cent of the population and the Senegalese diaspora is estimated at 2.5 to three million people. According to the Agence Nationale de la Statistique et de la Démographie (ANSD),16 it is the fourth country in sub-Saharan Africa in terms of receiving remittances from emigrants, with and about USD 2.422 billion in 2018; nearly 10 per cent of GDP.<sup>17</sup> Nonetheless, it is important to also stress that beyond emigration, large groups of people also move southward—to Dakar—in search of jobs and better opportunities.

The preceding section demonstrates that the impact of climate change is wide and unpredictable. Due to the factors enumerated earlier, such as the weaknesses of the Senegalese economy and the demographic factors of youth and population growth, the impact of climate change reverberates in unexpected dimensions. When Senegal's case is juxtaposed against prevailing conditions in the region, it paints a gloomy picture of a region under threat from the climate change phenomenon. The implications for peace and security are as a result, dire.

# Migration and Insecurity in Senegal

Historically, climatic conditions in the region, such as the long dry season and highly variable inter- and intra-annual rainfalls, favour temporary migration from rural areas. For many people in the region, seasonal or temporary labour migration from rural areas is a common activity and well-established strategy to diversify income. Particularly, migration during the dry season is often an economic activity complementary to agriculture and is crucial to ensure food security. Migration, per se, is not a problem. To explain, for hundreds of years, people have decided to migrate for a variety of reasons education, cultural interests, or better economic status. Migration may only become problematic, therefore, when a decision to migrate is based on deteriorating living conditions, which may make the home areas less suitable places to live. 18 Also, environmental changes are placing an increasing pressure on land productivity and livestock production; further exacerbating existing migration drivers and patterns.<sup>19</sup>

The link between climate change and migration is evident. To arrive at this, the paper makes the distinction between local migration and regional/ international migration. The first case normally occurs during the warmer seasons when people move from hot climates to the coastal areas. For instance, in the

<sup>&</sup>lt;sup>12</sup>Sultan, B., & Gaetani, M. (2016). Agriculture in West Africa in the Twenty-First Century: Climate Change and Impacts Scenarios, and Potential for Adaptation. Frontiers in Plant Science, 7, 1-20.

<sup>&</sup>lt;sup>13</sup>Civil Society Expert. 2022. Op. cit.

<sup>&</sup>lt;sup>14</sup>Van der Land, V., Romankiewicz, C. & van der Geest, K. (2018). Environmental Change and Migration: A Review of West African Case Studies. In: R. McLeman, & F. Gemenne, eds. Routledge Handbook of Environmental Displacement and Migration. London: Routledge, 163-177.

<sup>&</sup>lt;sup>15</sup>Agence Nationale de la Statistique et de la Démographie (ANSD). (2020). Senegal in Brief. Retrieved from https://www.ansd.sn/ <sup>16</sup>National Agency for Statistics and Demography of Senegal

 $<sup>^{17}\!\</sup>mbox{Agence}$  Nationale de la Statistique et de la Démographie (ANSD). (2020). Op. cit.

<sup>&</sup>lt;sup>18</sup>Niasse, M., Afouda, A., & Amani, A. eds. (2004). Reducing West Africa's Vulnerability to Climate Impacts on Water Resources, Wetlands and Desertification: Elements for a Regional Strategy for Preparedness and Adaptation. Cambridge: IUCN. Retrieved from https://www.droughtmanagement.info/literature/IUCN\_reducing\_west\_africas\_vulnerability\_2004.pdf

<sup>&</sup>lt;sup>19</sup>Goff, L., Zarin, H., & Goodman, S. (2012). Climate-Induced Migration from Northern Africa

to Europe: Security Challenges and Opportunities. Brown Journal of World Affairs. 18(2), 195-213. Retrieved from https://www.jstor.org/stable/24590873

Matam region in the north and the eastern region of Senegal, temperatures can rise to around 40 degrees. Consequently, from May and June, people move to coastal areas. They leave to escape the heat and return during the cooler months.

There have, however, been several years of drought since 1984, which have induced a lot of migration. This is because during the dry season, agricultural activities are curtailed; affecting food production. As such, the indigenes migrate to coastal areas. They are considered as climate refugees as they are escaping the hotter period. On arrival in Dakar, they look for jobs to sustain themselves until the end of the dry season, after which they return to their communities. Over the years, some of them have stayed behindworking in restaurants, in the transport industry, and in informal sectors. This leads to a consistent increase in the population of Dakar as each year remnants of the climate refugees remain in the city.

With respect to regional migration, this has been facilitated by the Economic Community of West African States (ECOWAS) Protocol relating to the Free Movement of Persons and Goods, in which citizens of West Africa are able to move to Member States visa-free. As a result, it has become easier for people suffering the adverse effects of climate change to move to relatively friendlier states for jobs and recreation.

The World Food Programme (WFP) has identified food insecurity, economic constraints, and limited resources to diversify livelihoods among the West African migrants, as key reasons for regional migration.<sup>20</sup> Thus, migrants from Guinea, The Gambia, Mali, and Mauritania travel to Dakar and other towns around Dakar. In neighbouring countries, where there is deforestation, residents migrate to Dakar for trading in the small stores. These migrants have been well-integrated into the communities

due to their religion and common ethnic affinities. Unfortunately, many African countries are yet to produce proper agreements and policies for coping with climate change-induced migration, which may assist vulnerable people and populations looking for better living conditions.<sup>21</sup> Therefore, the few relatively stronger coastal states, which are equally grappling with the effects of climate change, have to contend with climate-induced migration and regional population movement, with its concomitant vices.

Beyond the intra-regional movement, migration abroad is also linked to climate catastrophe and floods, which make people go out in regular and irregular periods. They pass the desert and go through Libya, Morocco, and other perceived favourable North African countries. According to respondents in Senegal, these migrants usually originate from fishing communities and are used to being at sea; hence, they do not consider crossing the Mediterranean Sea to be a challenge. With the decline of fishing arising from climate change, they go abroad to Spain and France to work in the local farms and fishing companies<sup>22</sup>.

## **Gender and Climate Change**

When any society is stressed, the most vulnerable groups, such as women and girls, are impacted the most and are most at risk. The degree to which people are affected by climate change ramifications is partly a function of their social status, gender, poverty, power, and access to and control over resources.

Even though climate change affects both women and men, women are disproportionately impacted due to differences in societal roles. Women play the role of caregiver including in the provision of social protection services; therefore, when development is lacking, their survival rate reduces. Women farmers in sub-Saharan Africa are thought to be more

<sup>&</sup>lt;sup>20</sup>World Food Programme (WFP), 2017. At the Root of Exodus: Food Security, Conflict and International Migration. Retrieved from https://docs.wfp.org/api/documents/WFP-0000015358/download/?\_ga=2.210215381.1526933840.1699612978-1753093295.1679134306

<sup>&</sup>lt;sup>21</sup>Interview with Civil Society Expert in Dakar. December 02, 2022

<sup>&</sup>lt;sup>22</sup>Interview with Gender Expert Dakar. December 05, 2022

vulnerable to climate change and greatly affected by its reverberations because in addition to their limited access to farm resources such as improved seeds. land, agricultural extension, and financial services, the roles and responsibilities of women within the household, such as collecting fuel wood and water, increase their sensitivity to climate-related risks.

The livelihoods of Senegalese women have been impacted significantly by climate change. The erratic rainfall patterns in the country have had a detrimental effect on an already vulnerable group in society. In the opinion of respondents in the country, women in the rural areas where there is water scarcity, now need to go long distances to fetch water. Some have to leave home at dawn to trek long distances before they can access drying streams and rivers<sup>23</sup>. Additionally, for those that use rudimentary methods of cooking, it is difficult for them to get firewood due the drying conditions arising out of deforestation. Travelling long distances exposes women to dangers such as kidnapping, human smuggling, rape, robbery, and other forms of violence. Women also make up a large percentage of the fishing community and depend on the sector for their livelihood. So, a reduction in fishing yield arising out of climate change and toxic waste, threatens their survival. Thus, women in Senegal, as a result of the declining resources, have seen a reduction in their income levels. It has, therefore, become increasingly difficult for them to manage their homes with the limited resources.

As previously indicated, climate change affects agriculture and crop production. For this reason, as crop production has reduced, especially in poorer communities, there is a clear risk of hunger and famine. In Senegal, children are suffering from malnutrition due to food scarcity.<sup>24</sup> Hence, these children are also travelling to more prosperous communities or cities to survive. A result of this is that child trafficking, slavery, and child labour have increased, with families sending their children out to work to support the family.

# **Impact of Climate Change on Security**

Beyond the effects of climate change on women and children discussed earlier, the phenomenon has repercussions on broader peace and security. On personal security, it has been alleged that some of those that migrate from the north, come from regions close to terrorist regions. Consequently, they are perceived to import terrorism to the south. This often causes clashes between communities in the south and migrants. Beyond this, competition for jobs in Dakar has become keener as climate-induced unemployment rates increase in the north and people migrate to the south in search of jobs.

Senegalese farmers Furthermore, are also increasingly finding it difficult to get enough fish within the countries maritime zone. Hence, they encroach on Mauritania fishing waters; causing regular clashes between fishermen from these countries.

Further, climate change has an impact on health security, which is one of the major causes of climate migration. In the border regions, for example in Bakel, which is on the border with Mali on the Senegal River, it gets extremely hot—between 44 and 45 degrees Celsius—in the dry season. The drying up of rivers and streams has caused communities to depend on unhealthy water sources; leading to water-borne diseases. Moreover, older people are often advised to travel to Dakar to escape heat-related diseases such as stroke.

Environmental security is also a factor of climate change. Climate change has caused coastal erosion.

<sup>&</sup>lt;sup>22</sup>Interview with Gender Expert Dakar. December 05, 2022

<sup>&</sup>lt;sup>23</sup>Interview with Gender Expert Dakar. December 05, 2022.

The Saloum islands are widely impacted by floods and rising sea levels and so, the people that live there are also migrating to Dakar. Some have attempted to travel to European countries. What is more, cutting of trees in Senegal is leading to security issues between Senegal and The Gambia, because The Gambia is not arresting criminals responsible for this act, and this is leading to tensions between the two countries.

In addition, climate change is contributing to the conflict between farmers and herders. While herders struggle for grazing land for their animals due to desertification and deforestation practices, they move closer to farmlands and destroy them in the process; causing tensions between them and local farmers.

# **Mitigation Measures**

As a result of migration, the population of Dakar has increased by 4 to 5 per cent in the last decade. The government has, in response, instituted a number of mechanisms to anticipate the problem caused by local migration and climate change broadly. This includes the Plan Sénégal Émergent (PES),25 which is the master plan for Senegal's development until 2035. According to the Plan,

The Government's Strategic Guidelines that direct the initiatives needed for translating this vision into tangible actions and results for the benefit of the population, are based on three priorities; namely 'Bringing about a structural transformation of the economy: by strengthening current drivers of growth and developing new sectors that can create wealth, jobs, and social inclusion with a strong power of attraction for export and investments. This aim is enshrined in the goal of more balanced development, greater promotion of the territory, and a viable economic hub to boost Senegal's development potential throughout the national territory. Promoting human capital: through a significant improvement of people's living conditions and a more sustained fight against social inequalities, while preserving the resource base and fostering the emergence of viable territories. Enabling good governance: to

strengthen security and stability, protect rights and liberties, consolidate the rule of law, and create a setting more conducive to social peace'.26

It is expected that the Plan will take into consideration, climate change adaptation, mitigation, and financing. To make this Plan effective and more accessible, it will be decentralised to the local authority. Additionally, a national platform to integrate guidelines on integrating climate change in local development plans, has been put in place. The national platform is a framework that combines government, civil society, non-governmental organisations (NGO), and local authorities. More critically, the thematic areas/areas of focus are gender, migration, climate, and food security.

The Government is receiving support from several international partners such as the International Organisation for Migration (IOM), together with other multilateral and bilateral partners on issues such as migration returnees and resource mobilisation to finance climate change projects. Moreover, Senegalese in the diaspora are expected to strongly support the Plan; particularly, with resource mobilisation.

So, the mechanisms to address the challenges are on the right track, but more effort is needed to reinforce capacities for technical services such as agriculture, breeding, and forestry. The PES demonstrates that there is strong political commitment from the Government. However, the Government's capacity needs to be built to transform commitment into action.

Another initiative worth mentioning is the Dakar Plan Climat Énergie Territorial (PCET).<sup>27</sup> Even though this is specific to Dakar and is being implemented by the Mayor of Dakar, there is an evident lack of internal capacity. Moreover, it has been deduced that climate change does not feature in the national budget. There is, therefore, a need to sensitise state actors and to institute a national fund for climate change.

Thus, it is important to clearly determine the nexus between climate change, migration, and insecurity. This is the only way the political class can appreciate

<sup>&</sup>lt;sup>25</sup>Plan for an Emerging Senegal

<sup>&</sup>lt;sup>26</sup>Presidency of the Republic of Senegal (2023). Emerging Senegal. Retrieved from https://www.presidence.sn/en/pse/emergingsenegal

<sup>&</sup>lt;sup>27</sup>Territorial Climate and Energy Plan

its risks and detrimental effects can see the evidence can appreciate its risks and detrimental effects and be convinced to take concrete actions. It is not sufficient to have national frameworks for climate change. These need to be backed with specific measures. More importantly, the State needs to have an effective prevention programme especially for women.

#### Conclusion

This paper has enumerated the various effects of climate change on peace and security in Senegal. One of its key points is the impact of climate change on women, peace, and security, as well as on other vulnerable groups, and how these vulnerable groups face the most detrimental impacts of climate change. Accordingly, intervention mechanisms to address climate change should take this fact into consideration.

The paper has also determined that climate change affects the entire West African sub-region. While it has demonstrated that intra-state migration usually from northern territories to southern ones due to climate change and its negative effects on the livelihoods of those from northern territories, the paper has also shown that there us intra-regional migration for the same purpose.

Finally, the paper highlighted some mechanisms that have been instituted by the Senegalese Government, with support from partners, that seek to address the effects of climate change. It advocates for more education on the subject, while also building the capacity of actors to match their good intentions and plans with action.

#### Recommendations

- Young people need to be educated on climate change and its effects, as well as, informed of and educated on land cultivation, alternative livelihoods, and other adaptation methods.
- A programme on the environment should be developed for schools to educate young people, so they can take charge of their future.
- · Workshops should be organised, and women supported through small projects that can sustain their livelihoods.
- More in-depth research should be conducted into the linkage between climate change, migration, insecurity, and violence against women and children.
- Extensive advocacy on the linkage between climate change and security should be undertaken.
- Senegal should be positioned as a prevention hub and various preventive actions to be implemented should be determined.
- A climate security observatory should be created.

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