### The Potency of Climate Migration in West Africa – A Focus on the Sahel

Kanta Kumari Rigaud Lead Climate Change Specialist, World Bank

Presentation at the AFW South-South Leaning Exchange Platform
"How Can Community & Local Dev. Support Climate Adaptation & Resilience to Climate Change
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# JNUSWELL AFRICA

VERNAL CLIMATE MIGRATION IN WEST AFRICAN COUNTRIES





## Outline

- I. The Context Climate Migration
- II. Climate Migration Futures Focus on the West Africa
- III. Call to Action





- Climate has emerged as a compounding driver of mobility along others, including poverty, demographics, fragility or political instability.
  - As climate impacts intensify and escalate, the potency for climate to drive migration will increase.

Key

Messages

- Locality matters: and countries could see an emergence of "hotspots" of climate in- and climate out-migration impacting the poor and most vulnerable disproportionately.
- Urgency for far-sighted planning through landscape and territorial approaches with a focus on inclusive, locally led development that is green and resilient.



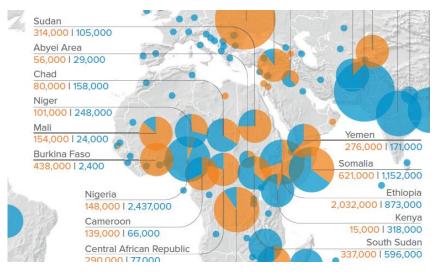
### Context: The Sahel has always been a highly mobile region with increasing IDPs

- **Highly mobile region** with various forms of voluntary mobility (economic, trade, nomadic pastoralism) and forced migration. These movements have been an **important livelihood strategy** to cope with Sahel's dry season.
- Migration has been facilitated by the **free movement protocol** of the Economic Community of West African States (ECOWAS)
- Internal mobility: rural to urban migration to both large and secondary cities; and rural-rural migration linked to forest clearing, overgrazing, and landscape burning
- **Displacement** in Sub-Sharan Africa continues to be high

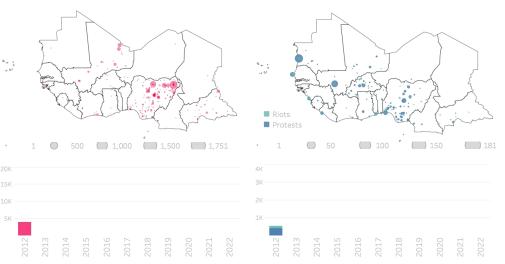
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- Displacement due to **disasters/hydrometeorological** events increased 3-fold since 2021
- **2.1M displaced** in 2022 due to longest and most severe drought on record with impacts on food insecurity
- Outbreaks due to conflict ((9M) outnumber disasters (7.4M)

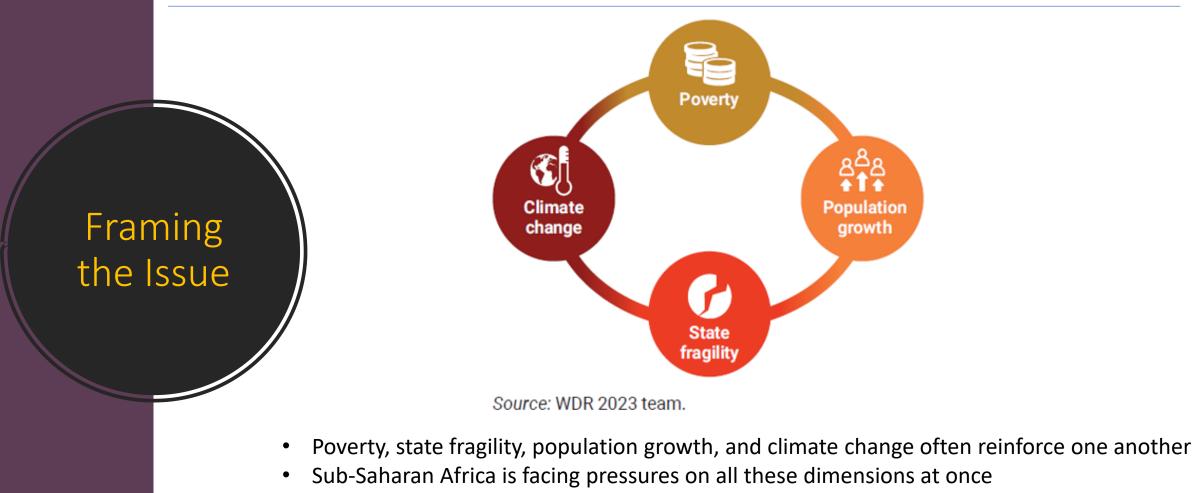
#### Internal displacements by conflict & disasters in 2022 (IDMC)



#### 2012 Outbreaks of violence & protests/riots 2012-22



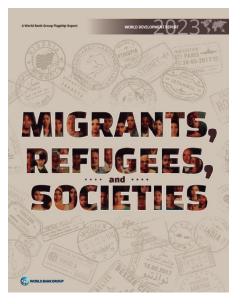
#### Some Intertwined Drivers of Mobility



• The Sahel exemplifies the challenges. Burkina Faso, Chad, Mali, Mauritania, and Niger are among the world's poorest countries

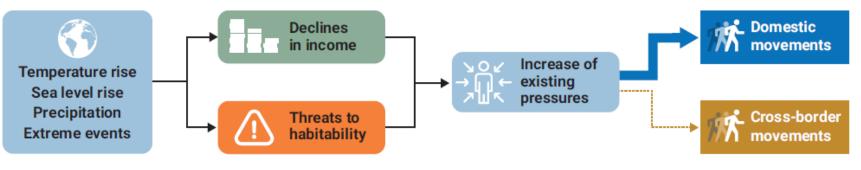


#### Framing the Issue



- Migration will become increasingly necessary for countries at all income levels
- Not all migrants are the same: *The Match* (*skills*) and *Motive Matrix*
- Making cross-border movements work for prosperity and development

#### Figure 3.10 Climate change affects migration through income and habitability

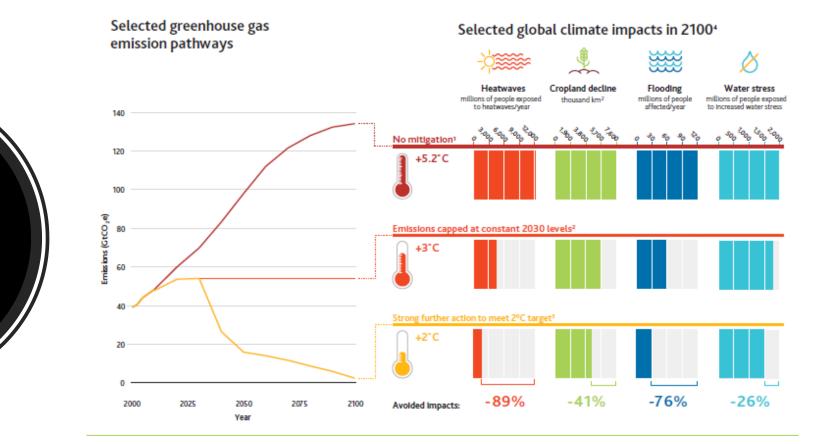


Source: WDR 2023 team.

Source: World Development Report 2023 (World Bank



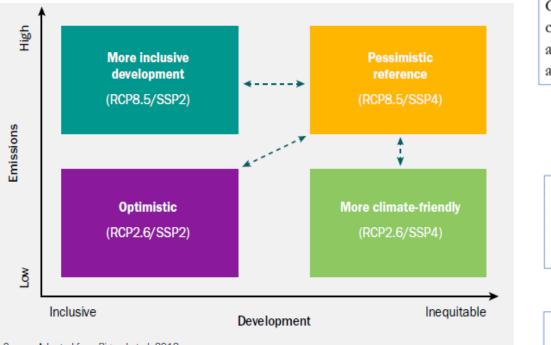
#### Unabated climate change will have significant consequences



Climate emissions and impacts pathways

- Future climate impacts in the Sahel will be significant, especially beyond the 2°C guardrail
  - 66% likelihood of breaching the 1.5C threshold between 2023 and 2027 alarm!!
  - Interaction between projected population growth and climate impacts could be very important
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### Groundswell Approach to understanding climate migration futures



Composite of climate, demographic & climate impact models run for each scenario applied to a gravity model @ 1km, aggregated to 14 km grid cell

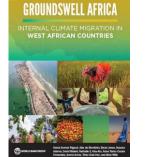


Estimates of climate migrants derived by comparing grid-cell level population for "climate impact" scenario with that of the "no climate impact" scenario

Results aggregated at national level, and at regional levels

- Groundswell study applies ۲ a scenario-based approach using state of the art data sets to estimate the scale of climate induced migration from 2020-50
- To better inform policy ٠ dialogue, planning and action

Source: Adapted from Rigaud et al. 2018



The population migration model and analysis combine climate and nonclimate factors—expanding the Groundswell approach—to better inform policy dialogue and action.





#### Climate change a potent driver of migration in absence of concrete action

#### Locality and context matter

Climate

induced

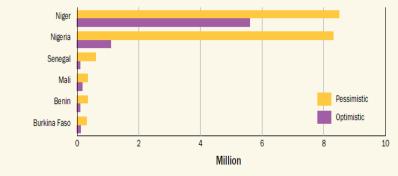
migration –

Results West

Africa

### Internal climate migration is not uniform across countries. Some areas will be more adversely impacted by climate change than others.

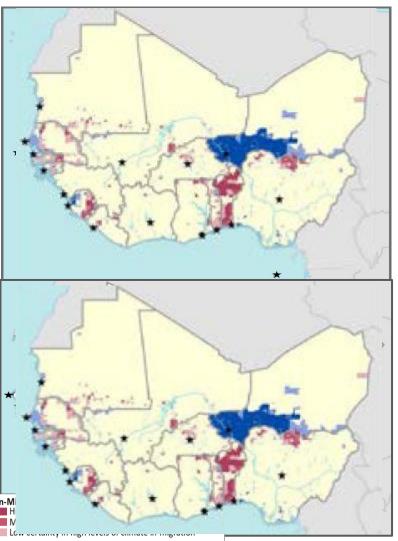
The optimistic scenario (inclusive development and low emissions) yields lower numbers of internal climate migrants than the pessimistic scenario (high emissions and unequal development).



Internal climate migrants by 2050

e study also included Cabo Verde, Côte d'Ivoire, Ghana, The Gambia, Guinea, Guinea-Bissau, Liberia, Mauritania, São Tomé and Príncipe, Sierra Leone, and Togo.

- Climate migrants could reach an average from 7.4 million (optimistic) to 19.3 million (pessimistic) by 2050
- **Emergence of hotspots –** as early as 2030 with movement from less viable areas to areas with better opportunities
- Locality matter migration hotspots are not pre-destined but will depend on early and concrete climate & development action



Out-Migration High certainty in high levels of climate out-migration Moderate certainty in high levels of climate out-migration Low certainty in high levels of climate out-migration \* National capital



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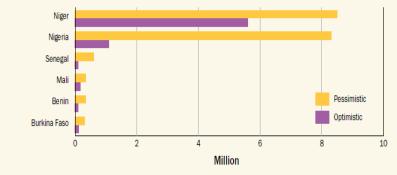
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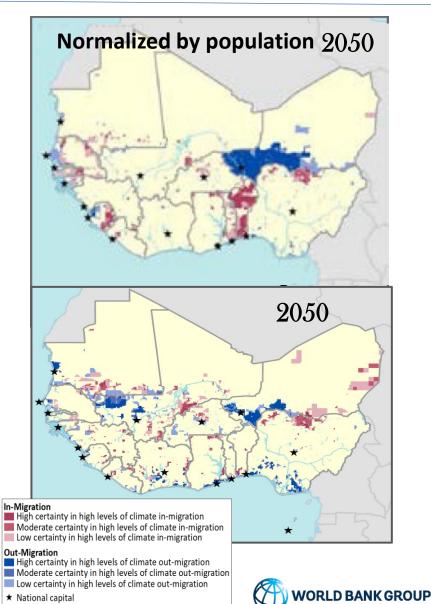
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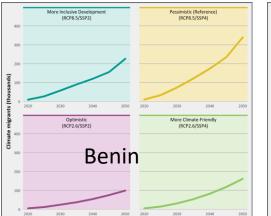


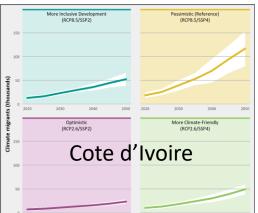
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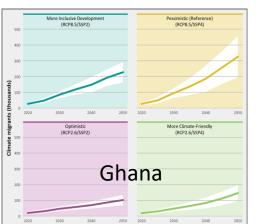
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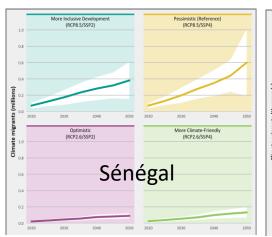
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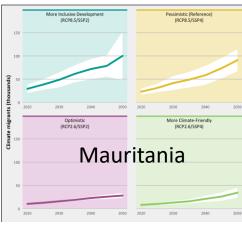












Pessimistic (Reference

(RCP8.5/SSP4)

More Climate-Friend

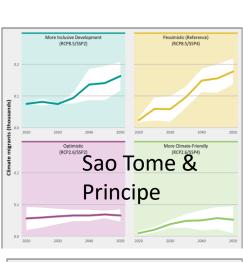
(RCP2.6/SSP4)

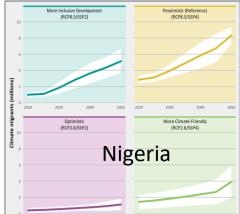
Togo

Nore Inclusive Develop

(RCP8 5/SSP2)

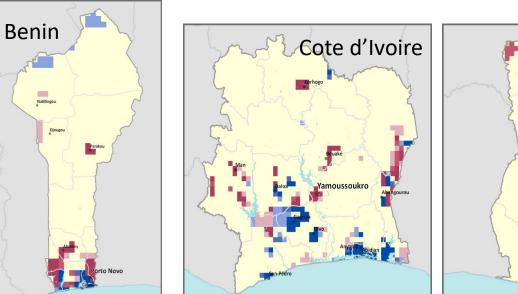
Optimistic (RCP2.6/SSP2)





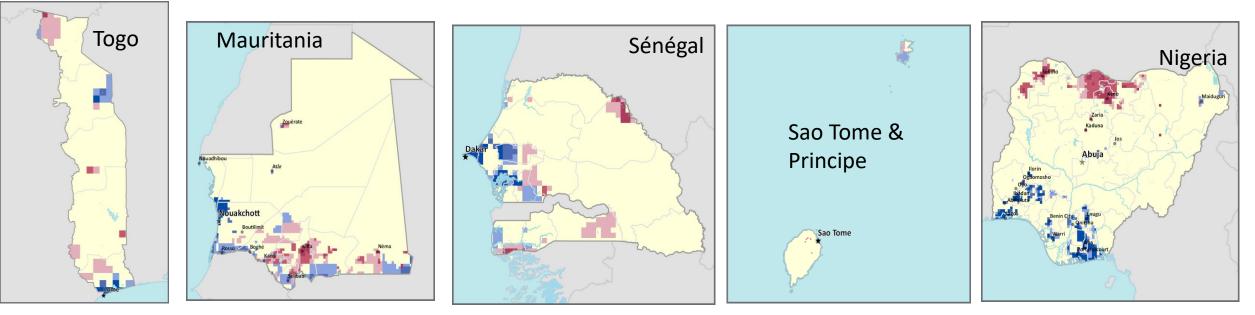
## West Africa - climate induced migration trends upwards across all scenarios(1)

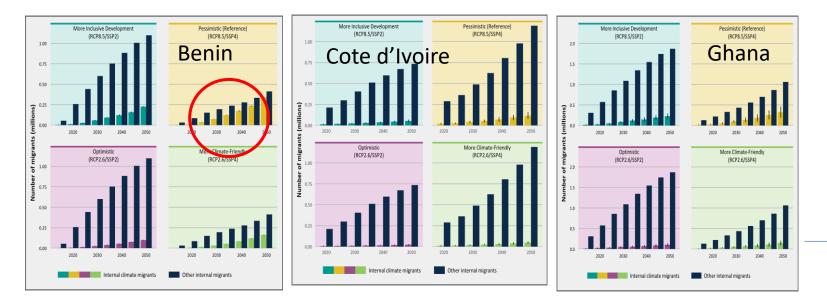
- Climate migration trajectory reflects climate induced spatial population shifts from 2020-50
- Pessimistic scenario displays a higher pace of increase in most cases
- Some countries exhibit more uncertainty (e.g., Senegal, Nigeria, STP)
- Climate migrants in 2050 are 1.0 %- 2.37% of total population (including hinterland countries)
- Sao Tome modelling done @1km because of scale – so not comparable with others



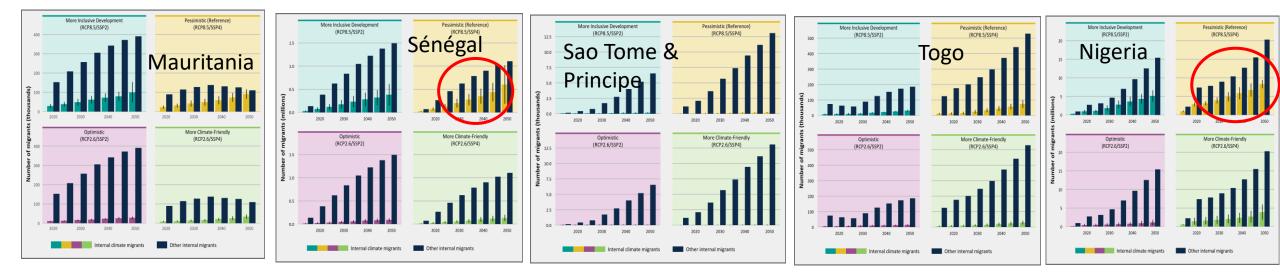
Ghana Banale Buost Achiamus, para Acria Tehie Buorat West Africa: climate migration hotspots intensify & spread by 2050(2)

- Emergence of climate migration hotspots as early as 2030
- Reflect losses of viability of ecosystems and habitability
- Opportunities for far-sighted planning and action



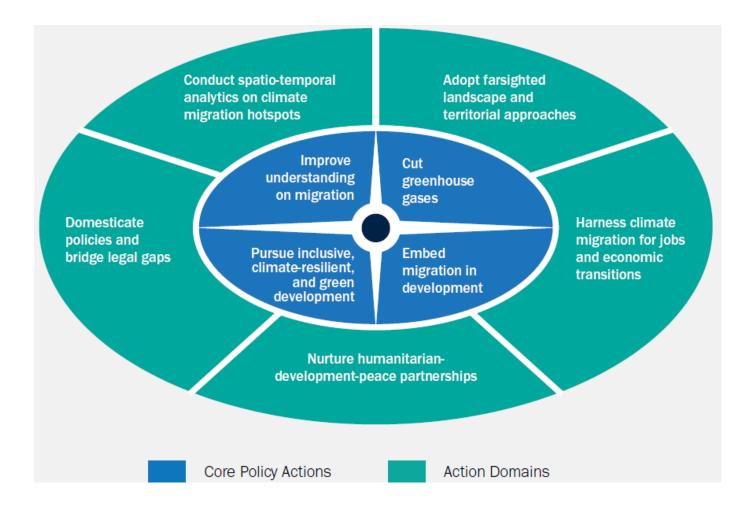


West Africa : share of climate migrants against other migrants varies across countries (3)



While climate migrants as a % of total population remain relatively low for coastal West Africa – it can make up a significant proportion of all migration by 2050, particularly under the high emissions scenarios, and significantly so for countries like Benin, Senegal and Nigeria

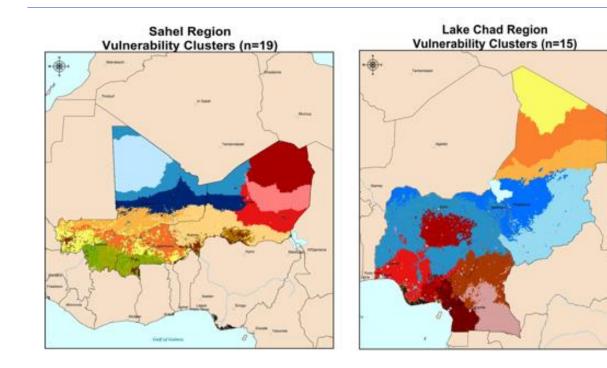
#### An end to end "Migration & Climate Informed Solutions Framework"



Action is needed in key policy areas and action domains at the intersection of climate, migration, and development.

Support of development, humanitarian, and peace partners alongside local, national and global actors to avert, minimize, or reduce distress driven migration and harness opportunities through economic and urban transitions

#### Advancing local action: Operationally relevant vulnerability assessments





- Unique climate-conflict clusters identified for 4 sub-regions
  - Sahel: 19 clusters
  - Lake Chad: 15 clusters

- Creating vulnerability clusters for localities with similar profiles provides valuable evidence for thinking regionally acting locally.
- Helps develop community-centered adaptation plans, using location specific vulnerability information
- Basis for locally driven climate action tailored to local needs and priorities; supports partnerships between governments, communities, and civil society

#### Recap

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## Thank you

World Bank team: Kanta Rigaud; David Maleki; Anna Casals Fernandez; Anmol Arora; Nathalie Abu-Ata CIESIN – Columbia University: Alex de Sherbinin, Susana Adamo CUNY Institute of Demographic Research: Bryan Jones

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