

Mainstreaming Climate Migration into Development Planning and Policy

CONSULTATION REPORT



World Bank Virtual Consultation on Internal Climate Migration in West Africa

March 17, 2021

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Woman in Benin farming

Andrea Borgarello / World Bank

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Table of Contents

Executive summary4

Introduction5

Context of the Study.....5

Breakout sessions6

Conclusion and Next Steps9

Annexes10

Annex I: Agenda, March 17, 2021 – 14:00-16:45 GMT10

Annex II: Opening remarks by Simeon Ehui, Regional Director for Sustainable Development for West and Central Africa, World Bank (translation of the *French original*).....11

Annex III: List of Participants13

Annex IV: Migration Poll16

Annex V: Consultation slides.....17

Annex VI: Photos24

Executive summary

The World Bank convened a virtual Consultation on Internal Climate Migration in West Africa on March 17, 2021 as part of a study on “Mainstreaming climate migration into development planning and policy”. The focus of the consultation was on countries of the West Africa Coastal Areas (WACA) Management Program, including Senegal, Mauritania, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, and São Tomé and Príncipe. The consultation built on an earlier workshop that the World Bank had hosted in Accra in September 2019. While the Accra workshop served to gauge interest and needs of country counterparts with a view to climate migration data and to advance the mutual understanding of climate migration and policy options, the virtual consultation—particularly through the breakout groups sessions—provided feedback on patterns of mobility, the modelling results, and suggestions on policy response. The participants represented 11 countries from the region and included a diverse range of stakeholders: government institutions, academia, civil society, and international and regional organizations as well as donors. The consultation was held in English and French with simultaneous translation.

Key results of the modelling exercise mostly aligned with participants’ experiences and research in the region and respective countries. Participants agreed that climate change is becoming an increasingly important driver of migration and displacement in the West African countries. Water availability, crop production, and sea level rise were widely seen as the driving factors of mobility in the region. Participants found the proposed scenarios and the climate in- and out-migration hotspots determined by the model to be plausible and stressed the importance of preparedness and resilience.

The consultation identified opportunities to strengthen the reports’ modelling results, strategic policy framework, and presentation. Clarifications should be provided with regards to hotspots in unexpected areas, for example in dry zones of the Sahel that have been identified as in-migration hotspots by the model. Recommendations further referred to additional factors affecting the vulnerability of certain sectors and demographic groups to climatic changes, particularly women, children, and the elderly, and the need to create policies that take into consideration and target their needs; the link between migration and conflict and instability, and how it is reflected in the model; and the need for an early, integrated, and holistic approach to climate migration.

Introduction

The World Bank held a virtual consultation on internal climate migration in West Africa, with a particular focus on WACA countries on March 17, 2021. Participants included 40 representatives from diverse backgrounds and professions, including government, academia, civil society, regional and international organizations, and donors (see Annex I for the full participants list). Eleven countries from the region were represented: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal, São Tomé and Príncipe, and Togo. The objective of the consultation was to share with the participants the modelling results and strategic response framework of the work undertaken under the study “Mainstreaming climate migration into development planning and policy” (P170862), which builds and expands on the methodology and approach of the World Bank’s [Groundswell: Preparing for Internal Climate Migration](#) report, which was published in 2018. This new work characterizes the plausible scale, magnitude, and trajectory of internal climate migration under a range of climate change scenarios by 2050 for selected WACA countries (Senegal, Mauritania, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, and São Tomé and Príncipe), including the emergence of potential “hotspots” of climate in- and out-migration by 2050.

The consultation began with opening remarks by Simeon Ehui, the World Bank’s Regional Director for Sustainable Development for West and Central Africa (see Annex II). He highlighted that the effects of climate change are already visible in West Africa in the form of increases in temperatures, sea levels, and the frequency of extreme weather events. Climate change is emerging as a driver of migration in the region, and it often overlaps with other economic, social, and developmental factors. The Bank is committed to supporting countries in averting, minimizing, and addressing climate migration. The Bank’s efforts towards that determination include: The *Next Generation Africa Climate Business Plan*, the goal of integrating climate action in at least 35% of the Bank’s financing, the announcement to invest \$5 billion in the next five years to help restore degraded landscapes, improve agriculture productivity, and promote livelihoods across 11 African countries of the Sahel, Lake Chad, and the Horn of Africa, and the WACA program. The Regional Director closed his statement by asserting that the participants’ engagement “is key to building holistic policy and response frameworks and strategies” for climate migration in the face of escalating climatic changes.

The Knowledge Product is funded by the World Bank with additional support provided by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), and the Knowledge Pillar of the WACA Platform, which receives funding from, among others, the Global Facility for Disaster Reduction and Recovery (GFDRR) and the Nordic Development Fund (NDF).

Context of the Study

Climate change has emerged as a potent driver of migration. The *Groundswell* report projects that without concrete climate and development action, more than 143 million people could be forced to move within their own countries by 2050 to escape the slow-onset impacts of climate change. The number of internal climate migrants in Sub-Saharan Africa is projected to be more than 85 million by 2050—the highest of the three regions studied in the report. In the same study, West Africa is projected to have up to 54.4 million internal climate migrants by 2050 under the pessimistic scenario.

Mobility across countries has long been a characteristic for the region, especially for fishing communities and also as part of the economic migration throughout the Economic Community of West African States (ECOWAS). The causes of migration are multiple and complex, but climate variability and increasingly climate change, acting

particularly through drought in dryland areas, sea level rise, and storm surges, along with competing demands on land uses, are seen as drivers of migration in the region.

Climate migration may be a reality, but it does not have to be a crisis. Early and concrete inclusive development undertaken at local and national level, coupled with global action to reduce greenhouse gas emissions, could significantly reduce the number of climate migrants: up to 80% in Sub-Saharan Africa under a climate-friendly scenario. Understanding when, where, and how climate migration will unfold is therefore critically important to help countries and communities pursue adequate policies and targeted action.

There is an urgent need for countries to integrate climate migration into national development policies and plans. Most regions have laws, policies, and strategies that are often poorly prepared to deal with people moving from areas of increasing climate risk into areas that may already be heavily populated. National agencies need to integrate climate migration into all facets of policy. To secure resilience and development prospects for all those affected, action is needed in each phase of migration: before, during, and after moving. Governments require guidance, technical assistance, and capacity building to develop national laws, policies, and strategies that are in line with international frameworks related to climate migration. The engagement of private actors, civil society, international organizations, and the donor community is key to build policy frameworks and capacity.

Plenary Session I: Presentation of Key Results

Preliminary results of the modelling analysis for climate migration in WACA countries was presented, with Nigeria used as a case study (see Annex V). The main points included:

- The impacts associated with slow-onset climate change impacts will ramp up internal climate migration, amplifying current and historical patterns.
- Climate-induced migration increases over time under all four scenarios driven by water stress, agricultural productivity losses, and changes in net primary productivity and sea level, compounded by storm surges.
- There are substantial differences in magnitude across scenarios. The pessimistic scenario consistently presents the highest numbers.
- The spread and intensity of climate in-migration and climate out-migration hotspots increases by 2030-50.
- The results provide an informed basis to drive constructive dialogue on human mobility within the discourse of planning for climate-resilient development – particularly at the national and sub-national levels.
- Climate-induced migration is in part a symptom of underlying failures, weaknesses, and gaps. Collective mitigation action and inclusive development are a key part of the response.
- There is a need to shift from response-driven, ex-post action to more proactive and far-sighted policy, planning, and action.

The Bank team responded to questions relating to the methodology and modelling results. Specifically, it was noted that the approach does not distinguish between types of migration (e.g. labour, seasonal), but is calibrated against historical shifts in population. The team also clarified that climate out-migration hotspots can often be interpreted as a dampening of population growth in response to climatic factors and do not necessarily imply an absolute decrease in population numbers.

Breakout sessions

Participants discussed the key findings in two breakout groups (English and French), guided by three key questions. Each group presented the main takeaways of their

discussions in the plenary. Participants actively engaged in the discussion and raised important points that are summarized in this section.

English-speaking breakout group

Question 1: What are the historical and current migration patterns (including climate) that you see in the countries covered in the study / that you represent?

- Why, who, to and from where, how, and duration of mobility?

Participants drew attention to the escalating conflicts between pastoralists and farmers brought about by changing migration patterns. One participant highlighted the trend of armed intrusion of pastoralists leaving North Nigeria and how it presents a warning sign. According to many participants, food shortage presented a critical challenge, and vulnerable communities (farmers, fishermen, and pastoralists) are at the front and center. Participants emphasized the importance of human development and the colonial legacy in influencing mobility patterns. A number of participants also spoke about the fluidity of movement in the region, which came with considerable freedom of cross-border movement. There was wide agreement that land degradation was a critical driver of migration. One participant drew on the example of Mali where drought is a driver of out-migration, especially in northern arid and semi-arid areas.

Question 2: What are your reflections concerning the future climate migration hotspots?

- Do they seem likely?

- What, if any, are potential surprises in these projection scenarios?

- Are there other emerging issues that need to be considered?

The participants did not raise any surprise or doubts regarding the projected scenarios and most climate in- and out- migration hotspots. They discussed the Great Green Wall project and what impact it can have on climatic and other factors in the region. A participant shared his experience of working on a planned relocation project and the difficulties in building trust and partnerships with communities, different government institutions, and the time-intensive nature of this work.

Question 3: What are key policies or actions that could serve to avert, minimize, and manage adverse internal climate migration in the future?

- Which are the most feasible? What are key obstacles and how can they be overcome?

Participants emphasized the importance of building resilience and helping communities adapt in place. Climate information and communication need to be comprehensible and actionable for communities. The importance of locally-led adaptation measures was highlighted. A multitude of challenges and the time-intensive nature of developing multi-stakeholder partnerships in planned relocation were discussed.

French-speaking breakout group

Question 1: What are the historical and current migration patterns (including climate) that you see in the countries covered in the study / that you represent?

- Why, who, to and from where, how, and duration of mobility?

Participants agreed that migration in West Africa is multidimensional and that its drivers are interrelated. Some of the drivers listed were economic, social, religious, cultural, educational, and political factors, as well as instability and conflict. Climate change was also considered an important driver of migration, with one participant calling it “an amplifier” of existing migration drivers. Water scarcity, coastal erosion, land degradation, poor precipitation, flooding, and deforestation were some of the climate-related migration drivers that participants identified in the region. Soil salinity is becoming an increasingly challenging issue to tackle and analyze in the context of climate-induced migration.

Participants shared their country experiences, highlighting that migration in the region is historically common, dynamic, inter-regional, and has changed over the years. For example, rural-urban migration, which used to be seasonal in Senegal, is increasingly permanent. Participants named multiple drivers that are making rural-urban migration permanent in Senegal, most of them related to climate. Participants highlighted that rural migrants in urban centers often send remittances to their families and emphasized the importance of the demographic dividend that the region could benefit from thanks to its young population. A participant shared that migration patterns have changed in Burkina Faso due to new economic opportunities in the country. During the 1970s, following an episode of severe drought, people migrated towards regions in the south to seek new jobs and rebuild livelihoods. More recently, during the dry season, people have been migrating to other parts of the country in search of new economic opportunities, such as gold mining, which has resulted in a new migration pattern in Burkina Faso.

Question 2: What are your reflections concerning the future climate migration hotspots?

- *Do they seem likely?*
- *What, if any, are potential surprises in these projection scenarios?*
- *Are there other emerging issues that need to be considered?*

Regarding the projections, one participant suggested to better explain why the model identifies some arid areas—with poor conditions for agriculture—as in-migration hotspots in the near future. Participants also recommended to better explain how conflicts and insecurity are addressed in the model given their increasingly important role in the region and the fact that they could impact the projections found in the study.

Question 3: What are key policies or actions that could serve to avert, minimize, and manage for adverse internal climate migration in the future?

- *Which are the most feasible? What are key obstacles and how can they be overcome?*

Participants actively discussed policy approaches, actionable solutions, and important issues to take into consideration when planning for and addressing climate migration. The importance of an integrated approach was highlighted. Institutional strengthening and capacity building for African countries were mentioned as critical for identifying and implementing climate migration solutions, in particular in urban area. Solutions should be informed by rigorous evidence and adequate planning, as opposed to an ad-hoc approach.

Multiple actionable policy recommendations were made. One participant identified reforestation efforts as a way to help retain more water in the soil, and another suggested training support for farmers to improve soil fertility and thus reduce land degradation, soil salinity, and poor agriculture outcomes. Participants also proposed building water points (*forages*) along transhumance corridors and awareness campaigns among local communities to reduce conflicts between herders and sedentary communities. In addition, a participant called for emergency/safety net support to improve food security, particularly in the COVID-19 context, and highlighted the important role of World Bank projects in doing so.

Participants shared that climate change does not impact all sectors and demographic groups equally and called for policy responses that take into consideration and specifically target the different needs and vulnerabilities of certain groups. For example, women, elders, and child migrants are particularly vulnerable to climate change. Especially women are highly vulnerable to drought and deforestation given their important role in the forestry sector. Policy responses will be different depending on context, e.g. for fishermen living on the coast compared to farmers and pastoralists living inland.

The environmental impacts of infrastructure projects need to be systematically addressed to ensure that they are not damaging the environment. The example of constructing dams upstream of rivers in Senegal to capture water for farmers was mentioned, which in turn has negatively affected biodiversity in the Senegal River delta and prevented fishermen from successfully fishing downstream.

Conclusion and Next Steps

The consultation offered insightful inputs that will help the Bank team finalize the regional and country reports. The reports, through the provision of robust analytics, will serve as a starting point to inform policy and planning as well as their implementation in countries.

The World Bank-led study was conducted in collaboration with the Center for International Earth Science Information Network (CIESIN), Columbia University, and the CUNY Institute for Demographic Research.

Annexes

Annex I: Agenda, March 17, 2021 – 14:00-16:45 GMT

- 14:00 Introductory remarks by Simeon Ehui, Regional Director, Sustainable Development, West and Central Africa, World Bank
- 14:10 Keynote presentation: Results and Analysis of Climate Migration in West Africa – Kanta Kumari Rigaud, Lead Environment Specialist, World Bank; and Bryan Jones, CUNY Institute of Demographic Research
- 14:40 Discussion/Q&A
- 14:55 Break-out group instructions and poll
- 15:00 Break-out Session: Discussion on past, current, and future drivers of climate migration, and resilience measures and policy options
- 16:00 Reporting break-out group
- 16:15 Open discussion
- 16:40 Reflections and conclusions/Closing remarks
- 16:45 End of consultation

Annex II: Opening remarks by Simeon Ehui, Regional Director for Sustainable Development for West and Central Africa, World Bank (translation of the *French original*)

Ladies and Gentlemen,

Good morning, and good afternoon and hope you are all keeping well and safe. It is a pleasure to welcome you to this virtual consultation on “Internal Climate Migration in West Africa”, with a focus on the region’s coastal countries. I understand we have representation from various countries in the region, as well as regional and international organizations, civil society, and academia.

With the ever-growing number of extreme weather events and disasters, climate change presents a growing threat to people—particularly in West Africa. Temperatures are rising 1.5 times faster in the Sahel than the global average. In Senegal, the combination of sea level rise and decreased rainfall will increase the saltwater intrusion in coastal aquifers, especially around Dakar. In Côte d’Ivoire, the expected changes in temperature and rainfall patterns may reduce soil fertility, increase evaporation, and result in drying soils, while also increasing the risks of pests and diseases, which could impact some cocoa producing areas.

Each country will experience its own unique challenges. The COVID-19 pandemic has shown us how shocks can disproportionately affect poor communities.

Last September, the World Bank launched the Next Generation Africa Climate Business Plan. The Plan provides a platform to further galvanize climate action by focusing on the region’s core development challenges and priorities and delivering on climate resilience and low-carbon development. The Plan’s five strategic directions are intrinsically linked to the drivers and impacts of migration. Particularly the strategic directions related to food insecurity, environmental instability, and climate shocks can contribute to increased migration, including distress-driven mobility. Green resilient cities, on the other hand, will have an important role to play for both climate in-migration and climate out-migration. When managed alongside wider migration patterns, cities can serve as engines of growth with foresight and planning.

Two recent announcements underscore the World Bank’s continued efforts to step up its climate action: Firstly, the World Bank is committed to ensure that at least 35% of its financing integrates climate action, thus delivering climate co-benefits across its portfolio. Secondly, the Bank announced in January this year at the One Planet Summit that it will invest over \$5 billion in the next five years to help restore degraded landscapes, improve agriculture productivity, and promote livelihoods across 11 African countries of the Sahel, Lake Chad, and Horn of Africa.

Climate change is a potent driver of climate migration—as was set out in the World Bank’s flagship report “Groundswell: Preparing for Internal Climate Migration”. The report found that Sub-Saharan Africa could have more than 85 million of the 143 million internal climate migrants projected by 2050—if we do not pursue concerted climate and development action.

We know that the climate drivers of migration can be influenced by or overlap with other economic, social, and developmental factors, such as rapid population growth and urbanization. However, understanding the scale and magnitude at more granular

levels is extremely important to drive policy dialogue and action. Over the last 15 months, we at the World Bank have undertaken additional work to understand the scale and trajectory of climate migration in West Africa and to identify where such population movements may likely occur in the next 20 to 30 years. Such studies are critical to help sharpen our focus on projects that address the drivers and impacts of migration, including in West Africa. The World Bank is already supporting several operations to help manage these drivers and impacts.

For example, the West Africa Coastal Areas Management Program or WACA, seeks to provide solutions and finance to help save the social and economic assets of coastal areas, from coastal erosion and flooding in particular. Through WACA, coastal communities have developed and will implement adaptation strategies specific to their needs. Better land use planning, construction of green and grey infrastructure, and tree planting to stabilize the shoreline have, together, helped mitigate the impacts of flooding and landslides on households in the pilot sites.

Thank you for joining us today to hear and discuss the results of the modeled climate migration future scenarios and the proposed policy recommendations. Your engagement is key to building holistic policy and response frameworks and strategies to avert, minimize, and address climate migration in the face of escalating climate change. On behalf of the World Bank, I wish you all fruitful deliberations and look forward to the outcomes.

Annex III: List of Participants

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Annex IV: Migration Poll

A poll of three questions posed to the participants with seventy per cent participation yielded the following results.

- 1. In your opinion, is climate change increasing as a driver of migration?**
 - a) Not at all: 0
 - b) Slightly: 22% (6 participants)
 - c) A lot: 78% (21 participants)

- 2. In your opinion, which livelihood in West Africa is the most vulnerable to climate induced migration?**
 - a) Pastoralism: 42% (13 participants)
 - b) Agriculture: 55% (17 participants)
 - c) Fisheries: 16% (5 participants)
 - d) All of the above: 45% (14 participants)
 - e) Other: 3% (1 participants)

- 3. In your understanding which sentence better reflects the relation between migration and adaptation?**
 - a) Migration is an adaptation strategy: 62% (21 participants)
 - b) Migration is a result of failed adaptation: 35% (12 participants)
 - c) I don't know: 3% (1 participants)

Annex V: Consultation slides

Internal Climate Migration Futures for West Africa – with a focus on Nigeria

Virtual Consultation

Study conducted by the World Bank in collaboration with the Center for International Earth System Information Network (CIRES), Columbia University and the CLIVAR Institute for Geospatial Research (IGR)

Groundswell methodology: focus on internal climate migration (1)

Slow-onset climate change

Internal Climate Migration Within countries

Up to 2050

Outline of Presentation

1. Overview of Study
2. Focus on Coastal West Africa
3. Focus on Nigeria
4. Call to Action

Groundswell methodology – key elements (2)

Key elements

- Uses the population gravity model to isolate the portion of future changes in population distribution that can be attributed to slow-onset climate factors.
- Developed plausible scenarios to characterize the scale and spread of climate migration – using emission pathways (RCP) and development pathways (SSP).
- The model used the IS92aP global crop and water simulations—a state-of-the-art computer simulations of biophysical climate impacts — which are directly relevant to livelihoods outcomes, together with sea-level compounded by storm surge to capture the slow onset climate factors. Sources of uncertainty and the possibilities of expanding the scope of the work were laid out.
- Results are contextualized against current and historic mobility, peer-reviewed literature, and consultations to further validate the patterns and trends.

Overview of Study and Consultation Context

Objective of the Study

- To examine the potential of climate-induced migration, within countries and inform policy makers of the urgency for near and far-sighted planning, policy and action as an integral part of the development response
- Using WB flagship report -Groundswell methodology

Deliverables

- Regional report on Climate Migration in Coastal West Africa + select country reports
- Regional report on Climate Migration on the Lake Victoria Basin + select country reports

Focus of the Consultation

- Solicit feedback on modeled climate migration scenarios and the proposed policy options and domains of action.

Groundswell methodology: novel scenario-based approach (3)

High Emissions

Low Emissions

More inclusive development (RCP2.6 / SSP2)

More climate-friendly (RCP2.6 / SSP4)

Reference / Reference (RCP4.5 / SSP4)

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 computing 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

*Shared socio-economic pathway (SSP) and Representative Concentration Pathway (RCP)

Groundswell methodology – calibration & enhancements (4)

- Model calibrated based on historical sensitivity of past population shifts using data from 1990-2010
- Sea level rise, accentuated by storm surges, is included as spatial mask
- Model enhancements for West Africa include NPP, median age/sex ratio, conflict fatalities and flood risk
- Implications of these enhancements on climate induced population shifts.

Indicators (Outputs)	Observed Characteristics		Projected rise in sea level experienced by storm surge			
	Median cells	Coast cells	Low	Medium	High	Very High
Crop production	9.9	0.07	0.00	0.00	0.00	0.00
Water availability	1.48	0.07	0.00	0.00	0.00	0.00
Sea level rise	0.4	0.00	0.00	0.00	0.00	0.00
Median age	0.07	0.07	0.00	0.00	0.00	0.00
Sex ratio	0.00	0.00	0.00	0.00	0.00	0.00
Conflict fatalities	0.00	0.00	0.00	0.00	0.00	0.00
Flood risk	0.07	0.00	0.00	0.00	0.00	0.00

Source: Clark et al., 2014, 2015, 2016

Demographic dynamics of West Africa

- Population in West Africa (mainland and island) reached 366.9 million in 2010 and is estimated at 392 million for 2020
- Average median age in 2020 is 17.9 years
- By 2050 population projected to close to double - range from 673.9 million (SSP2) and 788.9 million (SSP4)

Baseline population density (NP) and pessimistic scenario

Outline of Presentation

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Models (2010-50) project increase in water availability in the north west and north east of the Sahel region

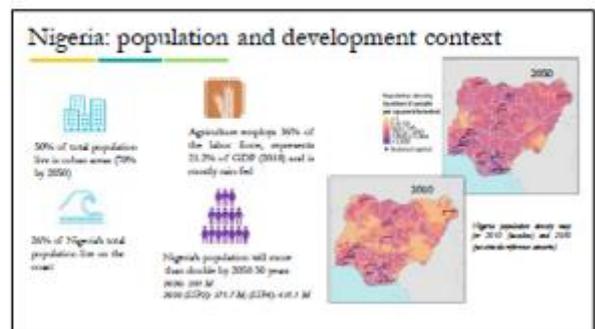
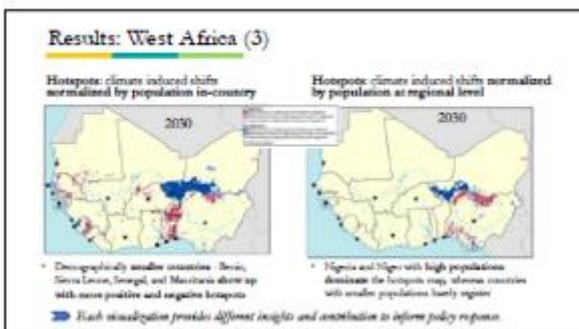
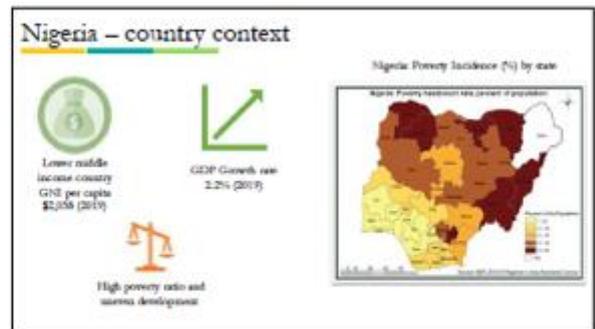
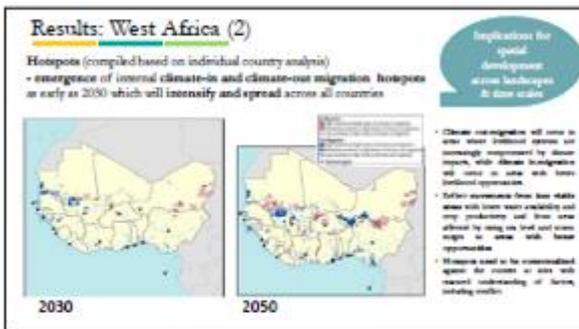
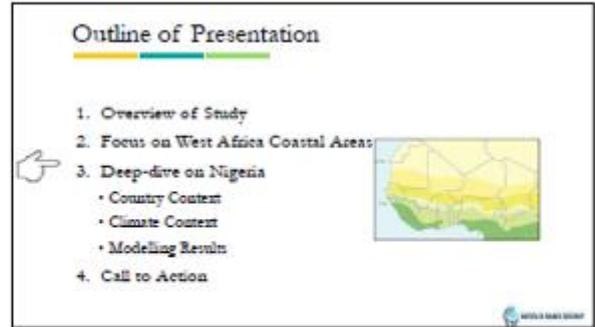
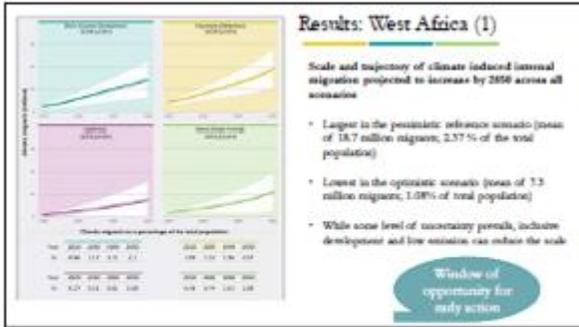
- Increase in water availability in the northeastern portion of West Africa across most model runs may be interpreted as a function of extremely low baselines
- Water models project wetting in the western Sahel (Burdina Faso and Niger), pattern accentuates under RCP4.5
- Significant drying in the western Sahel (Senegal low western Mali and northern Mauritania), pattern accentuates under the RCP8.5

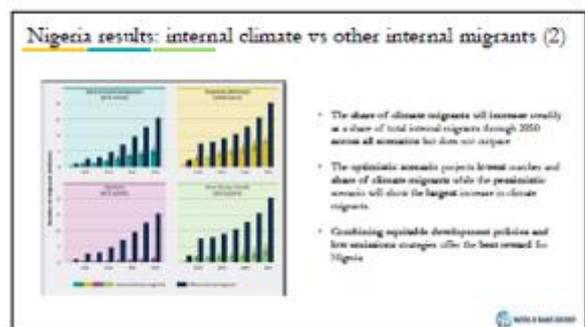
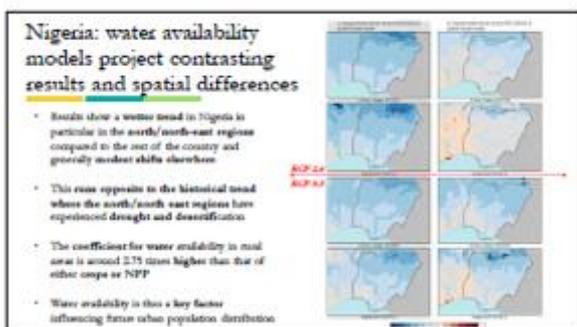
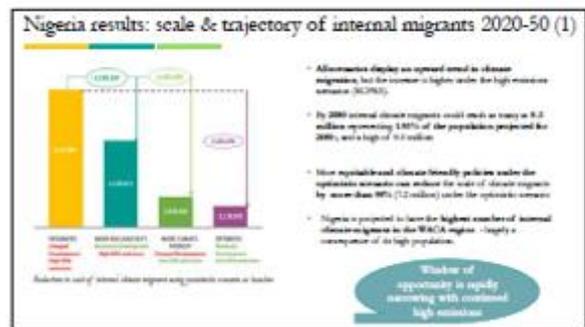
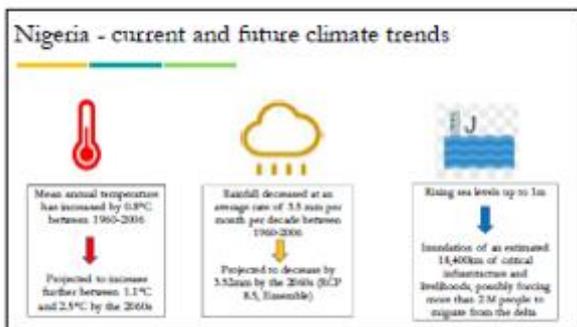
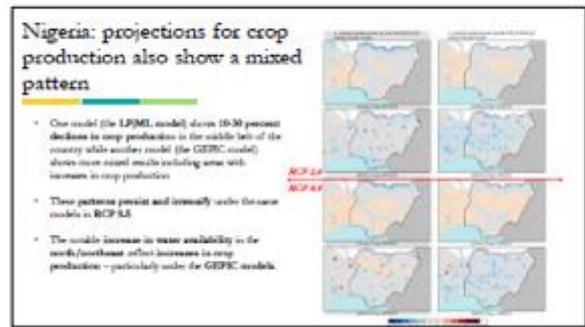
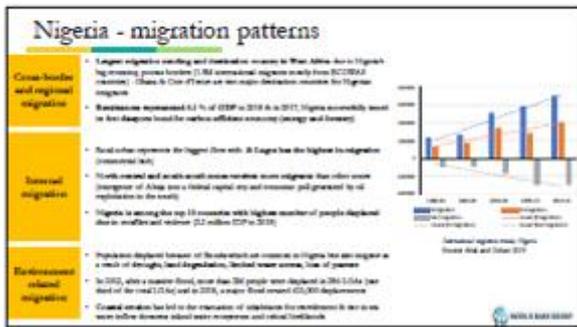
Migration patterns in Coastal West Africa

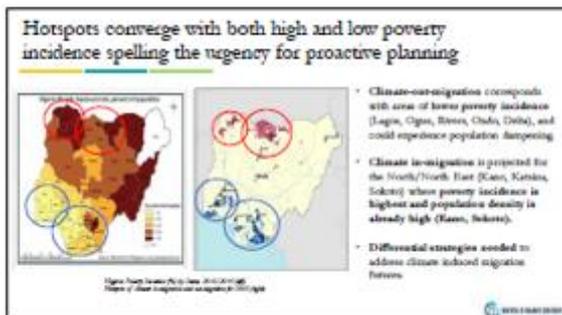
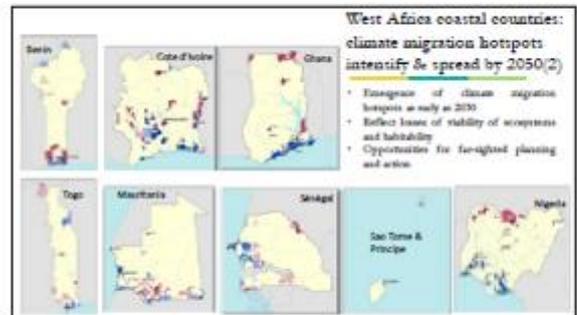
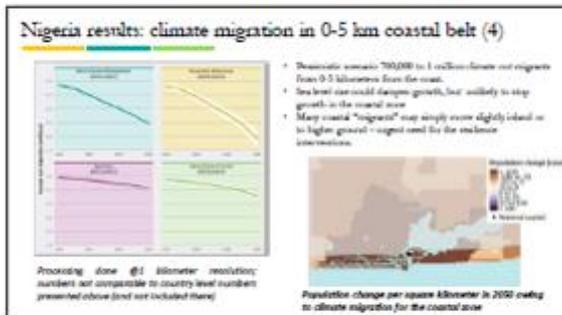
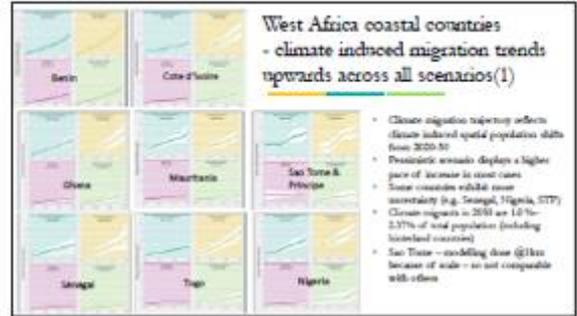
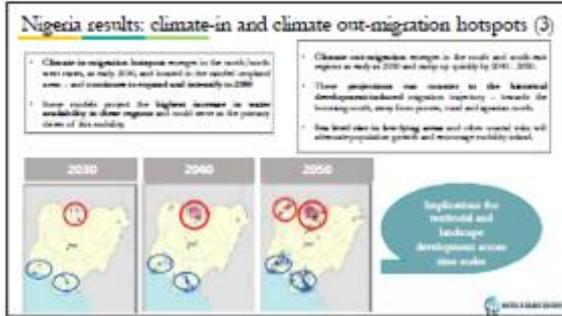
- Highly mobile region with various forms of voluntary mobility (economic, trade, seasonal pastoralists) and forced migration
- Migration has been facilitated by the free movement protocol of the Economic Community of West African States (ECOWAS)
- Migration influenced by environmental factors (droughts, floods), but also poverty and conflicts
- Internal mobility: used to urban migration to both large and secondary cities, and rural-urban migration linked to forest clearing, overgrazing, and landscape burning
- Inter-regional migration & high bilateral flows (Cote d'Ivoire, Burkina Faso, Guinea have the largest inter-migration flows while others are disproportionate recipients such as Cote d'Ivoire, Nigeria, Ghana), including refugee movements

Models of crop production show differences and spatial variations in West Africa

- The LPJmL model projects some widespread decrease of 10-30% across much of the region (except Senegal, Liberia and the northern Sahel)
- By contrast, the GEMEC model produces a pattern of mostly increases with some decreasing crop production. Increases are highest low baseline productivity.
- Patterns accentuate under RCP8.5







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Not starting from zero -learning from our portfolio (2)

Adapting the intervention for far-sighted approach to planning

Intervention/ Treatment	Provision	Provision	Anticipatory
Local protection	Delivering self-reliance	Establishing self-reliance programs	Stability, creating self-reliance protection systems
Landmarks programming for Resilience	Franchising, business, other inputs, and access to markets	Building economic diversification, developing and monitoring their resilience metrics	Viability of fringe over time water, business, livelihoods
Institutional strengthening	Expanding local government capacity for service provision to migrants	Setting up institutions to address migration and climate change, developing policies and frameworks, reflecting risks, and monitoring and evaluating outcomes, improving decision-making under uncertainty	Skills and human capital development to enhance mobility for jobs and economic livelihoods
Capacity building (Digitalization)	Providing legal support to migrants, as well as support to resolve local disputes	Increasing awareness of migrants' rights, dissemination of national and regional frameworks (EU Migration, GCM)	Introducing business changes to incorporating local issues, rights approach

Strategic Response Framework to Avert & Minimize Climate-induced Migration

Core Policy Directions

- Reduce GHGs
- Pursue inclusive and climate-resilient development policies
- Reduce climate migration in far-sighted dev. planning (adapt-in-place, mobile, relocate)
- Invest in improved understanding

Domains of Action

1. Adopt landscape and territorial approaches for far-sighted planning
2. Address and harness climate migration for jobs and economic transition
3. Global, Regional, and National Frameworks, Agreements and Processes
4. Monitoring development/humanitarian-peace percentages for end-to-end actions
5. Conduct spatio-temporal analytics on climate migration hotspots

Embedding migration into Nigeria's Growth Plan

ERCP (2017-2020) Five strategic priority interventions & Sector programs

Intervention to address the least developed countries	Intervention to address agriculture and rural poverty	ERCP Sector programs
<ul style="list-style-type: none"> 1. High yielding improved seed varieties 2. Access to credit services 3. Training and extension services 4. Improved water management systems 5. Improved market access 6. Improved risk management 7. Improved extension services 8. Improved extension services 9. Improved extension services 10. Improved extension services 	<ul style="list-style-type: none"> 1. Improved extension services 2. Improved extension services 3. Improved extension services 4. Improved extension services 5. Improved extension services 6. Improved extension services 7. Improved extension services 8. Improved extension services 9. Improved extension services 10. Improved extension services 	<ul style="list-style-type: none"> 1. Agricultural 2. Livestock 3. Aquaculture 4. Forestry 5. Fisheries 6. Irrigation 7. Extension 8. Training 9. Research 10. Policy 11. Infrastructure 12. Finance 13. Health 14. Education 15. Environment 16. Energy 17. 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Key takeaways

- The impacts associated with slow-onset climate change impacts will ramp up internal climate migration, amplifying current and historical patterns.
- While the scale of internal climate migration varies across the country, each will see an emergence of climate in-migration and climate non-migration hotspots.
- Climate induced migration is in part a symptom and a signal of underlying failures, weakness and gaps - collective mitigation action and inclusive development are a key part of this response. Migration is often an adaptation strategy.
- The plausible scenarios are not cast in stone and can be reduced through concerted climate and inclusive development actions - but the window of opportunity is narrowing, and inclusive, resilient development can be the first line of defense.
- There is a need to shift from response-driven ad-hoc action to more proactive and fit-ought policy, planning and action.
- A focus on key domains of action underpinned by some policy directions can help avoid, minimize and address the issue for estimated outcomes.
- The call to action cannot be postponed.

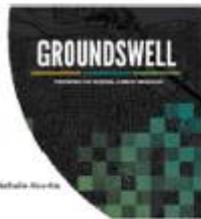


Internal climate migration may be a reality BUT it does not have to become a crisis... IF we pursue concerted action now

Thank you

Wendy Wood James, Sarah Rogstad, David Mahali, Aron Cook (coordinator), Annet Ayem, Mathias Akpan
 CEPRU - Columbia University, Abu de Shehata, Souma Adjerem
 GIZ, Institute of Geographic Sciences, Witten, Germany

The work for the enhancements for West Africa is supported by:



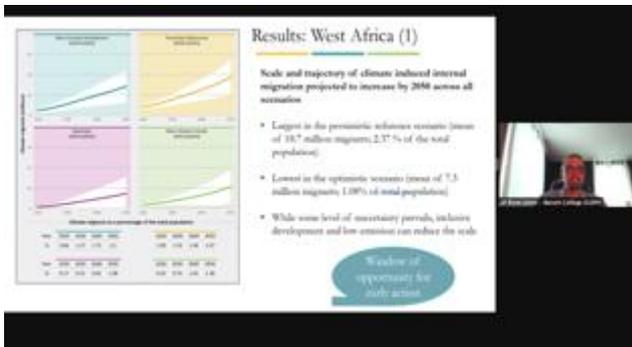
Annex VI: Photos



Introductory remarks by Simeon Ehui, Regional Director, Sustainable Development, West and Central Africa, World Bank



Keynote presentation: Results and Analysis of Climate Migration in West Africa – Kanta Kumari Rigaud, Lead Environment Specialist, World Bank



Keynote presentation: Results and Analysis of Climate Migration in West Africa –Bryan Jones, CUNY Institute of Demographic Research



English breakout session



French breakout session