

# GROUNDWELL

PREPARING FOR INTERNAL CLIMATE MIGRATION



Kanta Kumari Rigaud, Alex de Sherbinin, Bryan Jones,  
Jonas Bergmann, Viviane Clement, Karly Ober, Jacob Schewe,  
Susana Adamo, Brent McCusker, Silke Heuser, and Amelia Midgley

# GROUNDWELL

## Preparing for Internal Climate Migration

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*6<sup>th</sup> EMN Educational Seminar on Migration*  
*Falkensteiner Hotel Bratislava, Slovakia*  
*August 22-24, 2018*

[https://youtu.be/d6ijhQn\\_ww4](https://youtu.be/d6ijhQn_ww4)

# OUTLINE OF PRESENTATION

1. Motivation
2. Approach
3. Key Results
4. Call to Action





# MIGRANT CRISES IN EUROPE



**Migration crisis: the new routes to Europe** Migrants only cross



## Call for tougher controls on migrants in Germany

AN influential cellor Angela tion government stiffer control influx of Rom garian migr expected to tra after restricti ers expires.

The centre- Social Union w to limit their ac erous provision welfare state.

They are re suspension fr social service three months s expel people c

## Seeking Refuge: Migration Crisis



Here's where Syrians have gone

## Europe's refugee crisis is making headlines, but Latin America's is just as alarming



re not talking about

Image: REUTERS/Gael Gonzale



# 2010 Floods in Pakistan

- *20 million affected*
- *1 million people displaced*





# 2017 GLOBAL REPORT ON DISPLACEMENT



*31 million new displacements  
worldwide from conflict, violence and  
disasters in 2016 (IDMC)*



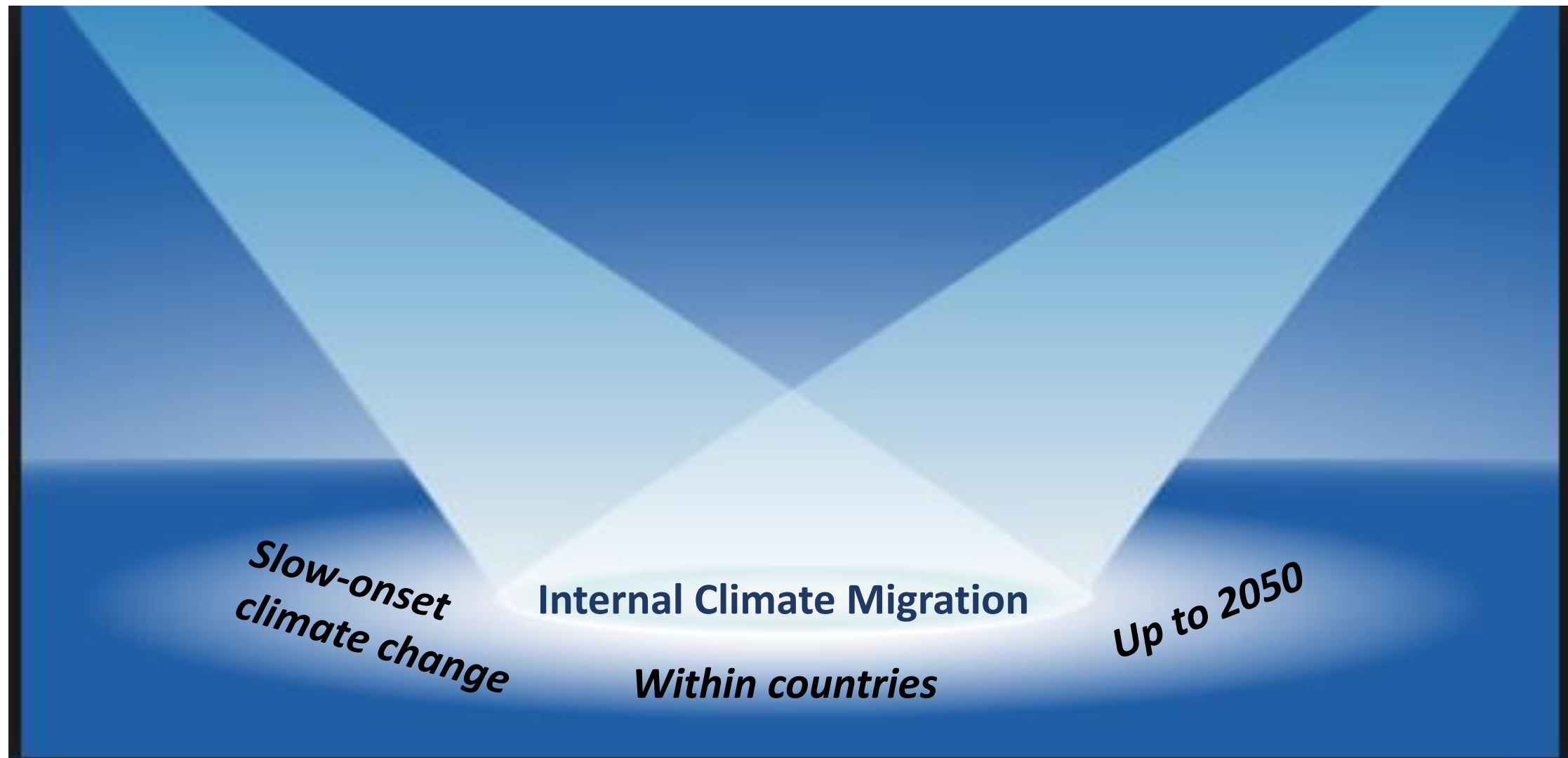
# FACES OF MIGRATION



## Multiple drivers:

- economic
- social
- political
- environmental
- **CLIMATE**

# SPOTLIGHT ON CLIMATE-MIGRATION-DEVELOPMENT NEXUS





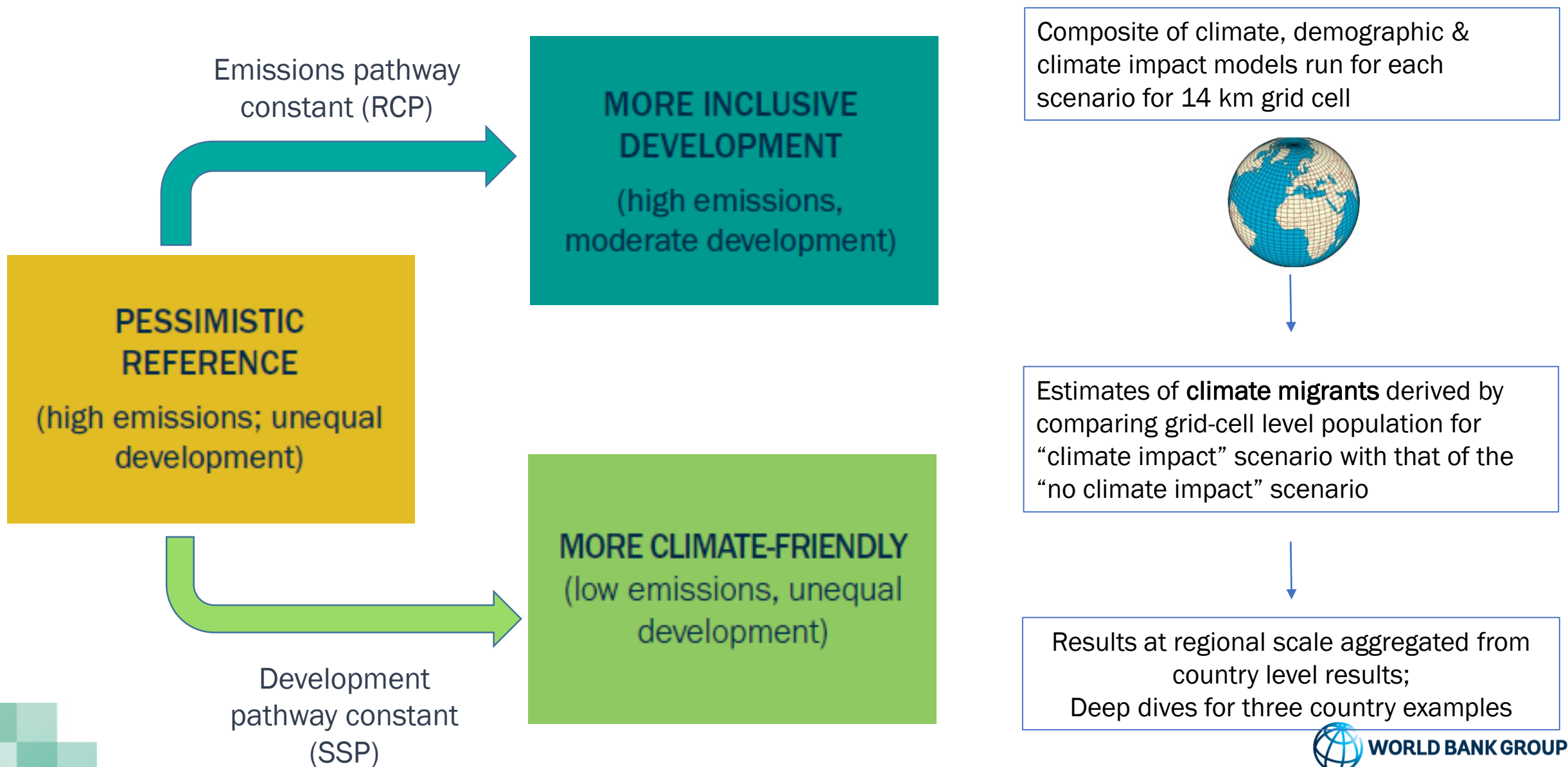
# OBJECTIVE OF THE REPORT

- Help policymakers better plan and prepare for the likely movement of people within countries as a consequence of climate change
- Help understand areas of greatest climate vulnerability which are likely to propel people and communities to move within their countries and possible hotspots of climate in-and out migration





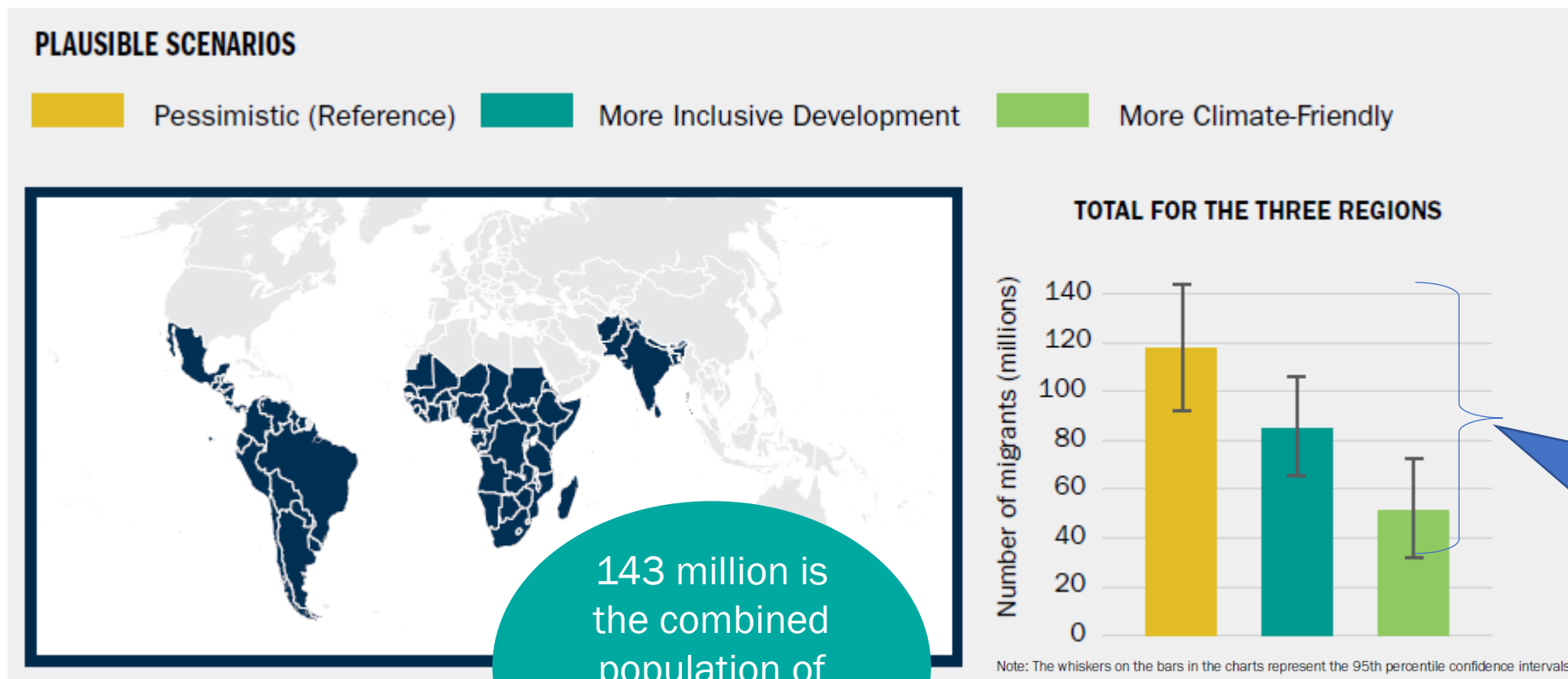
# PROJECTING CLIMATE MIGRATION 2020-50





# RESULTS – **SCALE** OF CLIMATE MIGRATION BY 2050

- By 2050 over **143 million people** in three regions could be **climate migrants** under the **pessimistic reference scenario**

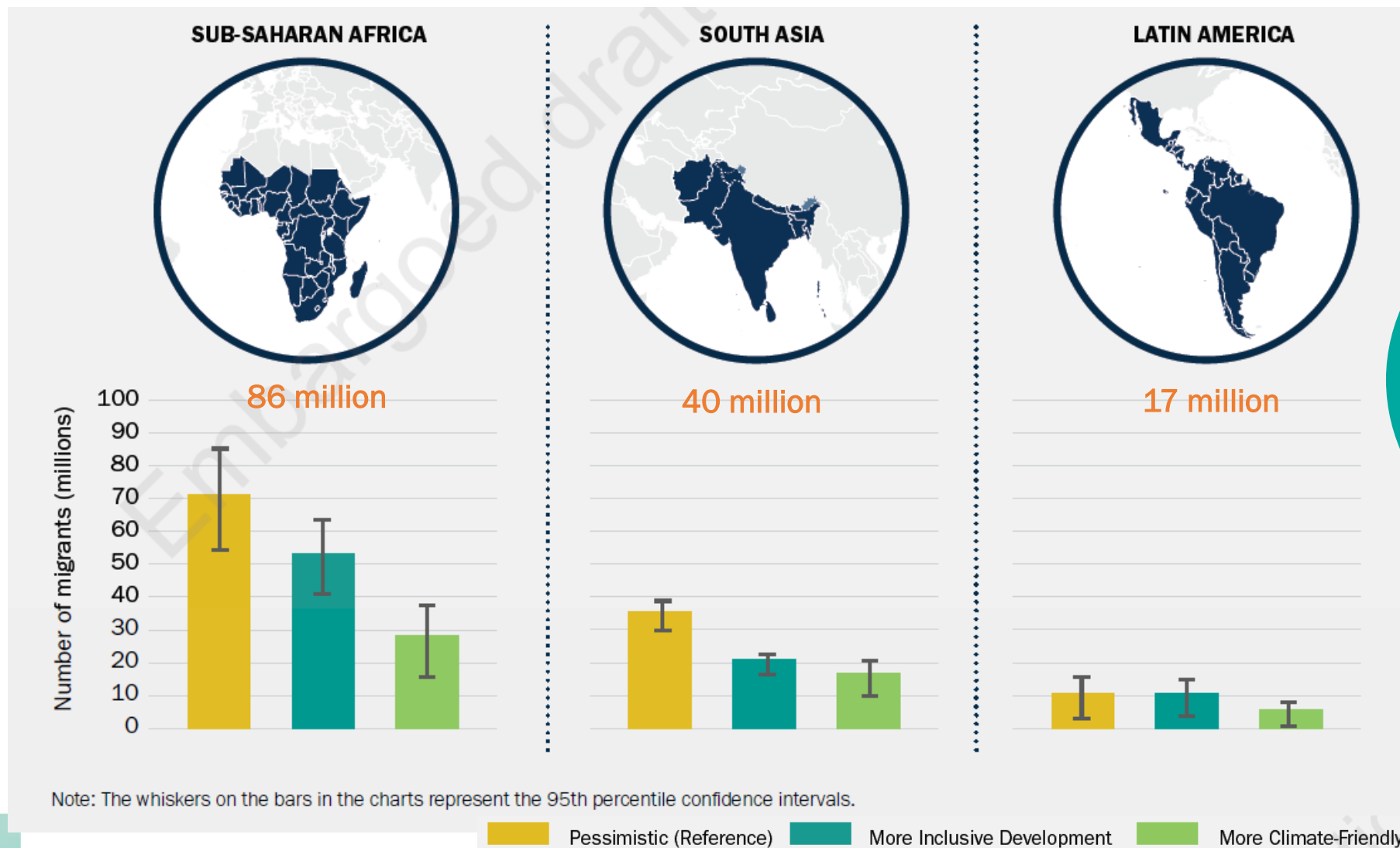


Climate migrants could be reduced by more than 80% under a more climate friendly scenario



# RESULTS – SCALE OF CLIMATE MIGRATION BY REGION

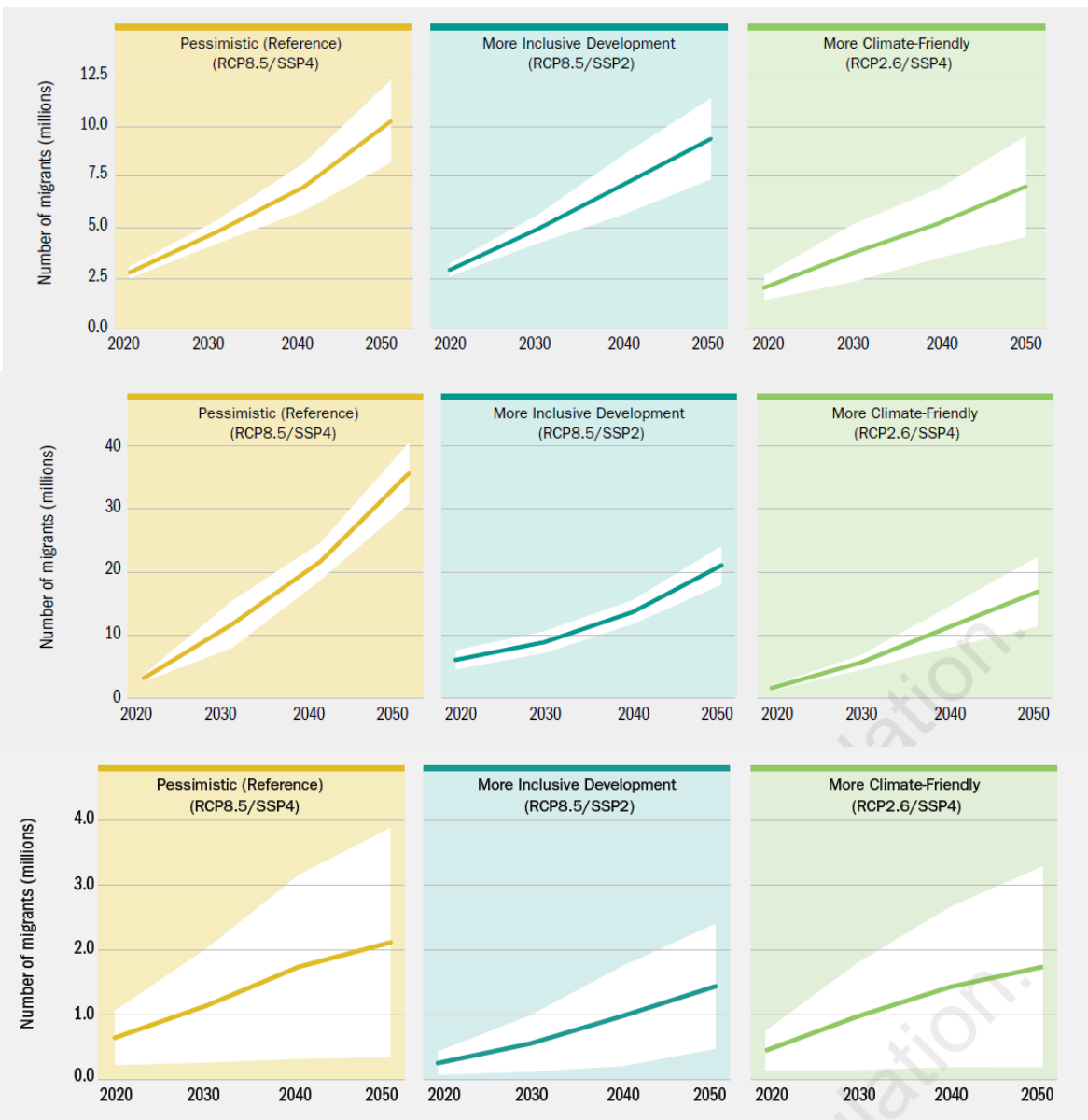
- Climate migrants by 2050: highest in Sub-Saharan Africa followed by South Asia and Latin America



Concrete climate and development action can help reduce distress migration



# RESULTS – **TRAJECTORY** OF CLIMATE MIGRATION (2020-50)



## East Africa (3X)

- Number of climate migrants ramp up by 2050
- Window of opportunity for early action

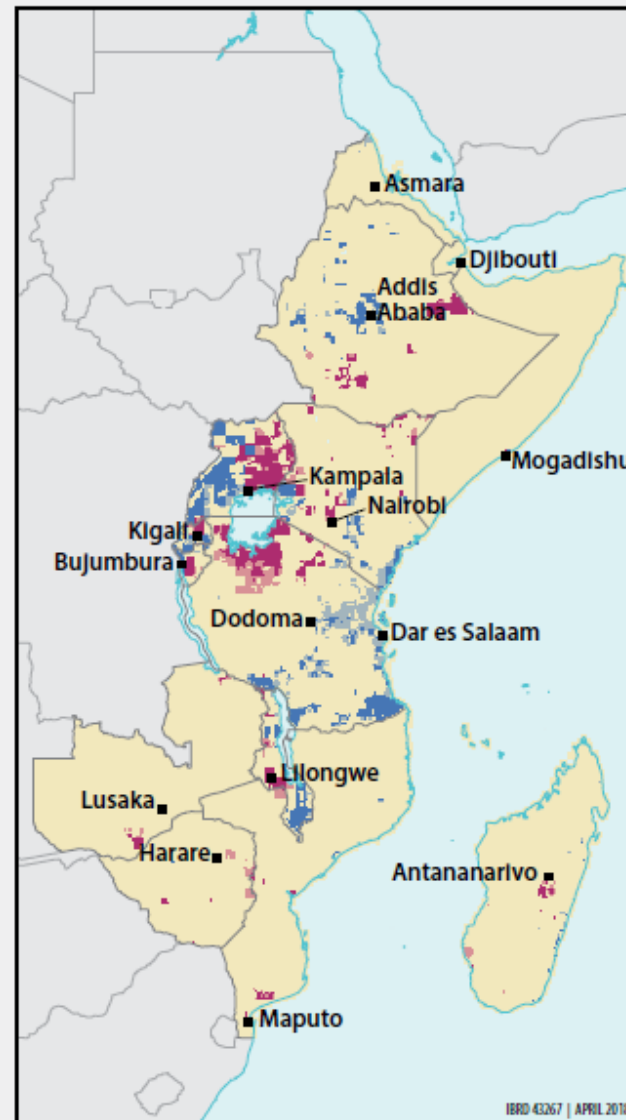
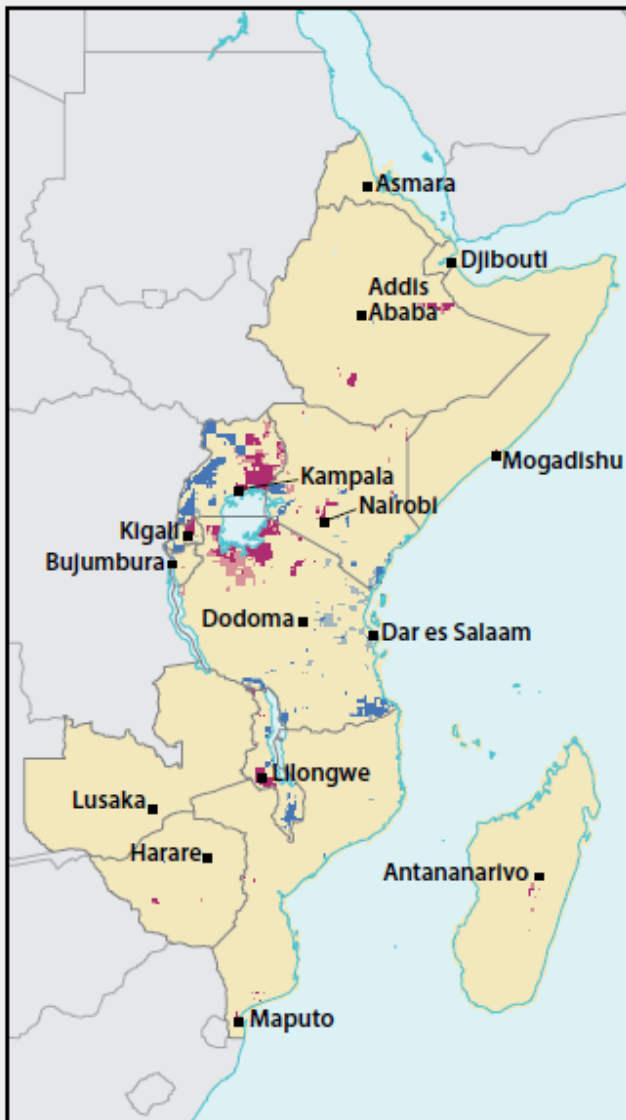
## South Asia (6X)

Post 2050: more extensive climate impacts => increase in climate migration

## Mexico & Central America (2X)

a. 2030

b. 2050



IBRD 43267 | APRIL 2018

#### IN-MIGRATION

- High certainty in high levels of climate in-migration
- Moderate certainty in high levels of climate in-migration

#### OUT-MIGRATION

- High certainty in high levels of climate out-migration
- Moderate certainty in high levels of climate out-migration

Note: High certainty reflects agreement across all three scenarios modeled, and moderate certainty reflects agreement across two scenarios.

## RESULTS – EAST AFRICA SPATIAL EMERGENCE OF CLIMATE MIGRATION HOTSPOTS

- Spread and intensity of climate in- and out-migration hotspots increases by 2050
- Hotspots reflect ecosystem and livelihood vulnerabilities
- Number of hotspots along boundaries

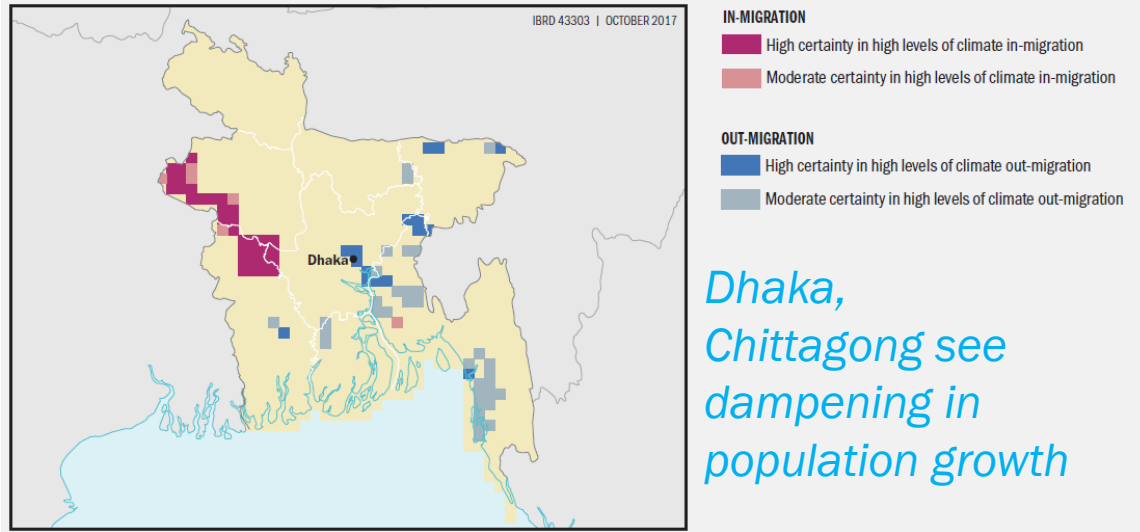
Implications for spatial development across landscapes & time scales



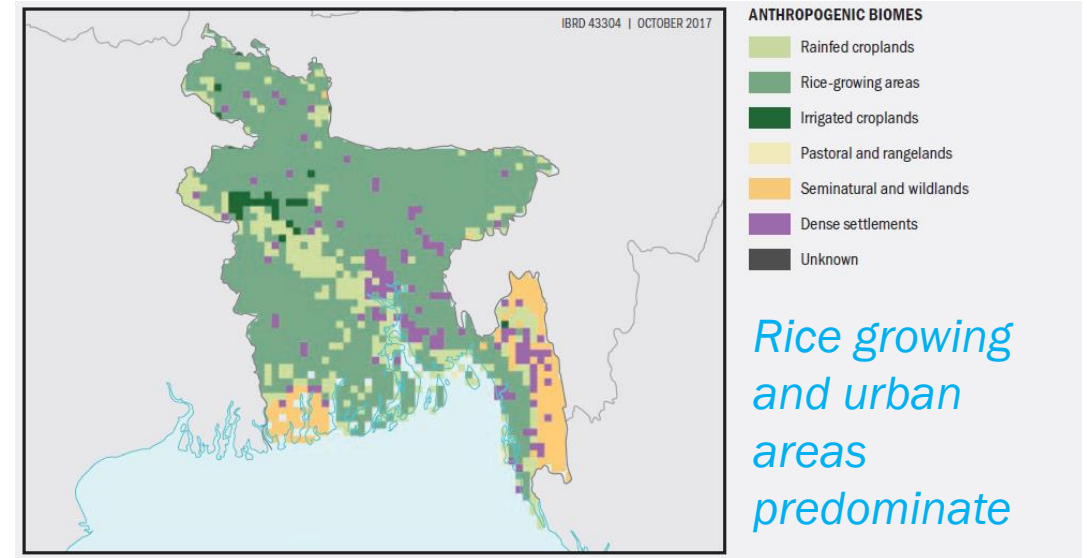
# BANGLADESH SNAPSHOT – KEY RESULTS

BGD: High climate vulnerability drives patterns

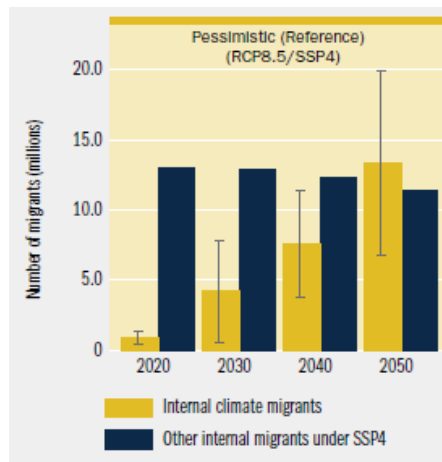
## Climate in- and climate out-migration hotspots



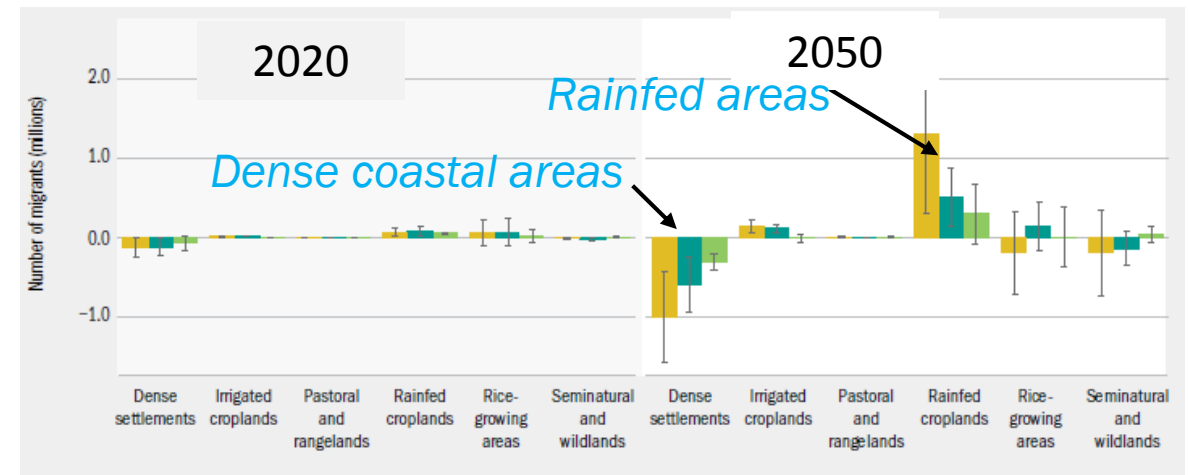
## Livelihood zones



## Climate migrants vs Other migrants



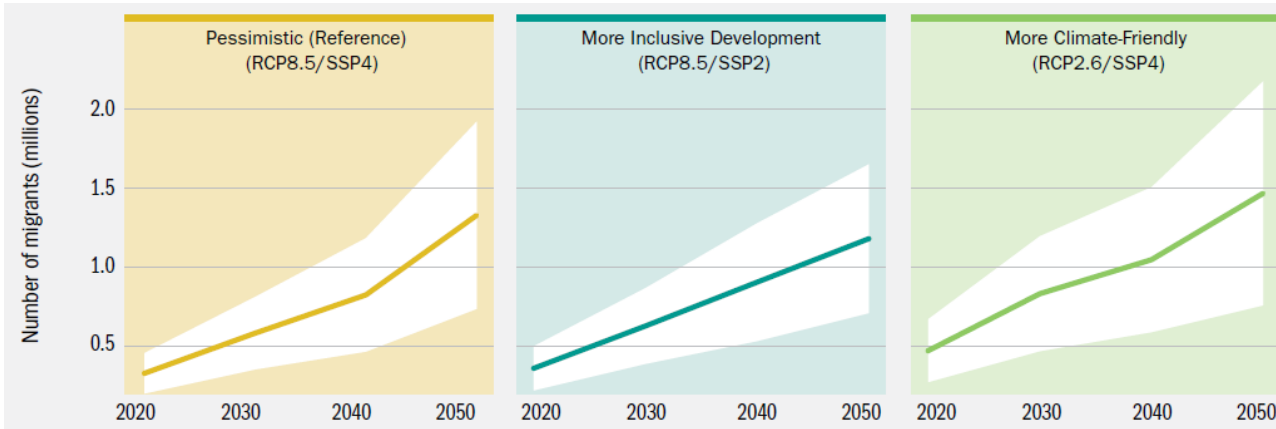
## Net climate in/out-migration from livelihood zones



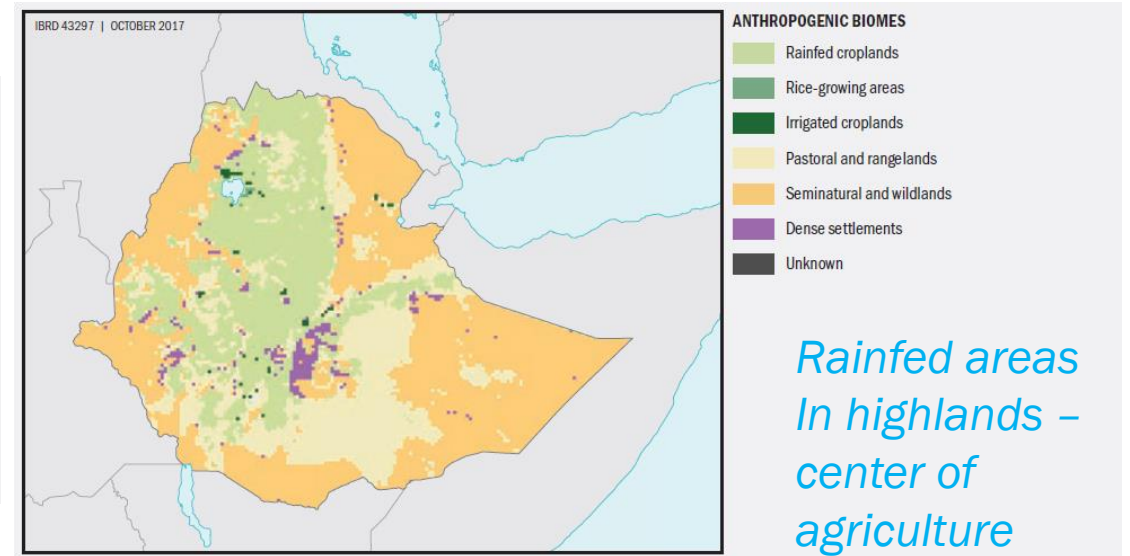
# ETHIOPIA SNAPSHOT – KEY RESULTS

ETH: Uncertainty in climate models drives results

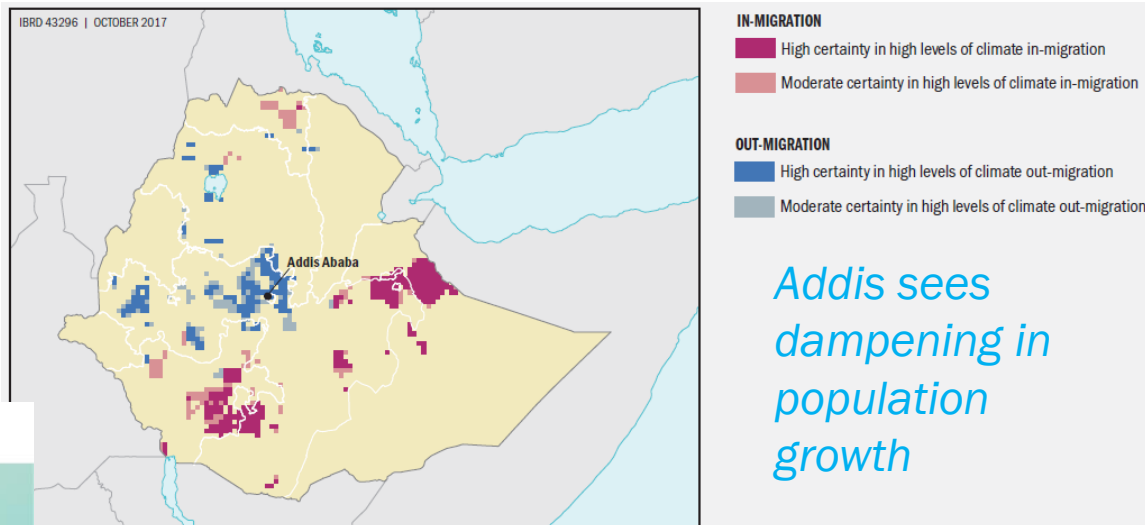
## Projected number of internal climate migrants



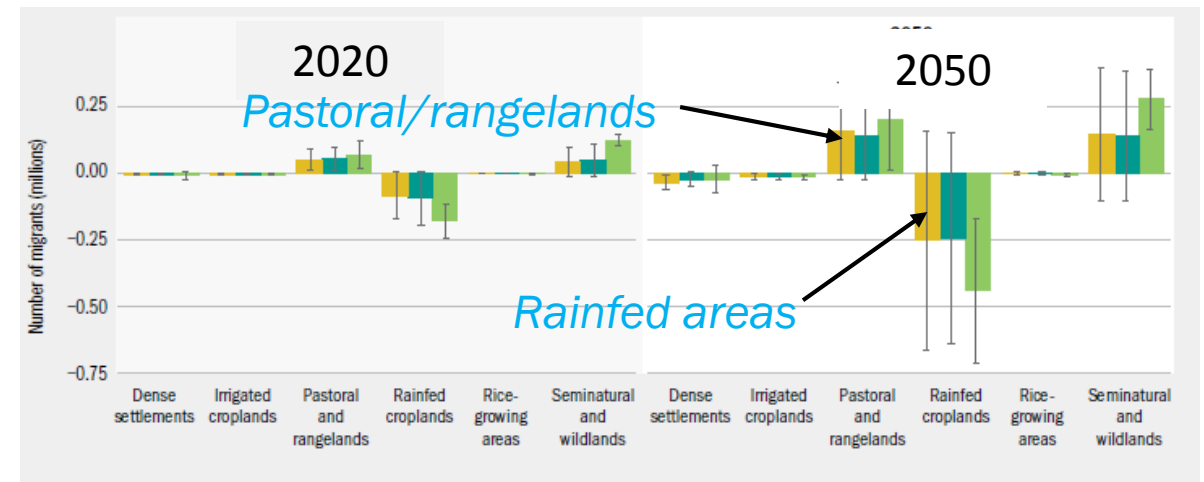
## Livelihood Zones



## Climate in- and climate out-migration hotspots



## Net climate in/out-migration from livelihood zones

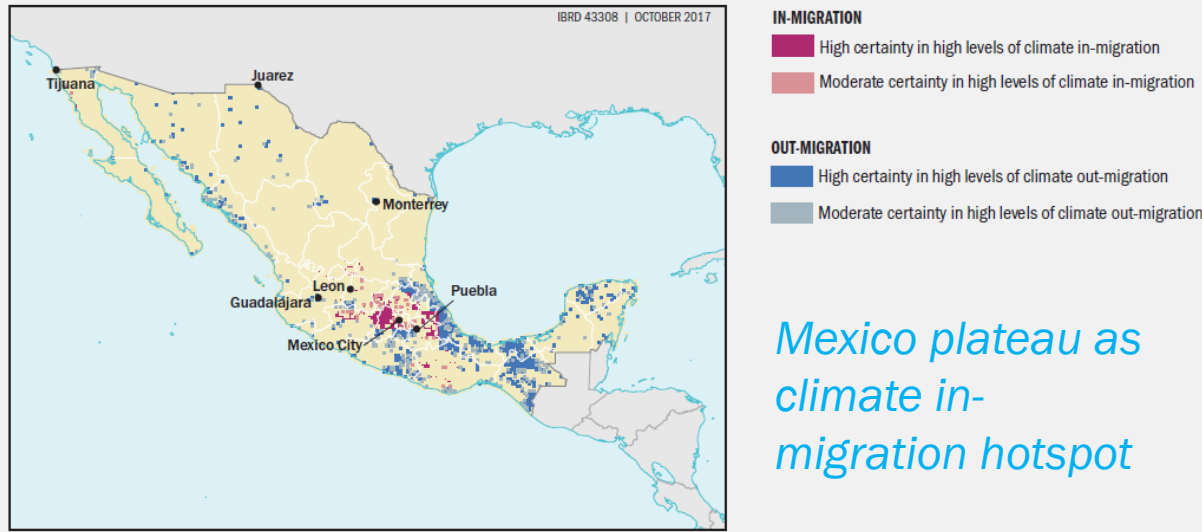




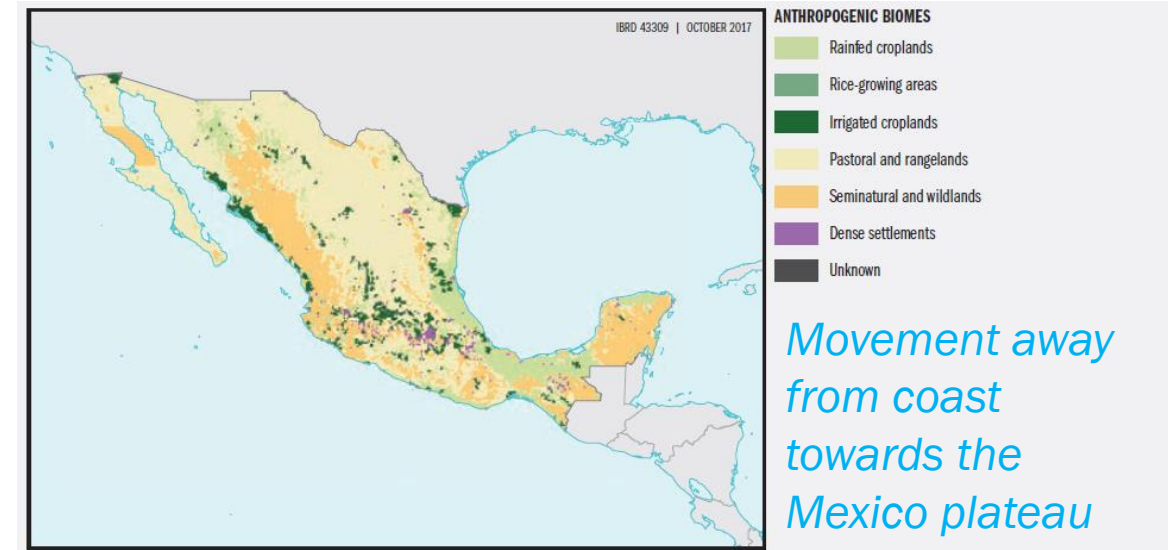
# MEXICO SNAPSHOT – KEY RESULTS

MEX: Climate impacts intensify post 2050

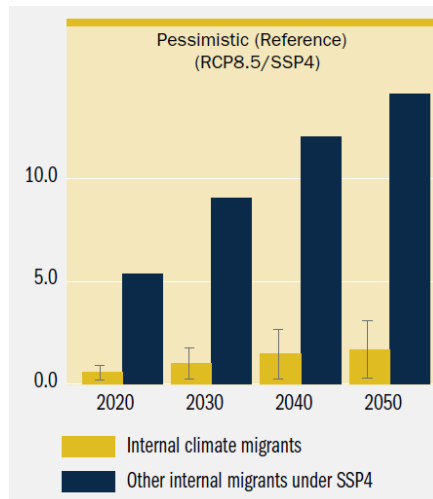
## Climate in- and climate out-migration hotspots



## Livelihood zones

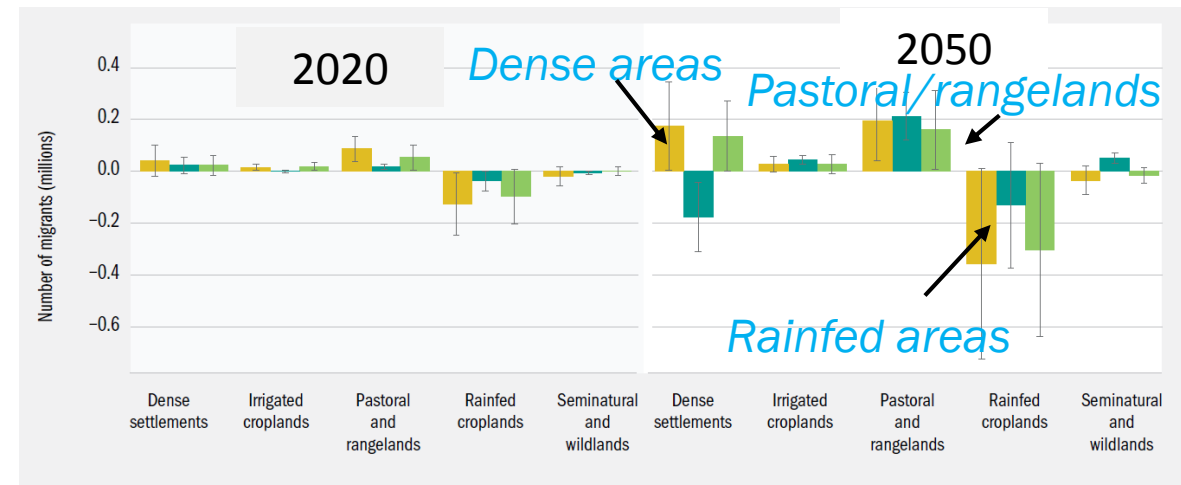


## Climate migrants vs Other migrants



*- Climate migrants c. 15% of other migrants*

## Net climate in/out-migration from livelihood zones



# TOUGH TAKEAWAY MESSAGES

- Climate migration is the human face of climate change – 143 million faces!
- Poorest and vulnerable areas will be hardest hit
- We are locked into a certain level of internal climate migration – even with Paris Agreement
- These are conservative estimates – focusing on select slow onset factors and only three regions

⇒ *Challenges the delivery of development targets.....  
and extent to which movement can be positive for  
migrants and their families*





# BUT THE WINDOW OF OPPORTUNITY STILL OPEN

*Internal climate migration may be a reality BUT it does not have to become a crisis...*

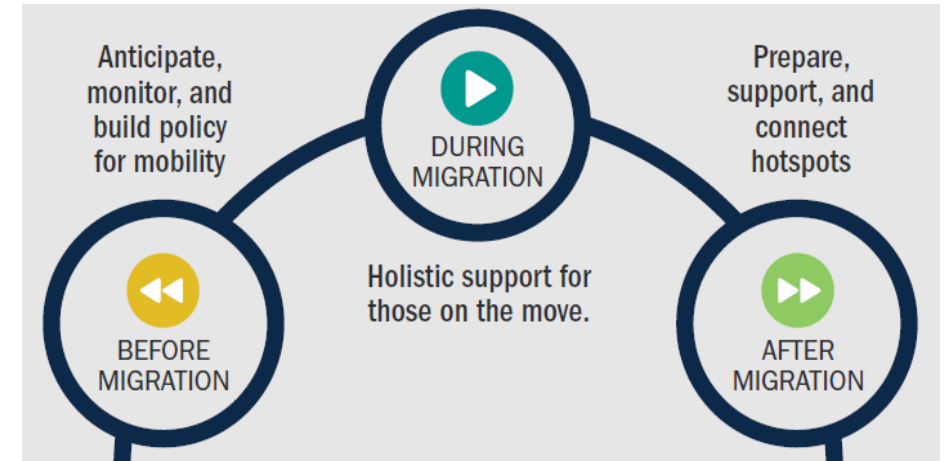
*IF we pursue concerted action now:*

1. **Cut greenhouse gases now** to reduce climate pressure on people's livelihoods and the associated scale of climate migration (*up to 80% reduction*)
2. **Embed climate migration into resilient development planning** for all phases of migration and **across time**
  - Before migration – through adapt in place
  - Enabling mobility – for those who need to move
  - After migration – both sending & receiving areas addressed
3. **Invest now to improve understanding** of internal climate migration



# DISCUSSION

- Can we have durable solutions without addressing potent migration drivers - like climate?
- Do we need to move from ex-post to ex-ante strategies?
- Should we take a longer range view of the issues?
- How can these scenario-based global, regional, country projections be used?





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# Thank you

For more information contact:  
Kanta Kumari Rigaud (kkumari@worldbank.org)

Useful links:

<https://openknowledge.worldbank.org/handle/10986/29461>

[https://youtu.be/d6ijhQn\\_ww4](https://youtu.be/d6ijhQn_ww4)

