



Celebrating 30 years of  
integrated climate impact research  
at the Potsdam Institute.

# Climate-Migration-Conflict Nexus in Ethiopia

B-EPICC Addis Abeba Workshop

10-12 May 2023 Addis Ababa Ethiopia

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B-EPICC - Potsdam Institute for Climate Impact Research

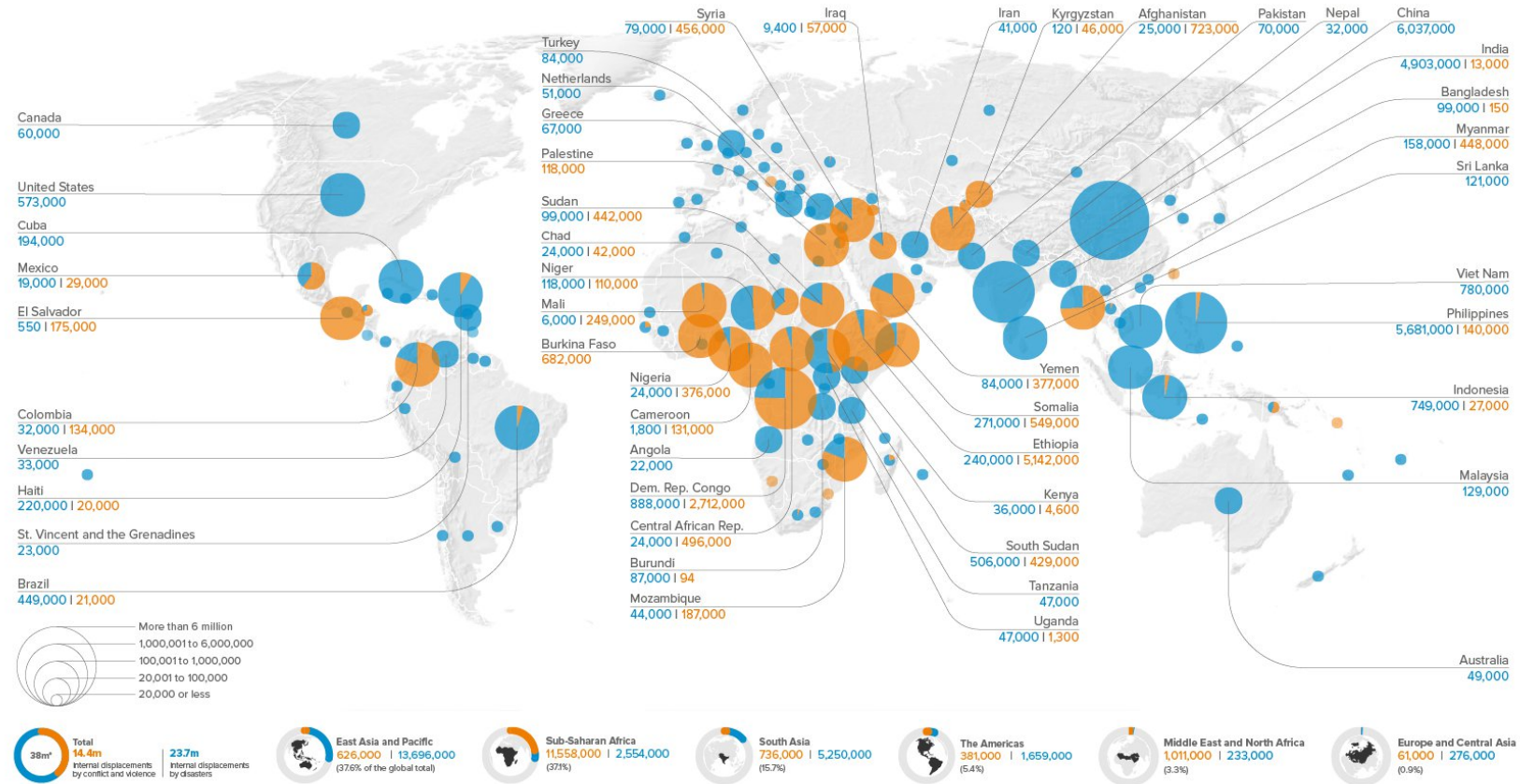
# B-EPICC – Climate Migration & Conflict in Ethiopia

- › Explore climate, mobility and conflict linkages
- › Ethiopia civil conflict and severe enviro events shaping mobility
- › Key outputs:
  - Assessing the Evidence Report (IOM)
  - Journal article

**\*\* Note: Ethiopia – explore nexus in forest-based communities**



# Internal displacements by conflict and disasters in 2021



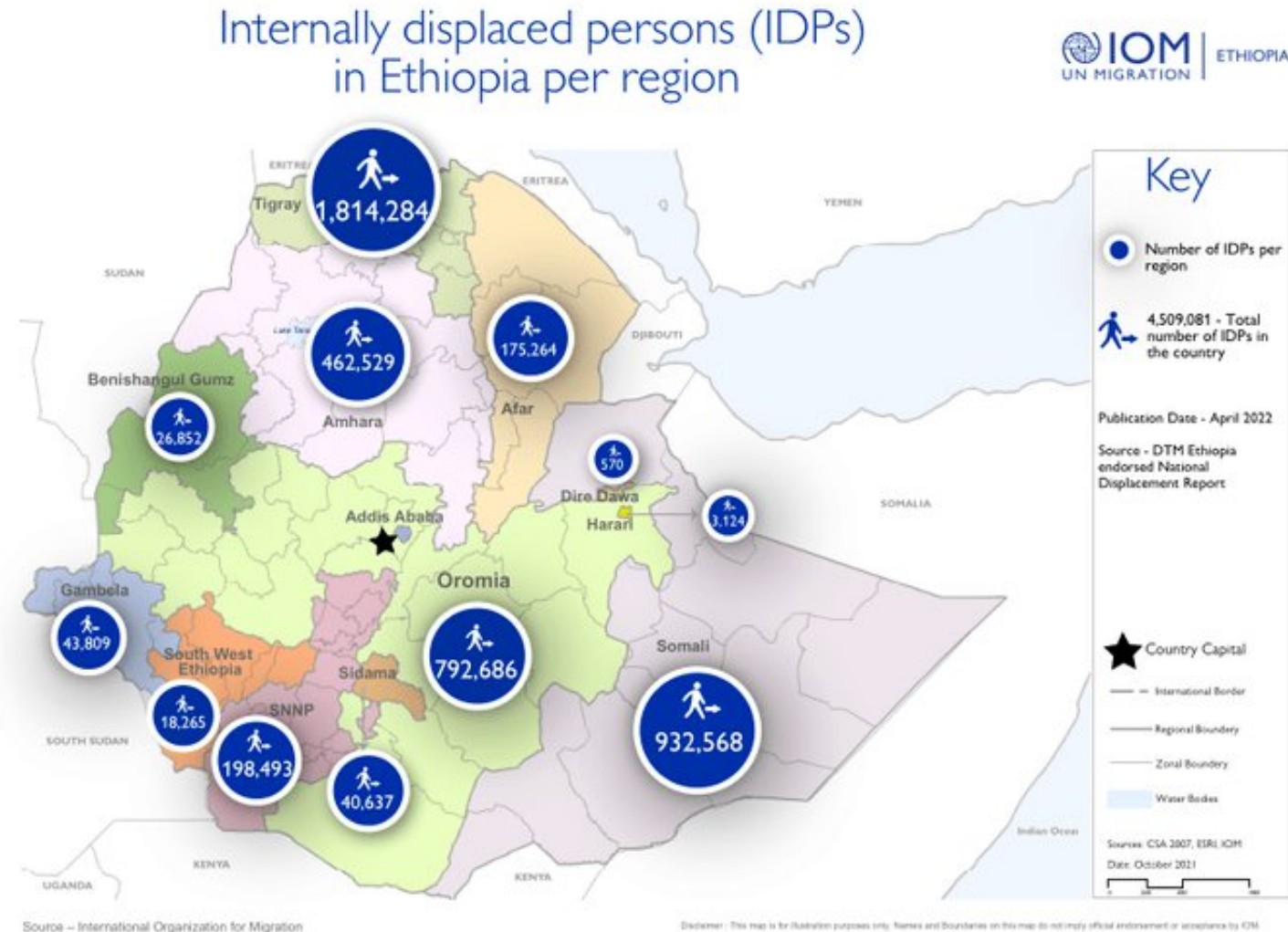
The country and territory names and figures are shown only when the total new displacements value exceeds 20,000. Due to rounding, some totals may not correspond with the sum of the separate figures. The boundaries and the names shown and the designations used on this map do not imply official endorsement or acceptance by IDMC.

**IDMC** internal displacement monitoring centre



# IOM Ethiopia – The Overall Picture

- April 2022: 4,5 million IDPs
- Nov 2020: Northern Ethiopia Crisis main driver
- Mobility due to climate change more typical—droughts, floods (Webster et al 2020)
- CC-related mobility multi-causal
- 2015 El Niño aftermath: reduced rainfall during the Kiremt season, drought in South and SE
- Heavy rains brought flooding displacing 200,000 in Oct 2019 (IOM 2021)

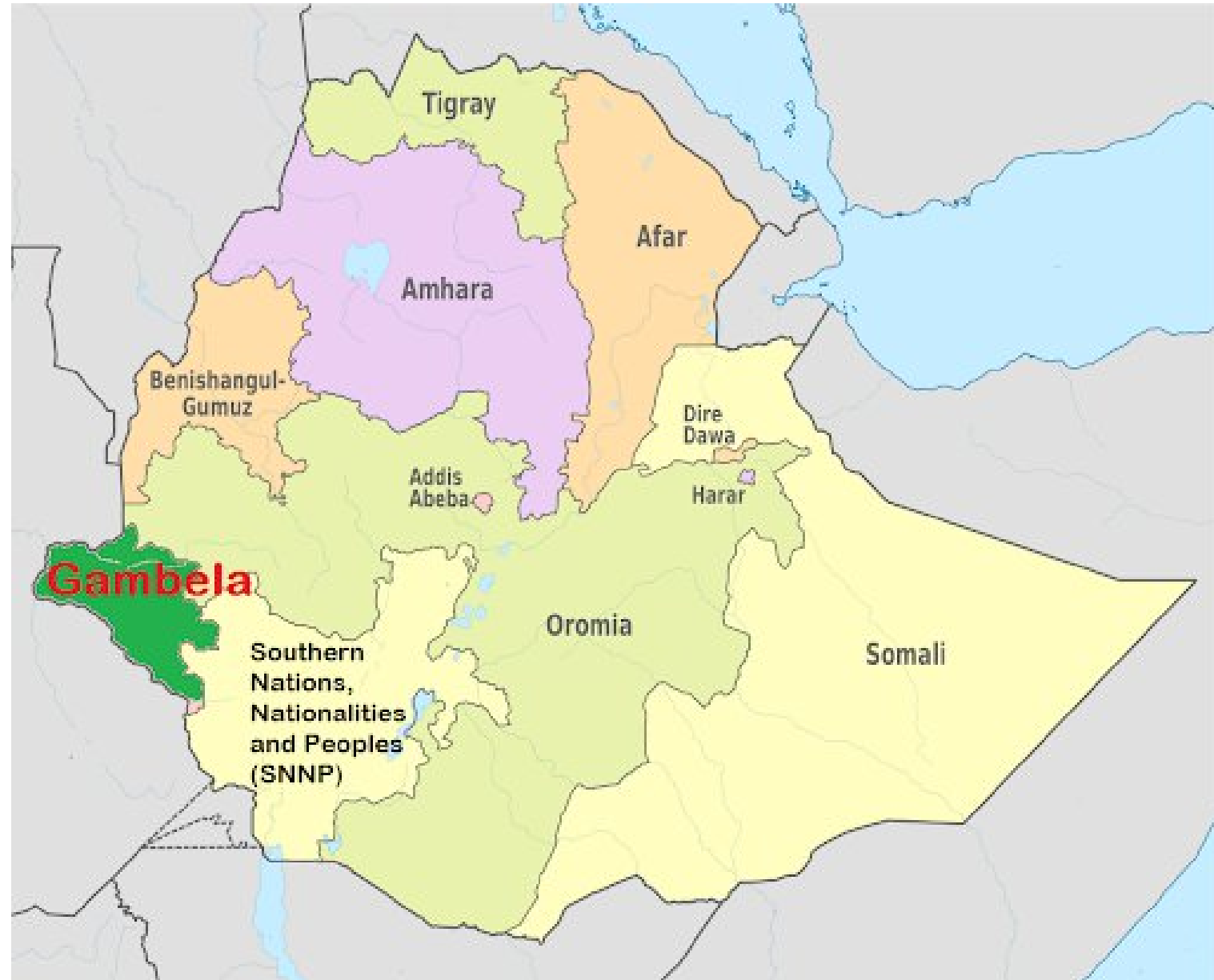




# B-EPICC Climate Migration – Objectives Ethiopia

- Assessment Report: comprehensive review of the evidence linking climatic change, migration and conflict, including policy review
  - › Contributors: PIK colleagues, HABITABLE IOM London, IOM Ethiopia, EFD, post-graduate Ethiopian researchers (esp. visualisations)
  - › Final draft ready to submit
- Research Project: explore to what extent migration and conflict interact in the context of climate driven land use and land cover change – forest focus
- Scoping Study: IDP and refugee camps in Gambella forest region

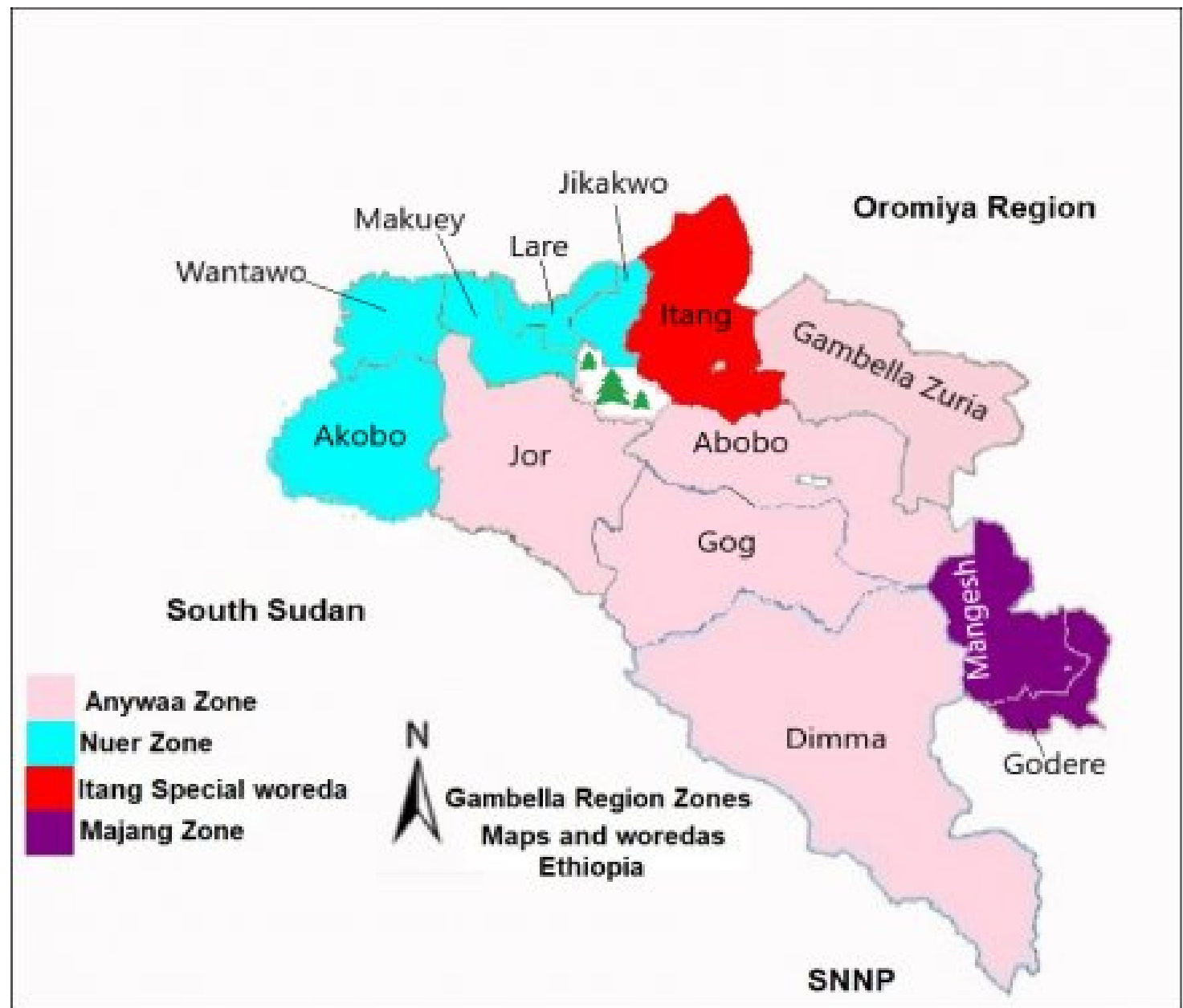
# Study site



# Gambella Region

## Itang Special Woreda

## Lare





# Study Sites

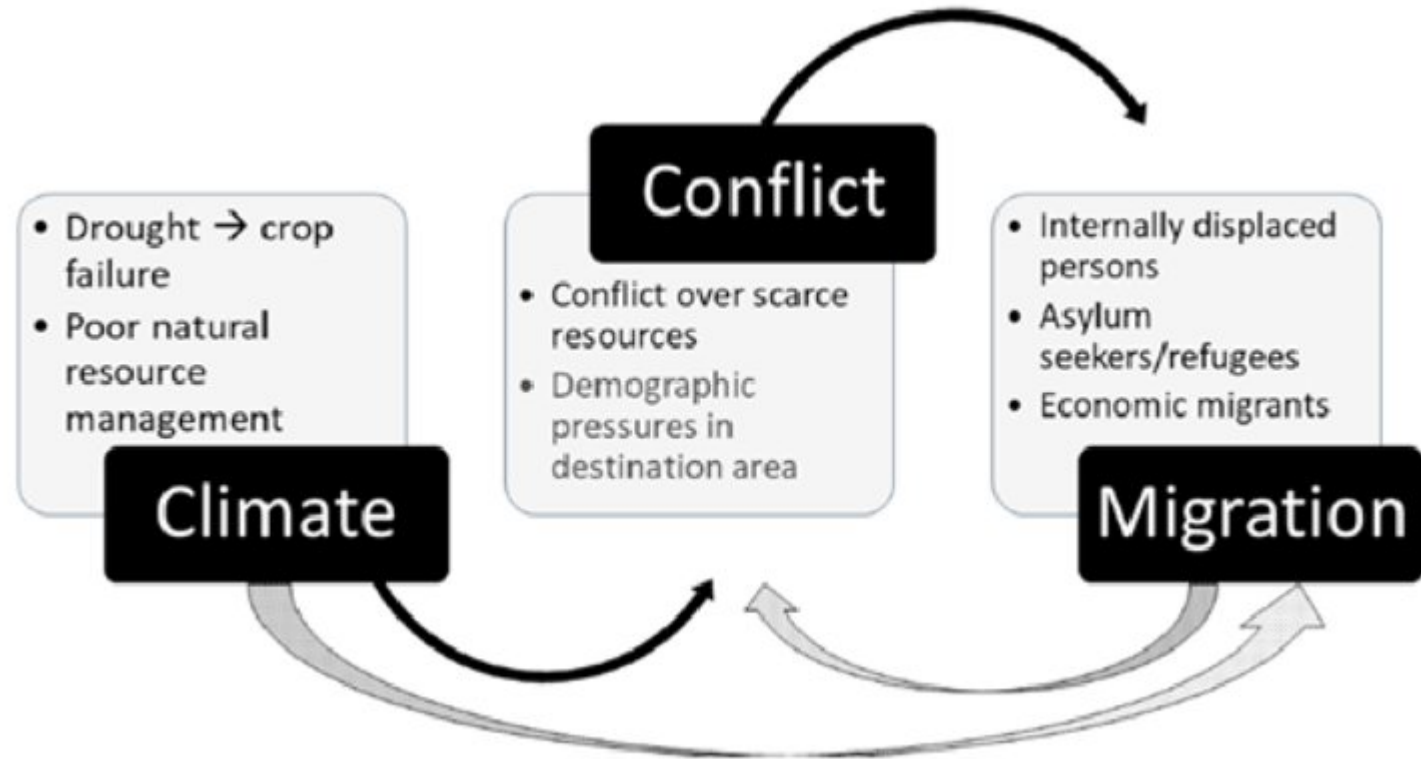
|                                                                             | › <b>Lare</b><br>› <b>Gambella Forest Region</b>                                                          | › <b>Itang Special Woreda</b><br>› <b>Gambella Forest Region</b>                                                                                    |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| › <b>Setting – southwest, removed from main conflict areas in the north</b> | <ul style="list-style-type: none"> <li>• Marshes and grasslands</li> <li>• Borders South Sudan</li> </ul> | <ul style="list-style-type: none"> <li>• Borders Gambella National Forest</li> <li>• Borders South Sudan</li> <li>• Largest refugee camp</li> </ul> |
| › <b>Climatic Factors</b>                                                   | › Drought, highly affected by flooding                                                                    | › Drought, highly affected by flooding                                                                                                              |
| › <b>Mobility &amp;</b>                                                     | <b>Conflict &amp; Enviro Change</b>                                                                       | <b>Conflict &amp; Enviro Change</b>                                                                                                                 |

# What are data source needs?

Accessible data on climate impacts on livelihoods and (im)mobility, and conflict on flows/traps

Possibilities to join-up climate-mobility-conflict for prediction purposes?

Potential to merge monitoring tools with what we can learn about pre-conditions, trigger points or mobility drivers for predictive models?



Abel et al 2019: climate-conflict-migration relationships (mobility/immobility)

# Climate Change-Migration Nexus

- › **It is generally acknowledged that defined or direct causal links between climate change and migration, and climate change and conflict, do not exist** (Foresight 2011; Abrahams and Carr 2017; Institute for Security Studies—ISS 2021).
- › **With respect to East Africa, Thalheimer et al. (2021b) find currently low confidence in a quantifiable climate change-human mobility nexus.**
- › A deteriorating environment **can be both cause and effect of migration** at the regional level (Hermans-Neumann et al., 2017).
- › Generally, migration can provide **a notable adaptation response where climate becomes more extreme or erratic** (Harrington et al., 2018), though entrapment – the inability to move away from precarity – is also possible (Foresight, 2011).

- › **Between 2020-2022, La Niña-induced droughts and failed rainy seasons were factors in displacing over 300,000 people** between October 2021 and mid-April 2022 in search of water, pasture and aid assistance.
- › **The IOM (2021) estimated approximately 200,000 IDPs were displaced in October 2019** due to several flood incidences in Afar, Oromia, SNNPR and Somali regions.
- › **More impactful than such changes in average climate, are changes in extreme events.** An increase in droughts, particularly in the South, is affected by this trend during spring (Lyon, 2014; Zeleke et al., 2017).
- › **While average precipitation is projected to increase, temperature will increase further and therefore evapotranspiration.** Results from climate models show that this drying effect from temperature increases cannot be balanced by increasing precipitation, thus leading to an increase in drought conditions (Haile et al., 2020b)

- › **An increase of local monthly temperature of one degree leads to a roughly tenfold growth in displacement over time in Somalia, which borders Ethiopia.**
- › **Similarly, where average monthly rainfall declines from 100mm to 50mm, anticipated internal displacement doubles**  
(Thalheimer, 2023).
- › **The number of internal climate migrants in Ethiopia could nearly triple by the middle of the century (Rigaud, et al., 2018).**



- › **Citing DTM Site Assessment data (November 2017 to May 2022), drought** is most commonly reported as the primary driver of displacement in Somali resulting in 14,679,535 IDPs before conflict and 6,327,784 IDPs during the Tigray conflict.
- › **Gender is a factor in people movement driven by climate variability in Ethiopia.** (e.g., Gray and Mueller, 2012)
- › **In northern Ethiopia, previous research has found that the prevalence of drought** predominately leads to short-term and short-distance migration (Hermans and Garbe, 2019).
- › **Over 4,5 million people were displaced as of April 2022.** Since November 2020, the Northern Ethiopia Crisis has been the primary driver for displacement. That said, human mobility related to climatic change and disasters has been more typical as a displacement driver, prior to the Tigray conflict.

- › **Out-migration occurs most in hotspots of socio-economic pressure, where human migration, land degradation and climate variability collide** – in Ethiopia, largely in the northern highlands and central parts of the Great Rift Valley. **Grasslands where cropland expansion occurs are hotspots of in-migration.** (Hermans-Neumann et al., 2017).
- › **Generally, out-migration from rural areas in Ethiopia is understood as short-term when responding to locational advantage or food impacts.** It is generally longer-term, including international, where households have higher educational or skill levels, though this effect is strongest in smaller households (Tegene and Penker, 2016).
- › Already, between 2007 to 2013, **one third of village households experienced rural to urban migration** in Ethiopia. (Bezu and Holden, 2014).

# Conflict

- › Whereas political instability triggering violence or conflict can drive internal and cross-border migration, **“there is no consensus on the causal association between observed climate change and conflicts”** (IPCC, 2022: 4-54).
- › **In conflict-driven displacement, reintegration remains the most common durable solution** in DTM assessed sites from November 2017 to February 2020, and continues to rise over time.
- › **For pastoralists, mobility is generally viewed as an adaptation strategy to resource scarcity and climatic change.** They are also prone to conflict, due to loss of land to agriculture, land tenure issues, resource scarcity and weakening social institutions and large-scale land investments that can contribute also to a lack of mobility.

# MoUs and major project partners...



- Ethiopia Forest Development-JC (MoU)
- Ethiopia Wetland & Natural Resources Association (MoU)

- IOM Addis; IOM London
- IOM Gambella Region
- Gambella Bureau of Agriculture



Yayu Coffee Forest Biosphere Reserve, Illubabor Zone of the Oromia Regional State.