

Whose pain counts?

A computational text analysis of inequalities in disaster impacts reporting

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Do not edit

How to change the design



What comes to mind when you think about disaster impacts?

ⓘ The Slido app must be installed on every computer you're presenting from

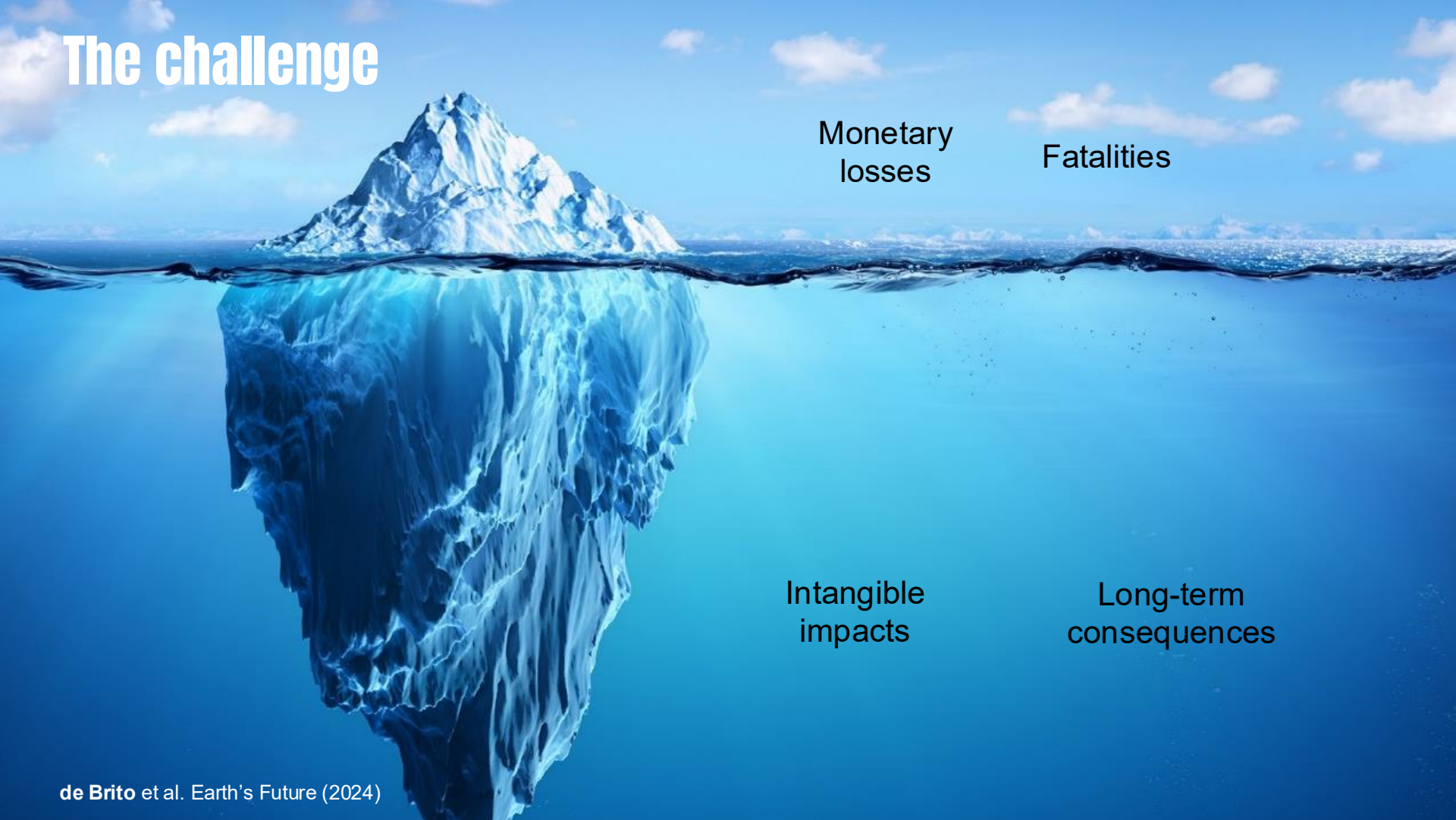
slido

Governments make key decisions about adaptation based on impact data

But what if the data systematically underrepresents certain types of losses and groups?



The challenge



de Brito et al. Earth's Future (2024)

Why do we need impact data?

- **identify** hot spot areas
- **decide** on adaptation measures
- **create** impact-based forecasting

How is attention to disaster impacts distributed in scientific literature?



Mapping biases in scientific evidence on disaster impacts

Scientific attention can

Shape public perception



Influence policy response



Impact the allocation of funds



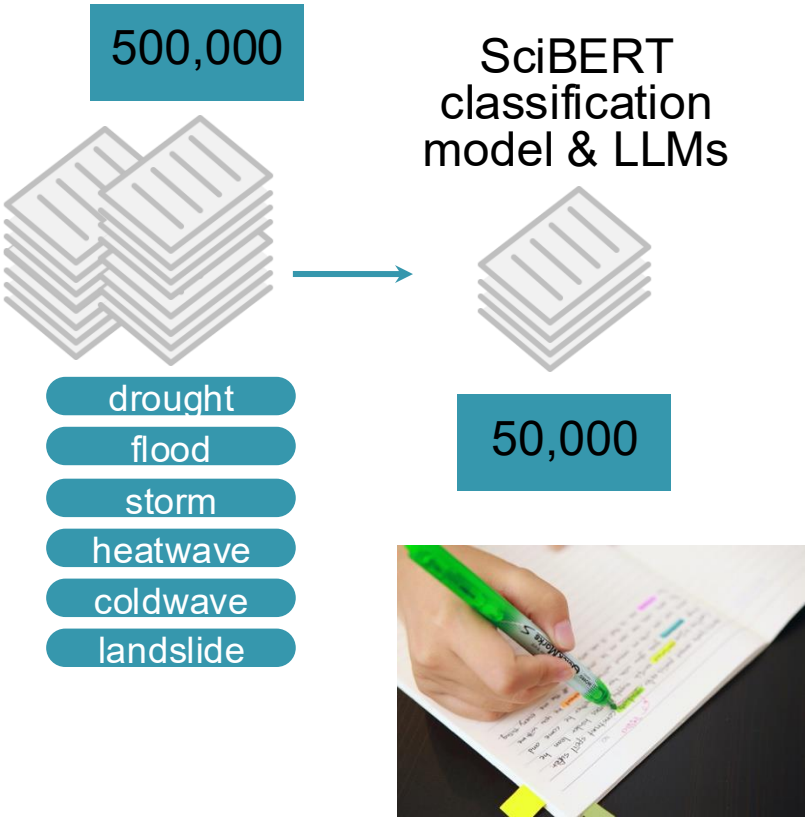
Carvalho, T.M.N., Niekler, A., Kuhlicke, C., Zscheischler, J., de Brito, M.M. (2026, accepted) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research. Communications Earth and Environment. doi: 10.21203/rs.3.rs-6095740/v1



Dr. Taís Carvalho



Dr. Andreas Niekler

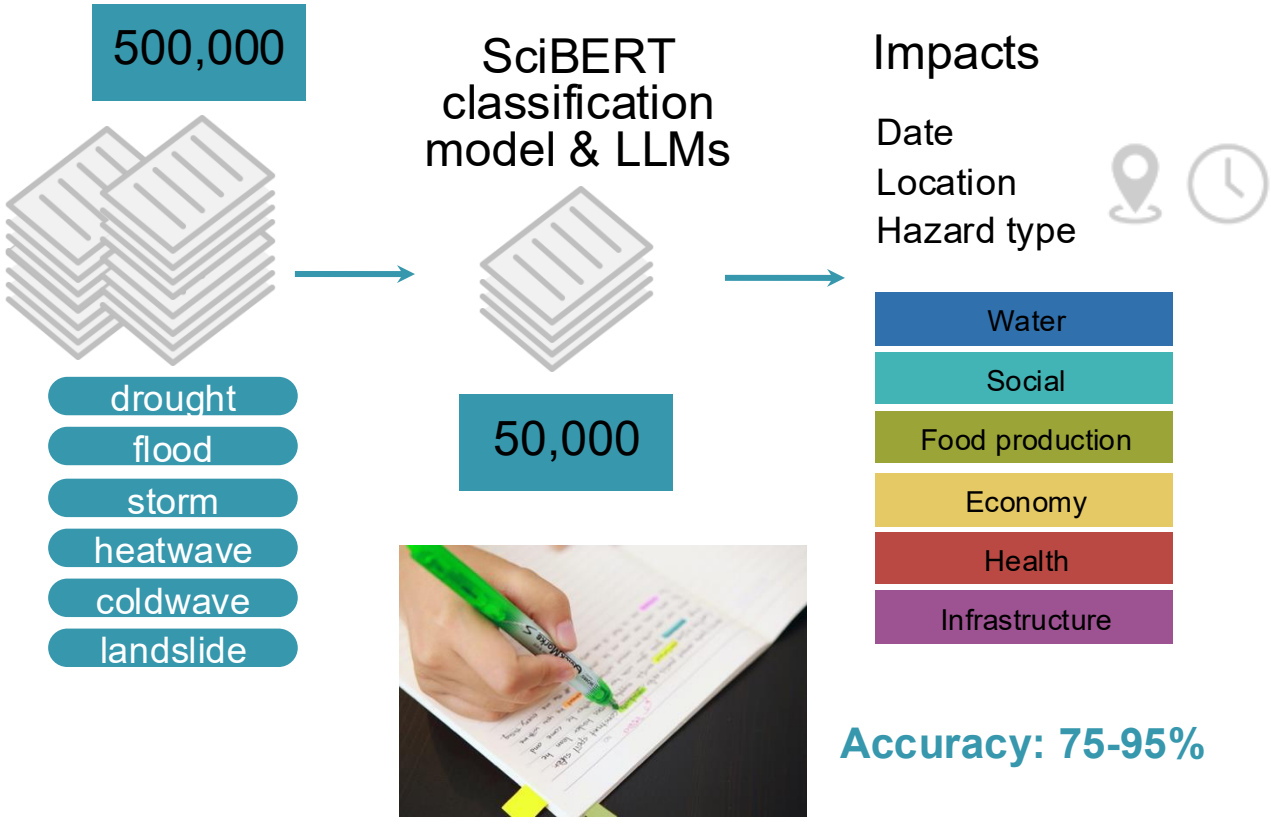


Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research

Filtering to remove intruder keywords

contentment. Negative emotions were mainly triggered by the flood of new information and study-related factors, while positive emotions were associated with the supportive attitude of teachers and the freedom of university life.

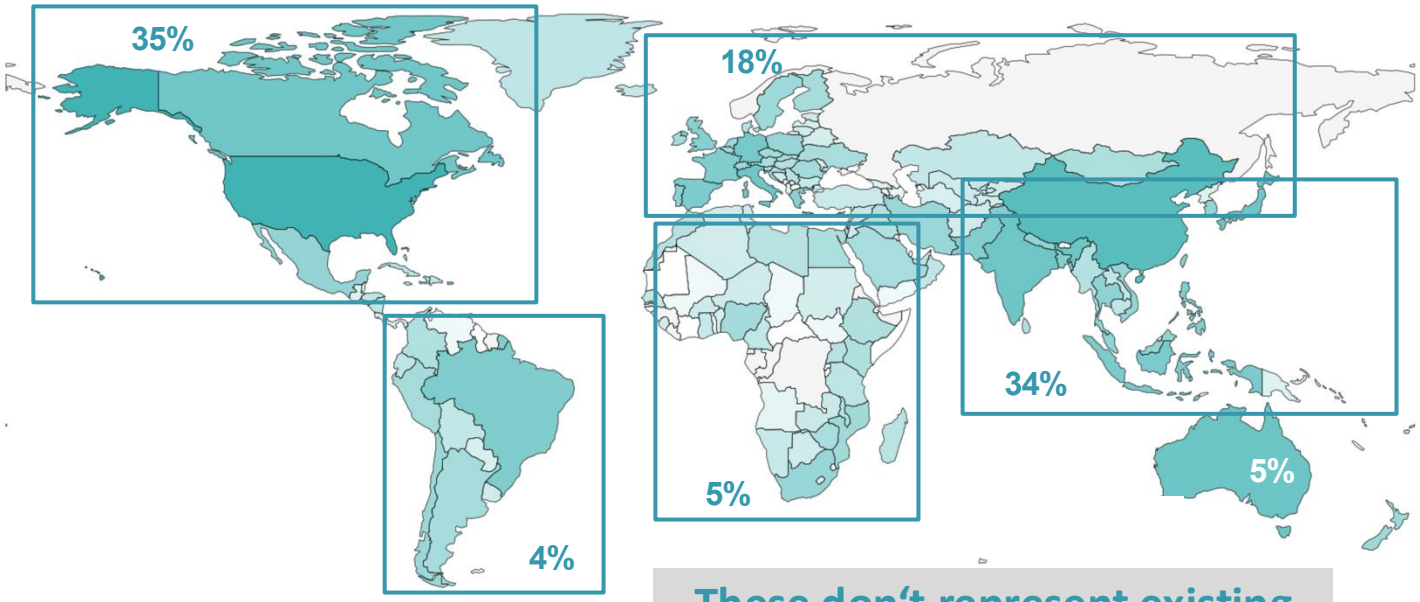
Objective. There is a drought of effective treatments of knee osteoarthritis (OA) and new therapies are needed. The present study has been conducted to establish an initial estimate of effectiveness of intra-articular (IA) injection of a proprietary 2.5% cross-linked polyacrylamide hydrogel (PAAG) for the treatment of knee OA symptoms and signs.

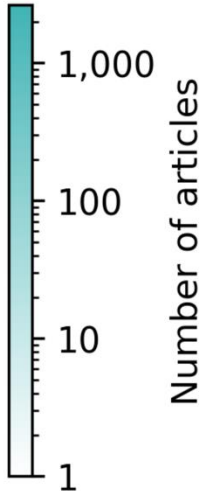


Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research

Open-access English research on climate impacts from 1900 to 2025

Location of the case studies





These don‘t represent existing knowledge, but attention!

Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research



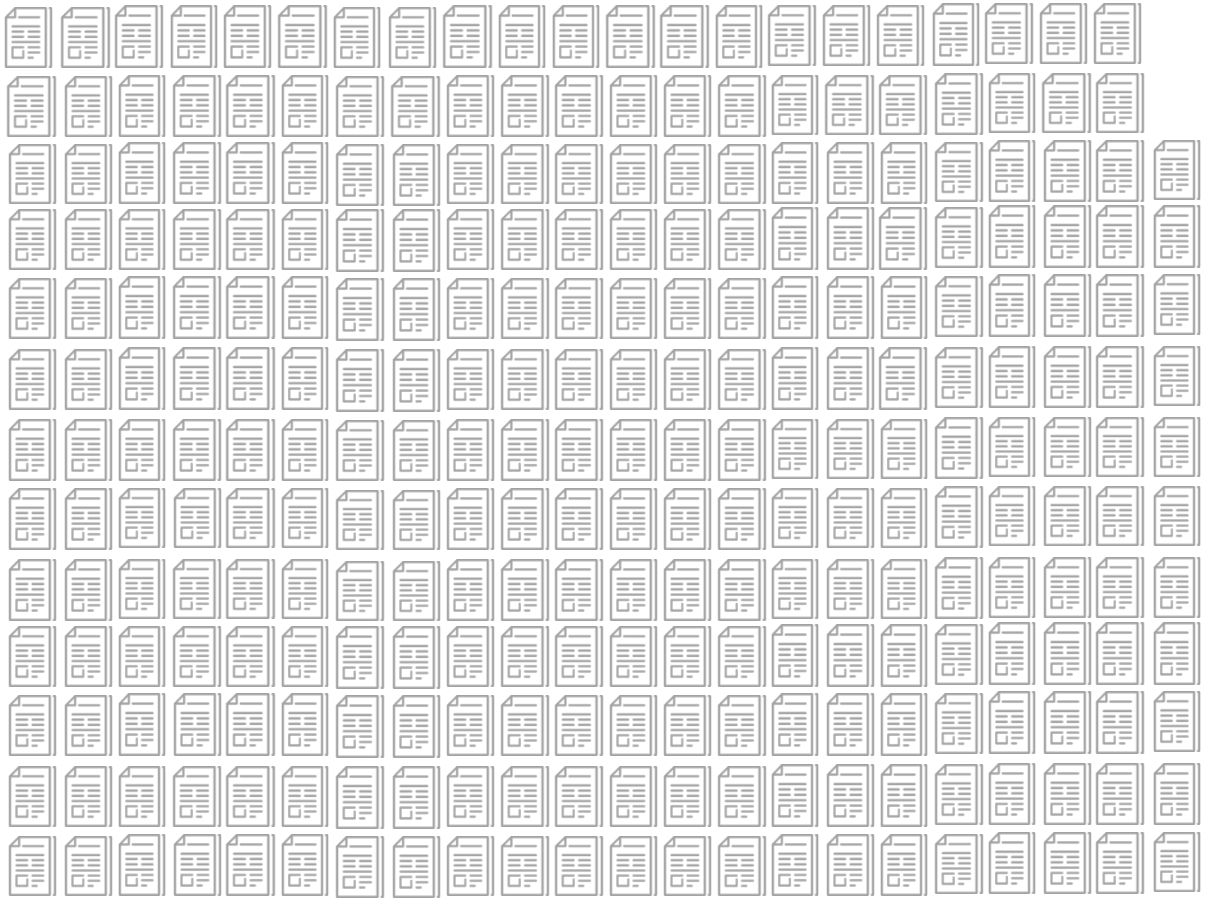
Hurricane Katrina, 2005



Typhoon Durian, 2006

Hurricane Katrina, 2005

1400 fatalities 278 studies



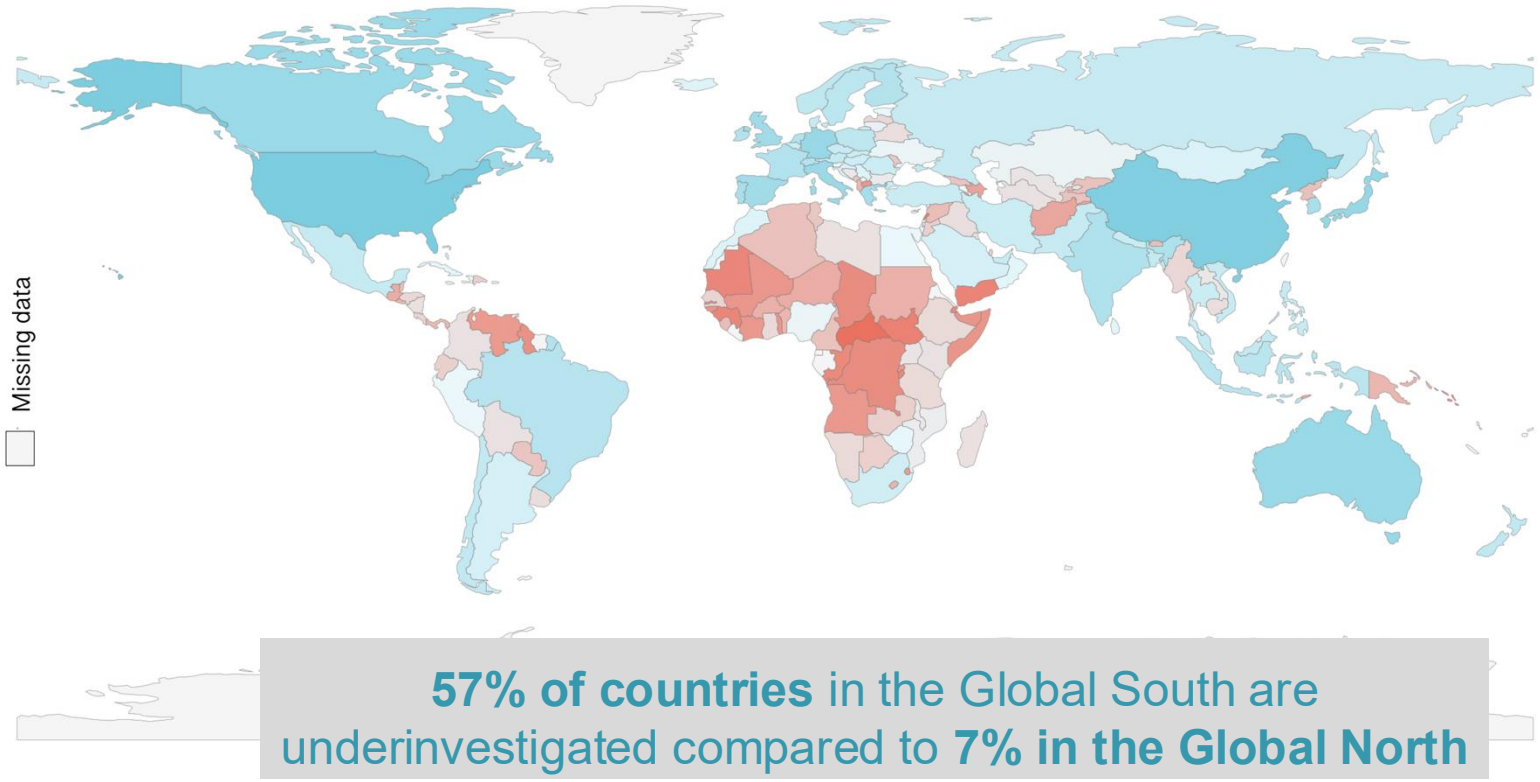
Typhoon Durian, 2006

1500 fatalities

2 studies

Disasters in low-income countries need to be **10x more fatal and affect 200x more people** for their impacts to be studied

Scientific attention vs socioeconomic vulnerability to natural hazards



57% of countries in the Global South are underinvestigated compared to **7% in the Global North**

Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research

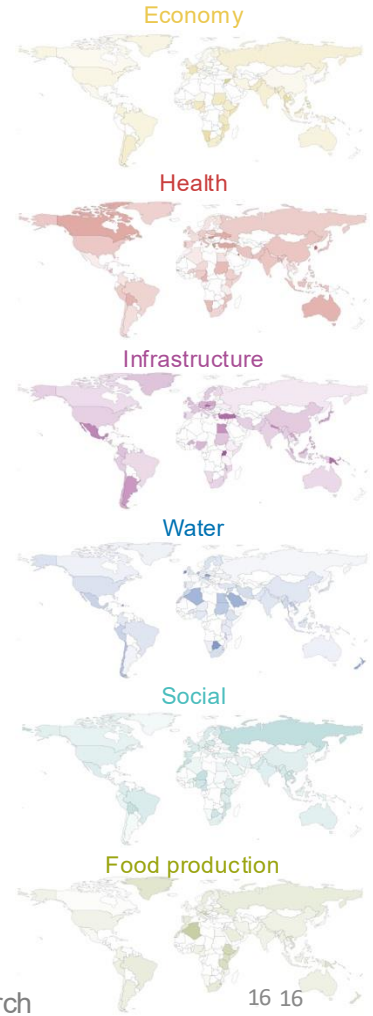
When impacts are missing from data, they disappear from decisions

Skewed understanding of **where risks are highest**
Misallocation of **funding**
Reinforcement of **inequalities**



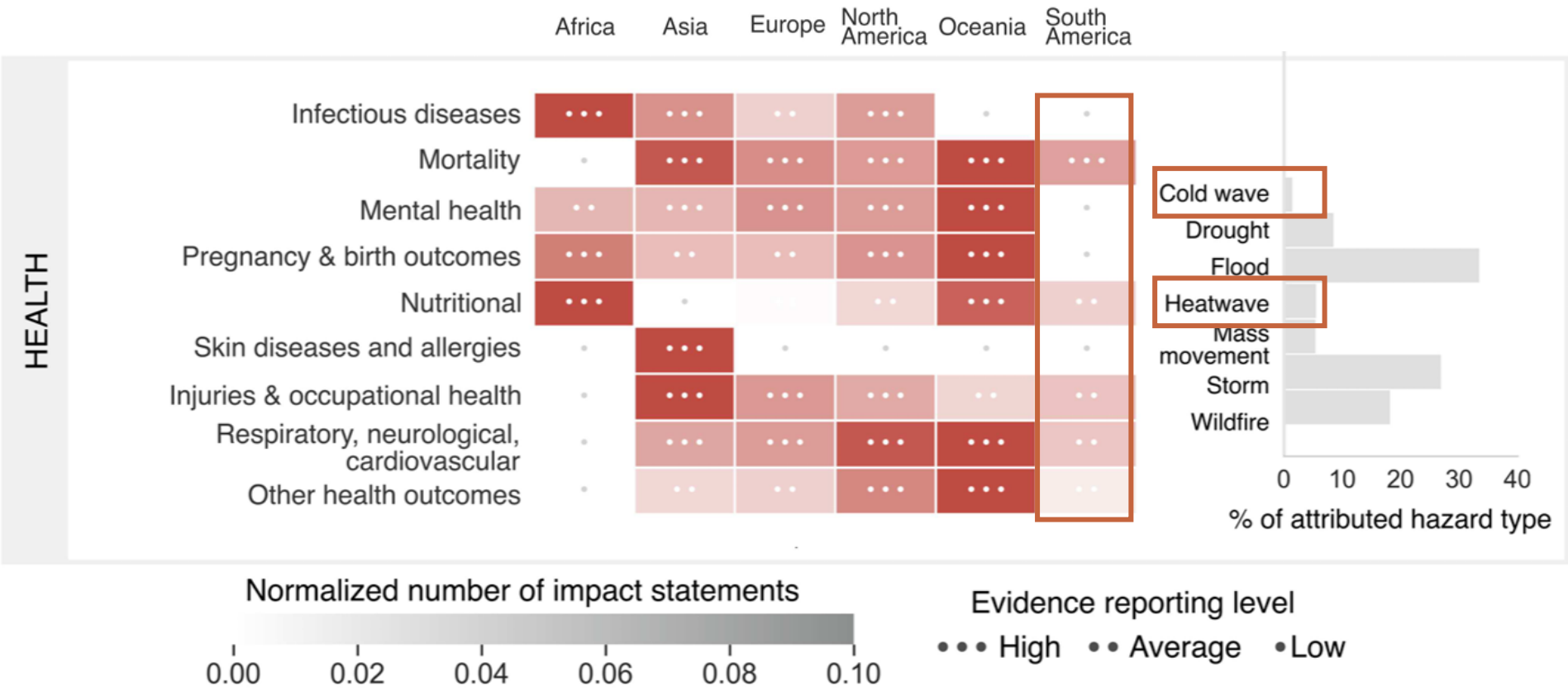
Not only where, but also what: research on systemic impacts is missing





Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research

Impacts per continent



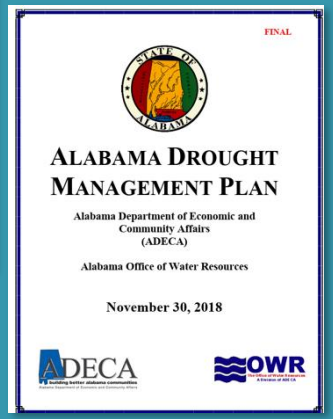
Carvalho et al. (2026) Global synthesis of peer-reviewed articles reveals blind spots in climate impacts research

Other ongoing studies

An example of monitoring adaptation



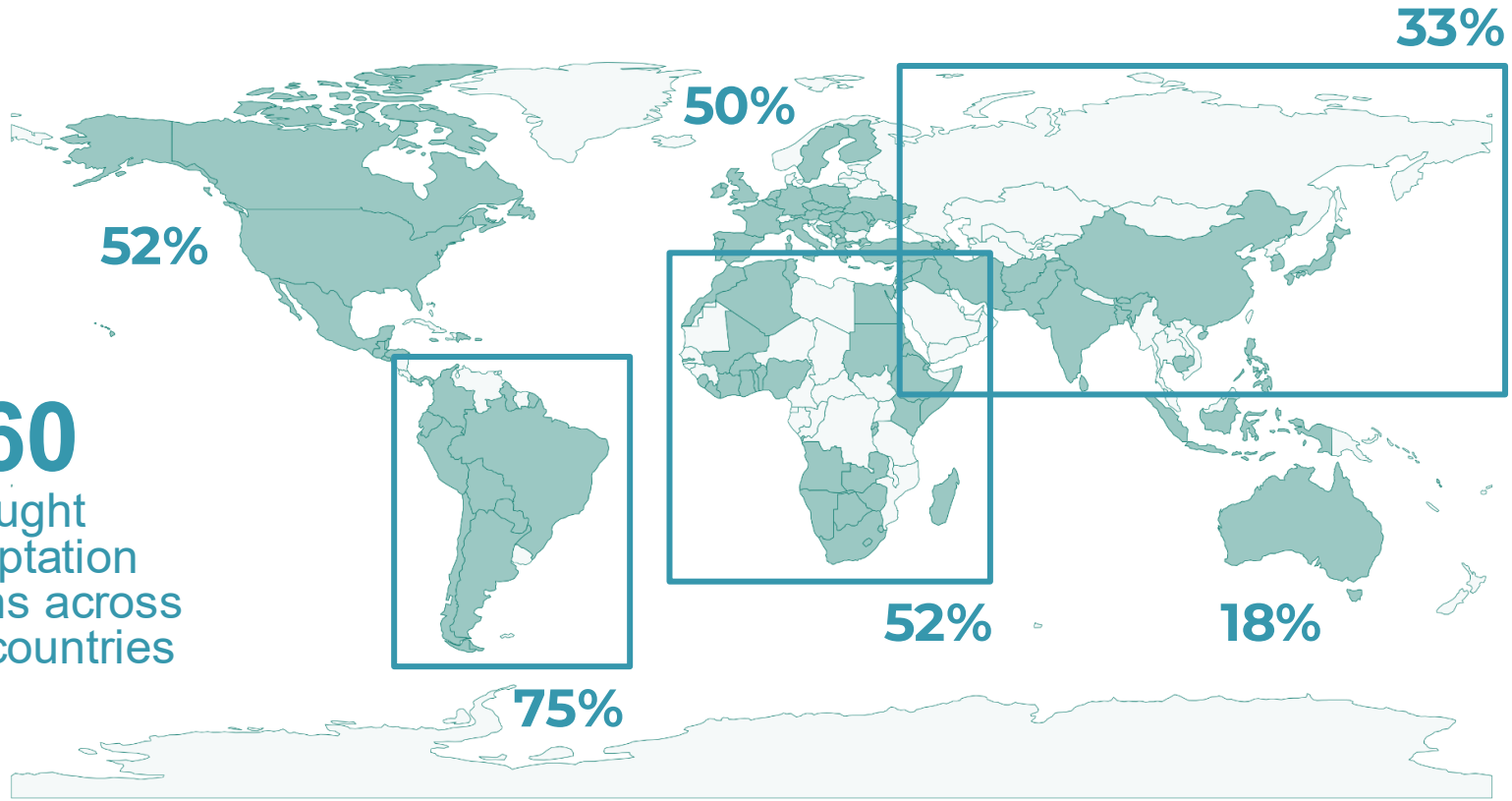




National or subnational drought plans



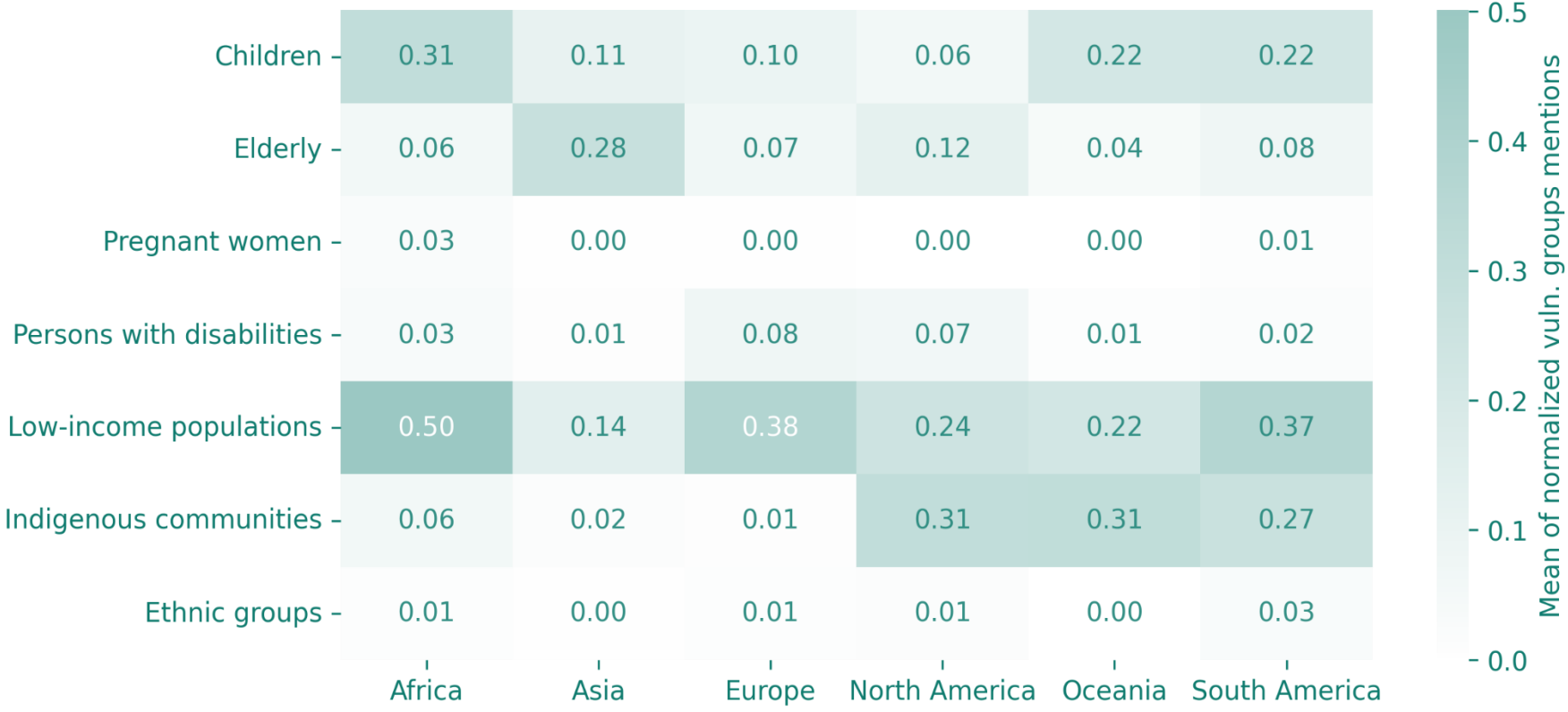
Represented countries: 45% of the documents are in languages other than english



360
Drought adaptation plans across 95 countries

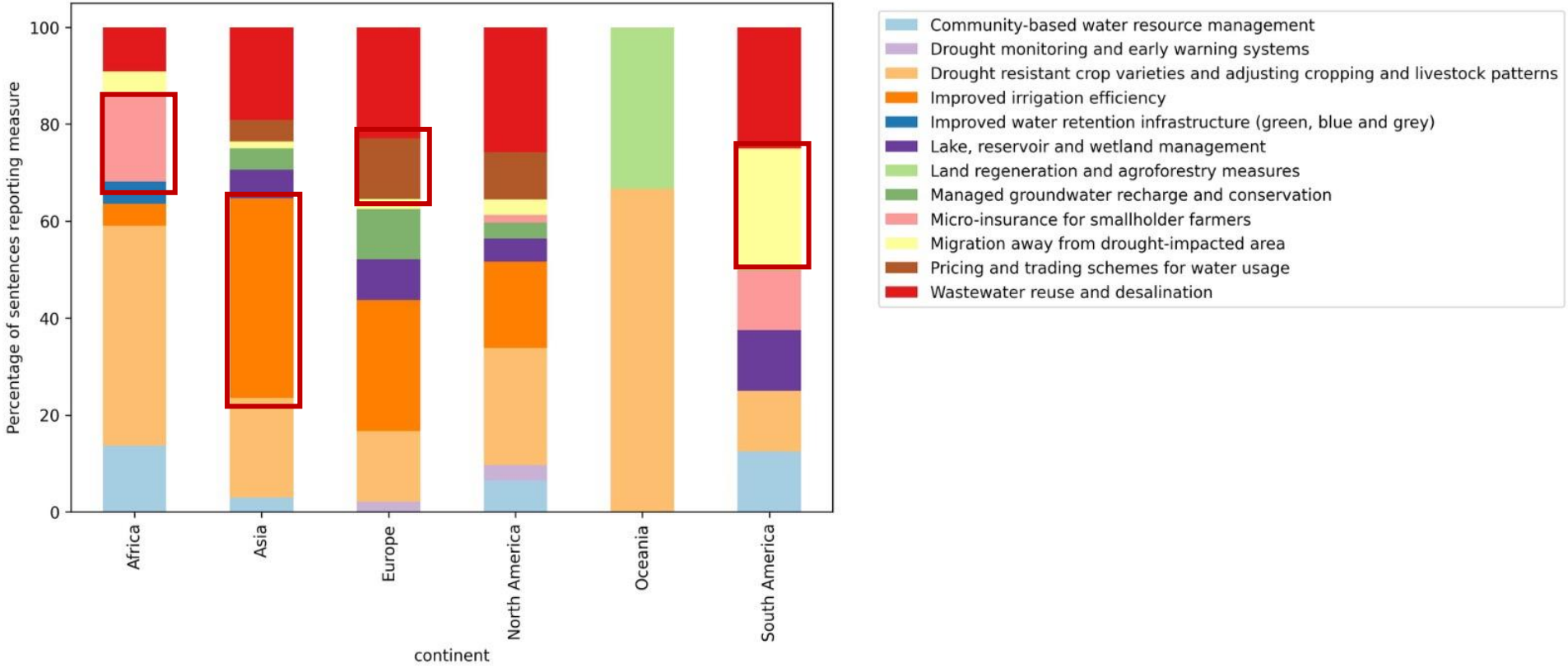
Which vulnerable groups are considered in drought adaptation plans?

Work in-progress



Describred adaptation measures

Work in-progress



Key takeaways

- Scientific publishing reinforces existing inequalities
- Investigation of issues that are hard to quantity
- Which voices are heard (or not!)



Interested in collaborating?
Get in touch:
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