

COP30: For the Sciences of Differences and Diversities at the Amazon Conference

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Exactly two years ago, the Intergovernmental Panel on Climate Change (IPCC), the United Nations body responsible for assessing science related to climate change, released the Sixth Assessment Report (AR6) on Impacts, Adaptation, and Vulnerabilities. The report highlights the risks of ineffective global climate adaptation strategies in safeguarding and protecting human lives and biodiversity amid the warming of land surfaces and ocean waters over this decade.

The Sixth Assessment Report (AR6) is the first in the series to deeply examine the risks of climate change for populations in cities of the Global South, emphasizing that "in urban contexts, observed climate changes are impacting human health, livelihoods, and critical infrastructure. Multiple climate and non-climate risks affect cities, settlements, and infrastructure, and at times coincide, exacerbating damages".^{vi}

With high confidence, the IPCC researchers (2022) underscored that the lack of investment and prioritization for the effectiveness of Article 7 of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), which sets the global goal of enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change, is now having direct effects on living conditions in urbanized areas. As highlighted by the UN-Habitat study, "the urban population continues to grow, and it is projected that cities worldwide will have an additional 2.2 billion inhabitants by 2050. At the current rate, the urban population is expected to increase from 56% of the global total in 2021 to 68% by 2050".^{vii}

This year, urban populations in the capitals and major cities of Latin America, Africa, Asia, and the Middle East are experiencing the impacts and effects of a decade of high temperatures, according to a study published by scientists from the World Meteorological Organization (WMO). For the WMO, the 2015-2024 decade is the hottest in the planet's temperature history, with 2024 likely to be the hottest year on record, "with a global average temperature of more than 1.5°C above the 1850-1900 average.""iii

Extreme heat events, including heatwaves and extreme temperatures, have intensified in cities and exacerbated the effects of atmospheric pollution, directly impacting the functioning of key urban infrastructures such as: health and housing conditions, access to and availability of food, access to public and private transportation services, public and private hospital services, educational activities (primary, secondary, and university education), electricity supply, and drinking water supply.

In Brazil and most developing countries^{ix}, the warming of urban land in medium and large cities is responsible for economic losses and increased inequalities in urban and rural areas. The study "The semiarid in gender perspective: sexual violence against girls and adolecents and the impactof prolonged periods of drought", the sixth publication in the Iyaleta Reports series, demonstrates the relationship between inequalities and Gender-Based Violence (GBV). In this study, which marks the second phase of the research "Climate Adaptation: an intersection Brazil 2030," conducted by the Ivaleta Research Association¹⁰ with support from the Climate







and Society Institute (iCS), scientist Emanuelle Goes highlights that in Brazilian semi-arid region, "72.4% of girls and adolescents in poverty contexts were victims of sexual violence in the semiarid," underscoring the impacts of prolonged droughts as an extreme climate event.

This is the context that mobilizes us as researchers from the Ivaleta Research Association^x to advocate for scientific exchange, ensuring the expansion of knowledge in implementing the "United Arab Emirates Framework for Global Climate Resilience,"xi, in this year marking the 10th anniversary of the Paris Agreement, with the 30th Conference of the Parties to the UNFCCC (COP30 – Amazônia) taking place in November in the city of Belém, Pará (Brazil).

COP30 occurs at a deeply troubling moment in global diplomatic relations, given the political rise of fascism in both developed and developing countries, reshaping governance forms that impact humanity conditions on a planetary scale. This affects climate goal negotiations and the financing of **Science** for climate adaptation, consolidation of mitigation efforts, and slowing the **energy transition** responsible for eliminating the exploitation, production, transformation, and consumption of fossil fuels and their derivatives.

The COP30 in the Amazônia region is a Latin America's Conference and presents significant challenges in the field of multilateralism, as highlighted by Ambassador André Corrêa Lago in his first communication as COP3- President. At the same time, it also brings great ambitions regarding the approval of the New Collective Quantified Goal on Climate Finance (NCOG), with a value of 1.3 billion dollars, to ensure the implementation of National Adaptation Plans (NAPs) and the financing (public and private) of adaptation actions in developing and island countries in the Latin American and Caribbean region.

The above points are structural for the negotiations of the Global Goals on Adaptation (GGA), in which the Iyaleta Research Association sees a challenge in defining global adaptation indicators and metrics for water and sanitation, health, food and agriculture, infrastructure, culture and heritage, gender, human rights, and housing. These indicators should monitor the progress of climate adaptation by enhancing the resilience of living conditions in urban areas through ecosystem recovery and reducing the impacts and effects of climate change.

To this end, we focus on expanding Science and Capacity Building at COP30, considering the challenges faced by Parties, National and Subnational Governments in developing adaptation plans, actions, and strategies that consolidate financing, implementing climate governance that eliminates intersectional inequalities imposed by carbonization in Global South cities. This is a priority to be negotiated in the Subsidiary Body for Implementation (SBI62 and SBI63) of the UNFCCC.

We believe that this expansion of Science and Capacity Building should occur in the Blue Zone^{xii} of the Conference of the Parties, as a pathway to scientific diversity, access and accessibility to research, training, techniques, technologies, and possibilities for transparency, transfer, and exchange of knowledge, enhancing the influence of scientists, researchers, and scientific research centers from Latin America, Africa, East Asia, and the Middle East. This expansion will enable the approval and implementation of adaptation indicators and metrics and financing goals, responsible for reducing the planet's temperature by up to 1.5° C and eliminating inequalities in the Global South.





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^{vii} ONU-Habitat. Available at: <u>https://brasil.un.org/pt-br/188520-onu-habitat-popula%C3%A7%C3%A3o-mundial-ser%C3%A1-68-urbana-at%C3%A9-2050</u>. Accessed March 12, 2025.

^{viii} World Meteorological Organization (WMO). Available at: <u>https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level</u>. Accessed March 12, 2025.
^{ix} With high confidence, the AR6/IPCC (2022), p. 13, highlights.

* Non-Governmental Organization (NGO) Permanent Observer Member of the UNFCCC.

^{xi} Report of the Conference of the Parties (COP), acting as the Meeting of the Parties to the Paris Agreement, during its fifth session, held in the United Arab Emirates from November 30 to December 13, 2023.

^{xii} A *Blue Zone* – It is a pavilion under the authority of the United Nations. The space is operated by the host country on a commercial basis, in order to provide the Parties and admitted observers with a dedicated space to hold their own private meetings and office accommodations.





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^{vi} IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001.