CLIMATE CHANGE, DECENT WORK AND WORKERS HEALTH

VECTOR-BORNE DISEASES

In 2024, Brazil exceeded its worst-case projection for dengue cases in June 2024, with a record 5.5 million infections reported, representing a 240 per cent increase from the 1.6 million cases recorded in 2023, which was already among the highest on record [2]

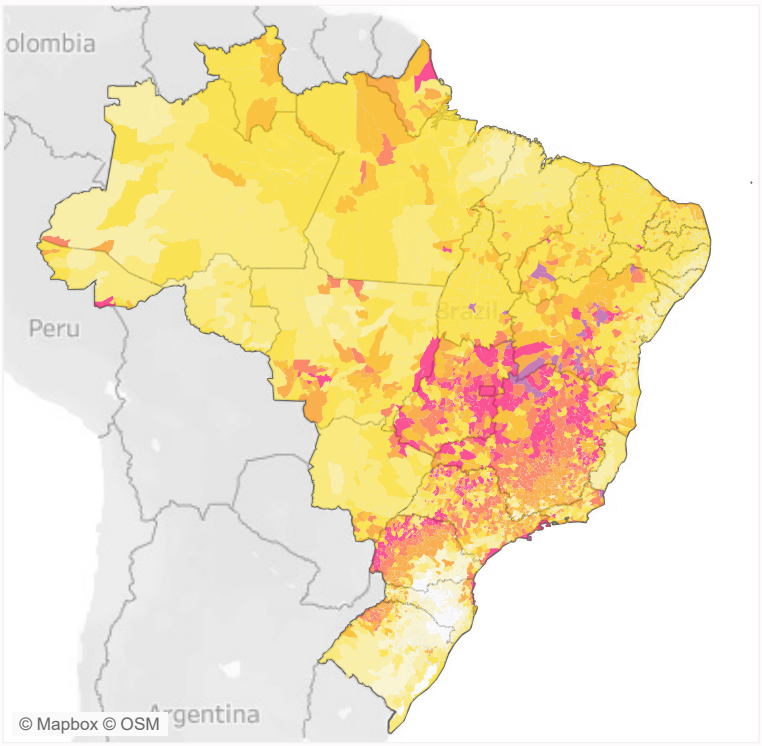
Agriculture workers are among those most exposed to climate hazards, yet frequently have no choice but to continue working, even if conditions are dangerous. The ILO selected six major impacts of climate change on occupational health, based on their severity and effect magnitude on workers: excessive heat, UV solar radiation, extreme weather events, air pollution, vector-borne diseases, and agrochemicals [1].

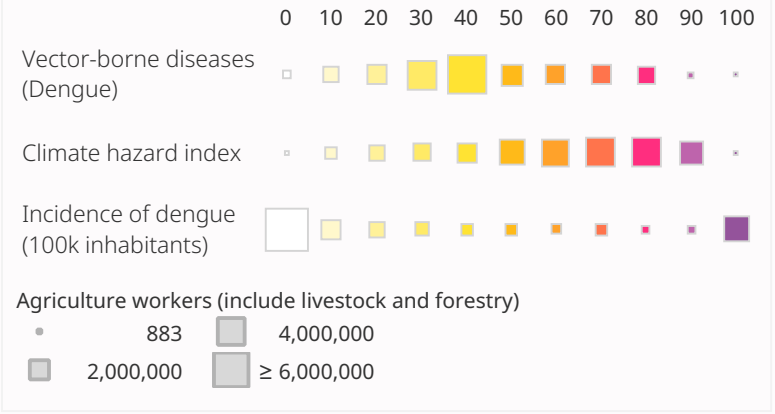
Vector-borne diseases score is estimated by integrating Climate Hazard Index* related to the occurrence of dengue, zika and chikungunya arboviruses [3], Incidence of dengue per 100,000 inhabitants [4]

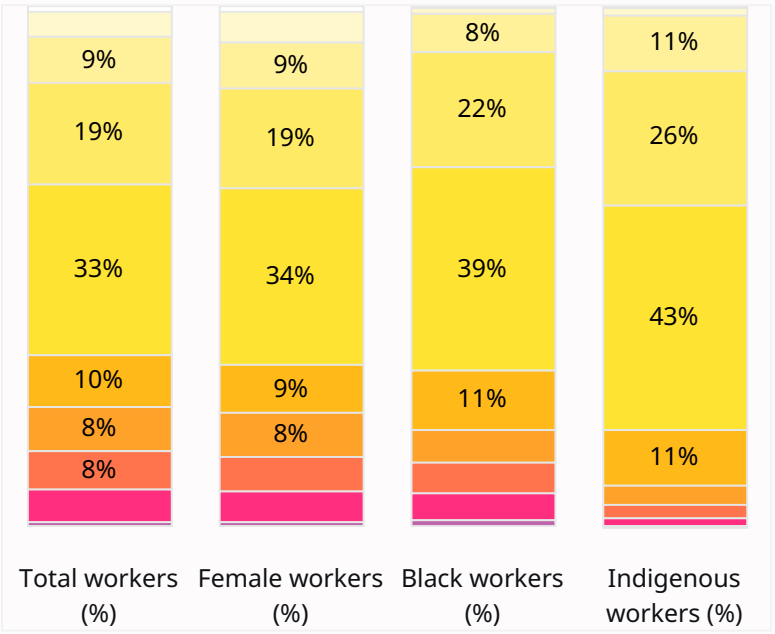
Vector-borne diseases (Dengue)

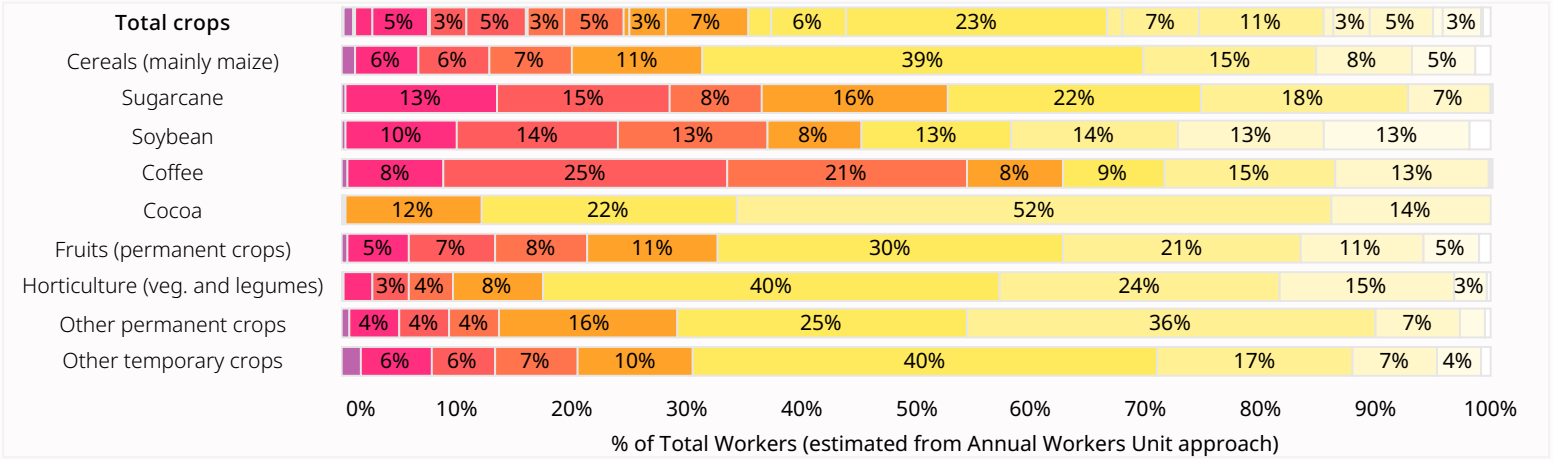
0 10 20 30 40 50 60 70 80 90

scores above 50 are considered high









Sources: 1. Ensuring safety and health at work in a changing climate | International Labour Organization (ILO); 2. https://www.dengue.com/Dengue-outbreak-in-Brazil-2024 3. AdaptaBrasil: https://sistema.adaptabrasil.mcti.gov.br/ 4. Índice de Desenvolvimento Sustentável das Cidades – Brasil. https://idsc.cidadessustentaveis.org.br/ * Climatic variations in temperature (minimum and maximum), precipitation, thermal amplitude, number of heat waves and relative humidity related to the occurrence of dengue, zika and chikungunya arboviruses, based on a 20-year interval.

This research is funded by the British Academy's ODA Challenge-Oriented Research Grants 2024 Programme (IOCRG\100945), supported under the UK Government's International Science Partnerships Fund.

University of Nottingham Rights Lab