

AGORA: an enabler for disaster risk reduction (DRR) and climate change adaptation solutions

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KEY FEATURES

- **Holistic and tailored interventions:** provides a comprehensive view of the specific risks and vulnerabilities within a particular territory to better prepare and respond to a crisis
- **Data-driven decision making:** relies on accurate hazard-exposure and risk mapping via remote sensing and geographic information systems (GIS) tools to inform planning, allowing for evidence-based decision making
- **Community-based and people-centered:** encourages active involvement of local communities in identifying risks and designing priority solutions, fostering a sense of ownership and resilience
- **Multi-stakeholder collaboration:** facilitates collaboration with various stakeholders from the onset, especially local authorities and CSOs who are the first responders when disasters strike
- **Long term sustainability:** integrates risk reduction measures into local planning frameworks and strengthens the capacity of local actors to prepare for and respond effectively to disasters

AREA-BASED RISK ASSESSMENT (ABRA)

Using geospatial analysis and relying on both locally available data and global datasets, the ABRA assesses natural and/or anthropogenic hazards, vulnerabilities, and capacities within a target territory to understand and address disaster risks effectively. It includes:

1. **Hazard identification** (e.g., floods, earthquakes, wildfires, etc.)
2. **Exposure mapping:** population, infrastructure, and environment that is located in a hazard prone area
3. **Vulnerability analysis** to understand the extent to which population and/or assets are susceptible to and/or unable to cope with disasters
4. **Capacity analysis** to identify existing resources, skills, and capacities within the community that can be mobilised for DRR/disaster risk management (DRM)
5. **Risk mapping and analysis** integrating hazard exposure, vulnerability, and capacity data to map areas of highest risk and areas with greater resilience.

Case studies

Ukraine: multihazard analysis and DRR planning

Between 2019 and 2022, the 3P consortium, comprised of Acted, IMPACT Initiatives (IMPACT), Right to Protection, Danish/Austrian Red Cross, and Ukrainian Red Cross Society, has been implementing a multi-year DRM programme to enhance DRR capacities and community resilience to a range of hazards, including anthropogenic, natural, and conflict-related vulnerabilities. Involving close collaboration with local authorities, stakeholders, and communities, projects use comprehensive multi-hazard ABRA to improve the availability of localised data on risk exposure and enable better mitigation/response/emergency planning and preparedness efforts to mitigate these risks. Simultaneously, targeted trainings and material support bolster the capacities of local authorities and first responders for disaster readiness, along with regular coordination and advocacy for policy change and investments in DRR.



Fig 2: Integral wildfire hazard index, Kyivska oblast (Kyivska oblast ABRA), IMPACT, January 2023

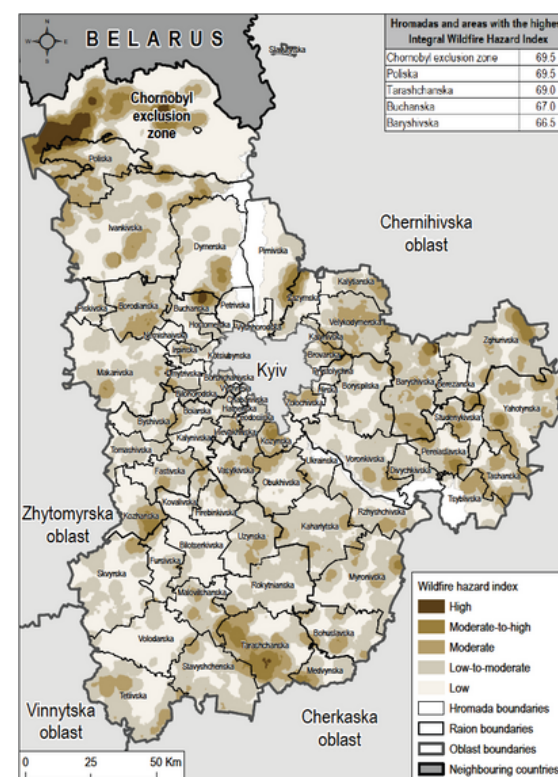


Fig 3: Drought hazard index, Kyivska oblast (Kyivska oblast ABRA), IMPACT, January 2023

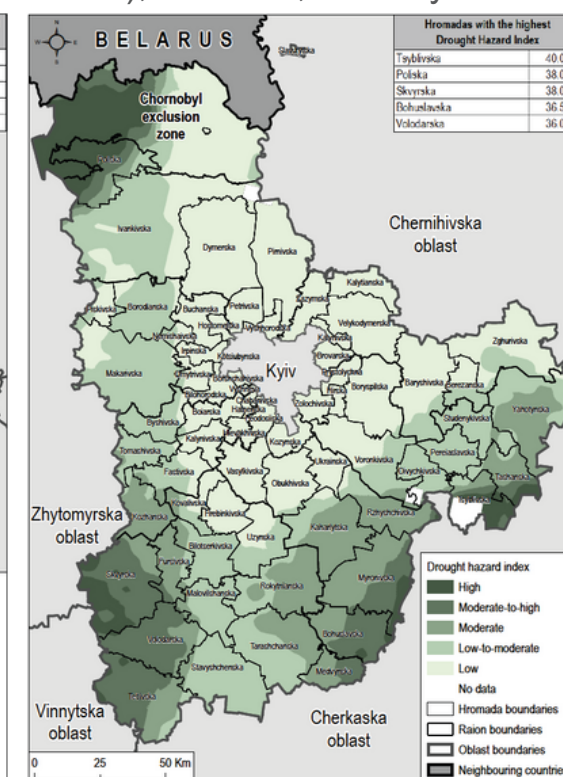


Fig 4: Vulnerability index, Kyivska oblast (Kyivska oblast ABRA), IMPACT, January 2023

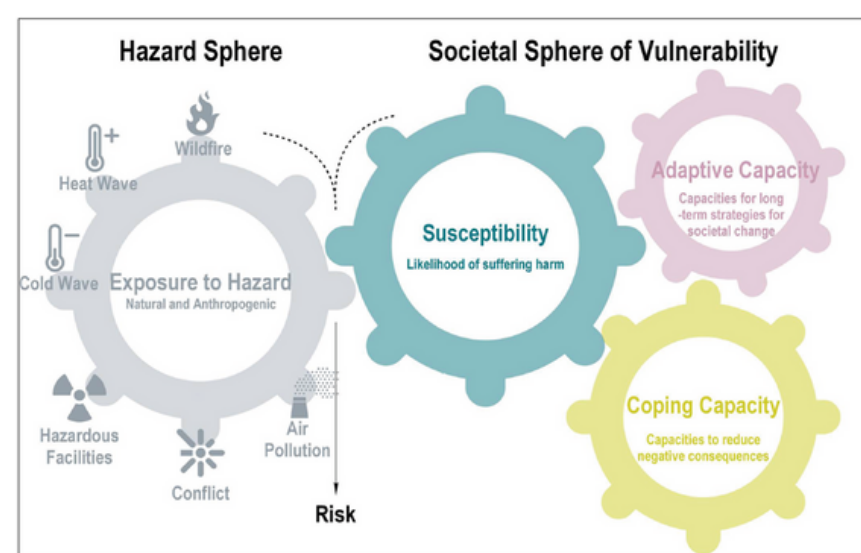
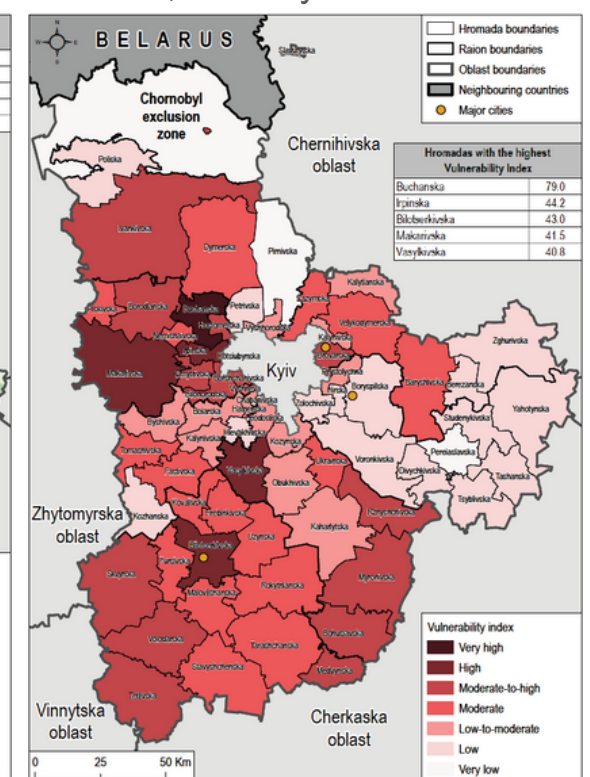


Fig 1: Risk diagramme (Torestsk city council ABRA), IMPACT, July 2020

Sri Lanka: DRR through resilient livelihoods

Acted, IMPACT and local partner CEFE Net aim to promote community-driven DRR measures for marginalised communities in four districts (Ampara, Batticaloa, Vavuniya and Kilinochchi). IMPACT will provide a strong evidence base and granular understanding of disaster risks through two assessments. The ABRA will provide hazard analysis on Divisional Secretariat Divisions level (admin. 3), including floods, drought, cyclones, water pollution, human-animal conflicts, and environmental degradation, factoring in the impact of the economic crisis as well. Exposure of local livelihoods and vulnerability (susceptibility, coping and adaptive capacities) of communities will also be measured. Based on these results and other factors, most at risk Grama Niladharis (GN, admin. 4) will be further analysed through a livelihoods resilience assessment. This will lead to capacity building on DRR strategies and livelihood resilience, and the subsequent implementation of community prioritised DRR measures by community-based organisations (CBO) and households, aimed at bolstering the resilience of fishery and agriculture livelihoods.



Fig 5: Spatial distribution of drought in Sri Lanka 1974-2008, www.desinventar.lk

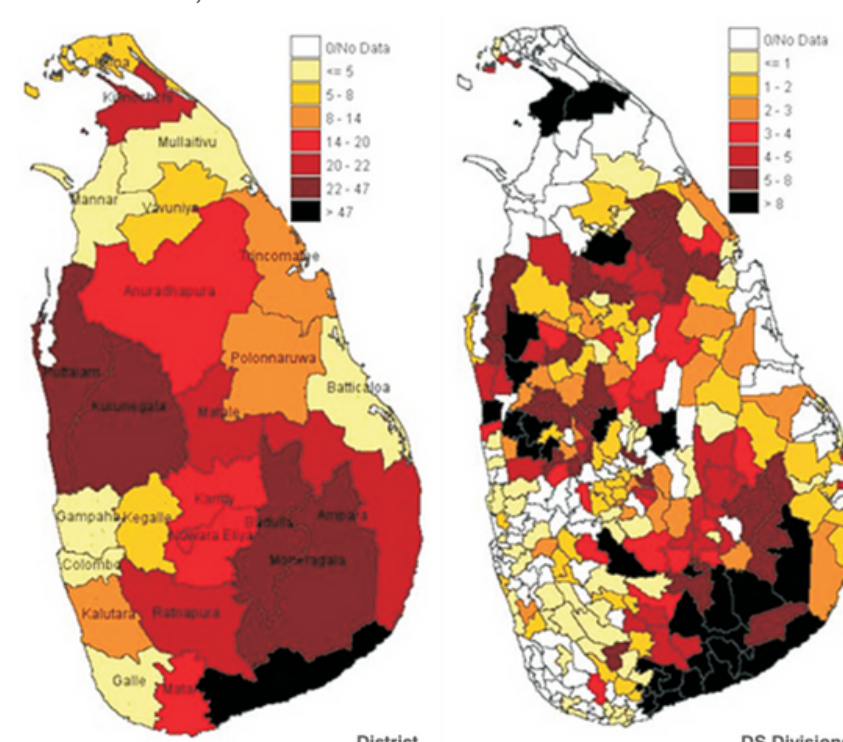


Fig 6: Spatial distribution of floods in Sri Lanka 1974-2008, www.desinventar.lk

