Area Based Risk Assessment in Sri Lanka

Submission by: IMPACT Initiatives

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Country: Sri Lanka

Climate hazard: drought, tropical cyclone, storm surge, flooding, land and forest degradation, loss of biodiversity, and human-wildlife conflict

Specific loss(es) or damage(s) experienced

Climate change poses an ongoing and serious threat to Sri Lanka's economy and human health. Under a worst-case climate change scenario, Sri Lanka's GDP could decline by 7.7 percent, and 90 percent of the country's population could be at medium to high risk of climate impacts by 2050. The annual average fiscal loss associated with disasters in Sri Lanka is estimated to be more than \$380 million. From September 2023, in partnership with ACTED and CEFE Net, IMPACT Initiatives piloted a multi-hazards approach to measure disaster risks in the Northern and Eastern regions of Sri Lanka, where high temperatures, unique and complex hydrological regime, and exposure to extreme climate events make it highly vulnerable to climate change.

The Area Based Risk Assessment (ABRA), carried out by IMPACT Initiatives, is aimed at providing a comprehensive and granular profile of natural and anthropogenic hazards, exposures, and vulnerabilities of communities and their territories at administrative level four (Grama Niladhari – GN), identified, and developed with relevant demographic variables and other statistical data sources. The ABRA is the first entry point to identify where the losses and damages are highly predictable due to the hazard exposure of the population and assets and their pre-existing vulnerabilities (i.e. physical, ecological, social, economic, cultural, and institutional).

The remotely sensed data are processed to represent the spatial distribution and other characteristics of the hazards, and to determine the exposure to the population and agricultural lands. Vulnerability index is calculated based on identified indices of susceptibility, lack of coping, and adaptive capacities. The multi-hazard risk calculation uses the formula Risk = Hazard x Exposure x Vulnerability. The multi-hazards maps produced by IMPACT Initiatives inform local communities, national and local government, and humanitarian and development actors where to prioritise risk mitigation and adaptation actions to reduce losses and damages. By identifying key community vulnerabilities it's possible to inform local development and social protection programming to strengthen resilience.

The ABRA findings also guide the selection of areas for conducting Livelihood Resilience Assessment (LRA), a current ongoing qualitative data assessment that aims to identify from a local perspective what the main hazards are, the damages they cause, and if coping mechanisms exist or could be implemented and prioritized to support adaptation efforts. The LRA is based on a questionnaire conducted interviewing local authorities, community-based organisations, farming and fishing communities, focusing mainly on livelihoods loss and damage. The hazards vary greatly between the areas but mainly relate to floods, droughts and human-wildlife conflict, especially involving elephants. The losses and damages to be identified will cover a range of life loss, health, public infrastructure, housing, and will have a particular focus on livelihoods loss, land degradation, loss of fertility, crops, production, income. The main livelihood impacts already identified are loss of land, income, and productivity, reduced land fertility, reduced fish stocks, damage to farming and fishing equipment. Communities are facing loss of life, increase of transmission of infectious diseases, drinking water scarcity, infrastructure damage, forced migration, among others.

Actions taken and/or planned to holistically manage losses relevant to comprehensive risk management

• Promote livelihood restoration by empowering marginalized communities to effectively implement livelihood resilience-building actions that mitigate the impacts of external stresses and shocks on households and wider community. The community will lead the design and implementation of adaptation solutions that they identified and prioritized.

• Provision of information to local and national authorities, national and international organisations working towards development to overcome data gaps in a participatory and gender-balanced manner. To achieve this, the focal group discussions will be split by gender and age, with male and female groups divided into over 30 and between 18 and 30 years old, aiming at having a broader perspective on how the impacts are perceived and what the priorities are.

• Consultations on the main drivers of losses, identifying pre-existing factors that contribute to the vulnerability, and exiting and prioritized adaptation mechanisms. Local Authorities, CBO/NGOs/INGOs, farming and fishing communities consulted, to identify governance gaps and enhance community participatory planning.

• Inform local actors with ground level perspective on losses and damages to livelihoods to support informed decision-making. Considering the range of local stakeholders involved, the findings will reflect their perspectives, identifying synergies and contrary points of view between the community, authorities, and organizations.

• Mobilize marginalized communities by enhancing technical capacities and strengthening linkages to prioritize DRR actions/strategies that mitigate the impacts of disasters.

• Provide capacity building and training to marginalized communities, disproportionately affected by climate and non-climate hazards, to have a robust understanding and required capacities to undertake DRR actions.

• Bolster the resilience of livelihoods and strengthen networks to support sustainable and replicable actions, then they can lead informed decision-making processes and determine priorities for mitigating impacts of disasters to achieve stronger community resilience. Their reinforced capacities will enhance governance engagement and advocacy capacity in local policy and planning.

• Support marginalized communities in implementing their DRR knowledge and practice to mitigate the risks and reduce future losses.

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On a more concrete matter, the project will identify and mobilize vulnerable households (HH) and Community-Based Organizations (CBO) into clusters based on vulnerabilities, livelihoods, and capacities and engage local NGOs and CBOs to strengthen DRR actions. Facilitate tailored technical coaching for clusters on DRR via livelihood resilience, coaching them to enhance their comprehension of DRR strategies and strengthen CBOs and NGOs' institutional capacities. By providing grants to clusters for implementing priority DRR actions, the project will support operationalization and community-led monitoring of agricultural and fishing livelihood resilience measures. The grants will be of a maximum of \$63,400, allocated based on population size, to implement priority actions. Community-led MEAL methodologies will enhance community engagement and ownership in implementation and monitoring. Individual conditional cash grants or in-kind support will be provided to vulnerable HHs for livelihood resilience actions, thus reducing the risk of losses and damages in the face of future hazards.

The enabling environments and other factors contributing to successful implementation

The project is a partnership between IMPACT Initiatives, ACTED and CEFE Nets, and it builds on IMPACTs long term experience in assessments and evidence-based approaches, the team will provide granular data collected by local enumerators in the local language. The identification of main challenges and priority interventions is based on Key Informant Interviews (KIIs) with local authorities and CBOs/NGOs, and with Focal Group Discussions (FGDs) with farming and fishing community members divided by gender and age to allow an inclusive approach. Acted and Cefe have a long presence in the country, having extensive experience with local engagement and governance support, with field offices in Batticaloa and Vavuniya. Acted's presence in Sri Lanka dates since 2004, after the tsunami, and most of its programming in the country has been focused on climate adaptation and resilience building. Recently, a few projects have been implemented on climate-smart agriculture, nature-based solutions, and marine protected areas. The project also builds on the willingness and engagement of local actors to share data, participate in consultations and data collection activities and support the project in general.

ACTED and CEFE collaborate to effectively implement project activities, build capacities, promote community ownership, and enhance resilience among marginalized communities. They will:

- Establish and maintain partnerships with stakeholders, including government authorities and civil society organizations, to promote collaboration and sustainability.
- Facilitate tailored technical coaching, focusing on strengthening disaster risk reduction capacities and organizational capabilities of community-based organizations and local NGOs.
- Provide mentoring and support to participants, helping them adopt and apply knowledge and skills into their daily practices.
- Conduct livelihood counselling sessions for selected households, assisting them in identifying and implementing individual DRR actions tailored to their livelihoods and capacities.
- Contributes to building community ownership of implemented actions through community-led monitoring and evaluation methodologies.

Expected or actual outcomes from the measures implemented or planned

1. To promote informed decision making by strengthening localized evidence-base on existing hazards, vulnerabilities and capacities in target territories.

2. To mobilize marginalized communities by enhancing technical capacities and strengthening linkages for prioritization of DRR action/strategies that mitigate the impacts of disasters.

3. To empower marginalized communities effectively implement livelihood resiliencebuilding actions that mitigate the impacts of external stresses and shocks on households and wider community.