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Leveraging Social Registries for Climate Action in the Asia-Pacific Region



TETRA TECH

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Impacts of Climate Change in the Region

The Asia-Pacific region is the most disaster-prone region in the world.¹ A significant portion of the population is exposed and vulnerable to the impacts of extreme weather and climate events. People in the region are six times more likely to experience climate and other weather-related hazards than those outside the region.² The impact of these climate-related hazards is staggering. Over a 30-year period (1970 to 2021), a total of 3,612 disasters attributed to weather, climate, and water extremes were reported throughout Asia.³ These hazards caused more than 984,000 fatalities and US\$1.4 trillion in economic losses. In 2022 alone, extreme weather events affected over 64 million people in the region and caused US\$57 billion in economic damages.⁴

These frequent natural hazards disproportionately affect vulnerable populations, including those in the informal economy, women and marginalised groups.⁵ The World Bank estimates that climate change could push as many as 35.7 million people into extreme poverty by 2030 in Asia and the Pacific.⁶ Protecting livelihoods and ensuring food security are essential for enhancing household resilience, enabling communities to withstand and recover from climate shocks and economic uncertainties.

1 UNESCAP (2023). Seizing the moment. Targeting Transformative Disaster Risk Resilience

2 UNWMO (2024). State of the Climate in Asia 2023

3 UNWMO(2023). Economic Costs of Weather-Related Disasters Soars but Early Warnings Save Lives

4 UNWMO(2023).

5 ILO (2024). World Social Protection Report 2024-2026: Regional companion for Asia and the Pacific

6 ESCAP (2024). Protecting our Future Today: Social Protection in Asia and the Pacific



Social protection and climate response

Social protection can play a key role in supporting climate change adaptation and mitigation. Properly designed and funded social protection systems can reduce vulnerability to climate change by directly alleviating income poverty and advancing human development outcomes,

provide income protection for those affected by climate shocks and disasters,⁷ and promote the transition towards a green economy through support for workers to further develop skills and to access new employment opportunities.⁸



Enhancing social registries for climate response

A key element to make social protection systems more adaptive and shock-responsive to climate shocks is to have a good understanding of the population characteristics and information about the potential intensity and likelihood of a shock.⁹ However, many countries operate with social registries focused on collecting data to assess chronic poverty based on proxies that are fixed or change slowly over time, limiting their ability to predict and respond to climate shocks

effectively.¹⁰ Enhancing the quality of social registry data and strengthening its linkages with climate risk data can help improve the efficiency of social protection systems by supporting the identification of individuals vulnerable to climate shocks and informing the design and implementation of adequate interventions to support climate change adaptation and mitigation efforts.

⁷ DFAT (2023). Rethinking Social Protection and Climate Change

⁸ Ibid.

⁹ World Bank (2023). Responsive by Design : Building Adaptive Social Protection Systems in South Asia

¹⁰ World Bank (2022). Revisiting Targeting in Social Assistance: A New Look at Old Dilemmas

Regional Progress Towards Climate Risk Data into Social Registries

The region has made steady progress in efforts to universally expand social protection systems. The share of the population in the region covered by at least one social protection scheme increased from 41% in 2015 to 55% in 2023,¹¹ demonstrating the growth, expansion and use of social protection to face pressing challenges like health crises, climate change, and conflict. The institutionalization of social registries is

progressing across the region, with an increasing number of countries integrating these systems into their policies, strategies, or legislation.¹² However, progress in incorporating variables related to climate vulnerability and linking these systems to climate risk data has been limited. Notable initiatives from Cambodia, Pakistan, and the Philippines demonstrate promising efforts in this area (Box 1).

¹¹ ESCAP (2024). Protecting our Future Today: Social Protection in Asia and the Pacific

¹² WFP (2024). Social Protection Information Systems in Asia and the Pacific

Box 1: Examples of Integrating Climate Risk Data into Social Registries

Cambodia

The government, with support from WFP, linked the IDPoor¹³ to WFP's Platform for Real-time Impact and Situation Monitoring, an online system that integrates real and near-time geospatial, disaster risk and socioeconomic vulnerability data, to support government planning for risk reduction, climate adaptation and adaptive social protection approaches. Now managed by the National Committee for Disaster Management the system can inform the targeting and prioritisation of preparedness, humanitarian response and social protection interventions.

Pakistan

Pakistan is incorporating climatic vulnerability data into its new Proxy Means Test (PMT) and working to map geographic coordinates for all registered households. This initiative aims to balance rural-urban and provincial indicators better and include agro-climatic zone data. By doing so, it seeks to more accurately target populations whose livelihoods are at risk from climatic shocks like floods and droughts.

Philippines

In the Philippines, the government uses an early warning system, in coordination with the Listahanan social registry, to estimate the number of households that may be affected by a disaster.¹⁴ In 2013, during the response to the devastating Typhoon Yolanda, households were filtered by typhoon-affected locations to provide targeted assistance to the most impacted populations.

¹³ IDPoor is a government-owned system that identifies poor and vulnerable households so that they can access benefits such as social transfers, healthcare, and other targeted services.

¹⁴ World Bank (2023). Responsive by Design: Building Adaptive Social Protection Systems in South Asia

Bridging Social Registries and Climate Data: The Path Forward

1. Invest in robust climate hazard and exposure analysis for geographic targeting.

Carry out a climate hazard analysis to consolidate disaster risk management and climate data into a comprehensive national climate hazard map. Integrate this map with social registry data to identify specific areas where low-income households face heightened vulnerabilities to climate risk. By focusing on these high-risk regions, support can be prioritized for the communities most affected by climate change.

2. Improve the integration of climate vulnerability indicators into social registries.

Develop a more comprehensive approach to measure vulnerability by incorporating climate-related indicators into the Proxy Means Test (PMT) to more accurately target populations at risk of climatic shocks. Potential indicators could include physical exposure to climate-related hazards, engagement in climate-vulnerable livelihoods (e.g., fishing, herding, or agricultural labor), and the adaptive capacities of households. In addition, to keep pace with the dynamic nature of climate change and its impacts on vulnerable populations, it is necessary to regularly update this data. Methods could involve on-demand data collection approaches or conducting periodic census surveys every two to three years.¹⁵

3. Identify and register “non-poor” households vulnerable to climate-related risks.

Expand the coverage of social registries to include “non-poor” households that might require temporary assistance due to severe shocks. Given the associated high costs of this process, start by prioritizing areas most vulnerable to climate shocks when planning any expansion of existing social registry coverage. In addition, consider creating a climate vulnerability score to categorize households into high, moderate and minimal risk to facilitate targeted support for climate-vulnerable households, including those not currently benefiting from social protection programs.

4. Progressively build a climate risk index at the household level.

Developing a comprehensive climate risk index that integrates various hazards, exposure levels, and household vulnerabilities is essential for detailed risk mapping and prioritizing support. Such risk index can facilitate well defined and targeted shock-responsive programming.

¹⁵ Barca and O'Brien (2017). Factors affecting the usefulness of existing social protection databases in disaster preparedness and response

5. Enhance government capacities to improve the interoperability and data sharing between social protection, disaster risk management and climate information

Strengthen the capacities of the ministries responsible for social protection, disaster risk management, and climate action to facilitate interoperability and data sharing between their information systems. Efforts should include establishing common identifiers to support system interoperability and cross-checks; defining protocols for data sharing, access, and use by various actors; and establishing inter-institutional arrangements for the governance and management of these systems and their integrated utilization.¹⁶

6. Strengthen multisectoral coordination for adaptive and shock-responsive social protection

The recommendations outlined above will be facilitated by enhanced coordination between the core sectors of social protection, disaster risk management and those involved in climate action. This involves clearly defining the role of social protection within disaster risk management and climate change adaptation and mitigation frameworks, as well as the development of institutional guidelines for adaptive and shock-responsive social protection. Additionally, the establishment of a national social protection and climate task force could bridge coordination gaps and advocate for improved policies and social protection guidelines that foster greater intra-ministerial coordination.



¹⁶ WB (2020). Making social protection information systems adaptive

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