**Strategies for Leveraging
Social Registries
for Climate Action
in LAO PDR**

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Social protection can play a key role in supporting climate change adaptation and mitigation by providing income protection to those affected by climate shocks and disasters, and facilitating a green economy transition through skill development and employment opportunities.

To enhance their effectiveness in responding to climate shocks, social protection systems require robust data on population characteristics and detailed information about the intensity and likelihood of potential shocks.

However, many countries operate with social registries[1] 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.

This brief provides recommendations for enhancing the quality of social registry data and integrating it with climate risk information.
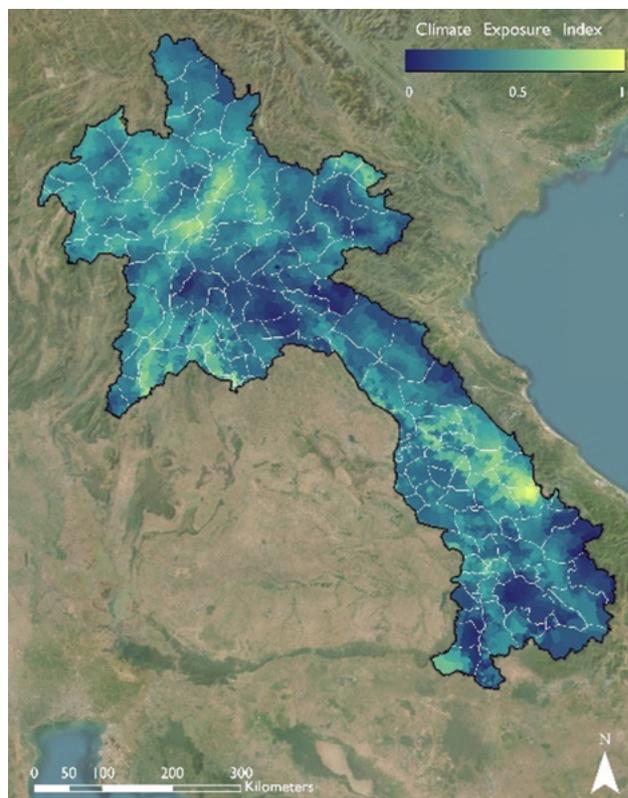
These measures aim to improve the identification of vulnerable populations and inform the design of adaptive and shock-responsive social protection interventions to support climate adaptation and mitigation efforts.

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1   A social registry is a database or system that contains information on households and individuals within a specific population. Its purpose is to provide a centralized and up-to-date data source that can be used for targeting, planning, and implementing social protection programs.

Impacts of Climate Change in Lao PDR

Lao PDR is experiencing significant climate-related hazards, primarily floods, droughts, and extreme heat, exacerbated by climate change. Floods are the most common natural hazard, with 19 recorded events from 1981-2020, impacting 83% of households in Vientiane and causing an average of 60% crop loss during heavy flooding.[1] This poses a substantial risk to the 70% of the population reliant on agriculture. Drought is primarily concentrated in highland areas, while flooding predominantly affects major river basins, with Vientiane being particularly vulnerable. Recent events, such as tropical cyclone YAGI in September 2024, triggered floods and landslides, affecting thousands in northern provinces.

A Climate Risk and Vulnerability Analysis conducted by Tetra Tech (Map 1) shows households located in high-exposure areas. Particularly strong exposure due to agricultural livelihoods based on rainfed agriculture is seen in Oudomxay, Savannakhet, and Vientiane. While fourteen per cent (129,528 individuals) live below the poverty line, an additional 20% (179,174 individuals) live just above it, relying on vulnerable livelihoods.[2]

Map 1: Climate Exposure Analysis

Expanding social assistance to groups with high exposure and high vulnerability to hazards could help address the devastating impacts of climate shocks.

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1   World Bank (2024). Climate Knowledge Portal
2   This data is based on a climate risk and vulnerability analysis conducted by Tetra Tech (May 2024)

Lao PDR's Progress Towards Climate Risk Integration in Social Protection Systems

KEY PROGRESS IN SOCIAL PROTECTION IN LAO PDR

Lao People's Democratic Republic (Lao PDR) has made significant strides in enhancing its social protection systems, particularly in response to climate-related challenges. The government recognises the importance of integrating climate risk data into social protection programming to support vulnerable populations, and overall, has seen increased collaboration among national stakeholders to align social protection efforts with climate-resilient objectives. Recent initiatives have focused on strengthening adaptive social protection systems, which aim to provide safety nets for communities most affected by climate shocks.

Lao PDR's key progress includes:

- The development of national policies, like the National Social Protection Strategy (NSPS), emphasizing progress in the integration of climate risk considerations into social protection strategies. Lao PDR's National Social Protection Strategy (NSPS) 2025 aims for universal social protection coverage by 2030, focusing on climate-related emergency assistance through legislation, a Disaster Management Fund, and enhancements to the social registry.

- Likewise, The Ministry of Labor and Social Welfare (MoLSW) administers some social protection programs, including pensions, health insurance, and unemployment benefits, and disaster risk, which they manage with the Ministry of Natural Resources and

Environment (MoNRE).

- The Ministry of Agriculture and Forestry (MAF) and the Ministry of Home Affairs (MOHA) manage the social registry, ensuring accurate data verification and supporting linkages with other data information systems.

CHARACTERISTICS OF THE SOCIAL REGISTRY AND CURRENT LIMITATIONS

The social registry in Lao PDR,[3] is currently managed and operationalised by MAF. According to the latest round of data collected in 2022, this registry recorded 6.5 million individuals (1.2 million households). The registry covers about 88% of the total HHs nationally in the database with the goal to advance towards universal coverage. The social registry in Lao PDR serves as a crucial tool for identifying and targeting vulnerable populations for social assistance programs, yet some limitations exist.

- Significant inclusion (39%) and exclusion (37%) errors are currently present. MAF plans to address these errors in 2025 which should get corrected through data verification and digitalisation.

- The social registry currently contains data on households identified as poor but does not fully account for the dynamic risks posed by climate-related shocks, which can push non-poor households further into poverty.

- There is limited but increasing use of social registry for social protection programming. For example, the Helping Hand project aims to expand into climate-exposed regions by integrating disaster risk maps with the registry data. Likewise, the social registry has been used in anticipatory action targeting, such as the FAO's 2024 drought response with seed and cash distribution. Access to the registry is growing through MoUs, with plans to share data with more ministries to enhance disaster response targeting and improve disaster risk management.

3   PM's decree 348 (2019).

AVAILABLE CLIMATE RISK DATA AND EXISTING GAPS

Lao PDR has access to various types of climate risk data, including historical climate and hazard data, and vulnerability assessment. Despite these resources, significant gaps remain.

- Lao PDR faces fragmented climate risk data across ministries, each maintaining their own internal databases. Data sharing is ad hoc and still developing, hindering the integration of social registry data with climate risk information.

- Disparate data sources make creating a comprehensive view of climate vulnerability difficult without comprehensive data-sharing agreements. For instance, the Department of Meteorology and Hydrology under the Ministry of Natural Resources and Environment (MoNRE) conducts climate risk assessments and provides data on hazards such as floods, droughts, and storms. The Ministry of Agriculture and Forestry (MAF) also collects data related to the impact of climate change on agricultural production and water resources. The Lao Statistics Bureau collects data on environmental statistic indicators including data on disasters, collected from MoLSW. Concerns over quality, quantity, and timeliness of data all impact use.

- Current indicators (such as living conditions and geographical location) collected by the social registry can be used for deductive reasoning and pre-emptive identification of population risk levels to climate shocks, but more data will be needed for more granular analysis.

- One partner, ADPC, endeavors to help bridge the gap in data availability and use through their recent climate risk analysis.

Bridging Social Registries and Climate Data: The Path Forward

Enhancing social protection in Lao PDR while seamlessly incorporating climate data presents a valuable opportunity to leverage the capacities already established within the government. To this end, key strategic recommendations for the government's consideration include:

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

Investing in climate hazard analysis is essential for identifying highly climate-vulnerable regions and supporting low-income households in those regions. Various efforts are ongoing to develop climate hazard maps, but efforts need to be centralized to create a comprehensive mapping for social protection.

2. **Improve the integration of climate vulnerability indicators into the social registry.**

For effective social protection targeting, it's crucial to integrate climate-related indicators into the social registry, addressing hazard exposure, livelihood impacts, and adaptive capacity. Regular updates are vital to refine indicators and to reflect evolving climate conditions and community responses.

3. **Pre-Identify "non-poor" households vulnerable to climate-related risks in the registry.**

In Laos, the Helping Hand program prioritizes the poorest households. However, a single climate shock can push non-poor households into poverty, highlighting the need to identify climate-exposed "non-poor" households in social registries for timely assistance in the wake of climate shocks.

4. **Develop a climate risk index at the household level.**

In the long run, a multifaceted climate risk index incorporating various hazards, exposure levels, and vulnerabilities at the household level is vital for enabling detailed risk mapping and prioritizing support for each household to facilitate effective shock-responsive programming.

5. **Enhance government and local stakeholder capacity to effectively integrate climate information in social registries for shock-responsive social protection.**

While integrating climate risk indicators offers significant potential, it also presents challenges such as the high cost of implementation, the technical expertise required for accurate data collection and maintenance, and the risk of reliance on incomplete or inaccurate projections. Enhancing the capacity of government ministries, departments, and agencies is recommended to provide crucial data for social protection agencies. Additionally, fostering a shared understanding of utilizing climate information can improve decision-making and support evidence-based social protection interventions.

Along with the recommendations for integrating climate risk into social registries, the study also identified some core areas which can strengthen the shock-responsiveness of the whole social protection system to better address climate-related shocks. These include:

- **Enhance the implementation mechanisms of social protection systems to address climate risks.**

Laos needs to strengthen its social protection system by implementing a digital national ID and delivery system to better support marginalized communities during climate shocks better. A cash-on-hand delivery system is insufficient in emergencies. The government should develop a flexible transfer system that combines cash-on-hand with digital wallets.

- **Mainstream the use of social registry data for targeting beneficiaries of sovereign insurance payouts**

Lao PDR is enhancing its disaster risk finance through the Southeast Asia Disaster Risk Insurance Facility (SEADRIF). Some SEADRIF funds could be used for ongoing social assistance to empower households in the aftermath of a shock while integrating climate data into social registries can better target vulnerable families for support.

- **Adopt a multi-level, multi-sectoral coordination.**

Lao PDR's social protection sector relies on international organizations for development and improving governance but faces challenges in inter-agency coordination and fiscal capacity. To address this challenge, collaboration through bodies like the National Disaster Management Committee is crucial.

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