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Leveraging climate risk data tools to inform social protection

The case of WFP's Platform for Real-time Impact and Situation Monitoring (PRISM)

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Social protection systems can be leveraged to respond to different natural hazards and provide timely support to affected people. However, very few social protection programmes have data on climate and natural hazard vulnerability and exposure. Furthermore, access and the capacity to use this data is challenging as expertise to access remote sensing data such as satellite imagery is not widespread, while data on climate and natural hazard vulnerability is difficult to obtain promptly. This often leaves decision-makers with information that either comes too late, does not capture the full breadth of risk analyses, or cannot be communicated effectively.

The Platform for Real-time Impact and Situation Monitoring (PRISM), launched by WFP in 2016, is a web-based climate risk monitoring system that integrates geospatial data on natural hazards with information on socioeconomic vulnerability. It can support country-specific climate risk analyses and assist governments to develop realistic planning scenarios to formulate risk mitigation, response plans, and climate adaptation objectives, especially centred on sectoral policies for vulnerable and food insecure populations.

PRISM for Social Protection: How does it work?

PRISM is a digital public good that brings together national disaster management organisations, national hydro-meteorological services, and government departments to collectively monitor risks, prioritise responses and inform programmes and policies. Increasingly, WFP has focused on deploying PRISM to inform governments with climate hazard information, such as measurements of rainfall levels and temperatures, along with vulnerability data to support risk-based decision-making. Risk and impact analyses are conducted in real time, and data on current and historical conditions can be visualised through a map-based dashboard.

When a disaster strikes, such as a tropical storm, PRISM can rapidly produce statistics on the population(s) potentially exposed to damaging wind speeds. This enables governments to identify vulnerable areas and take possible early action to mitigate the impact. Through its alert system, PRISM can allow social protection authorities to monitor pre-established thresholds and trigger action when a threshold is exceeded.

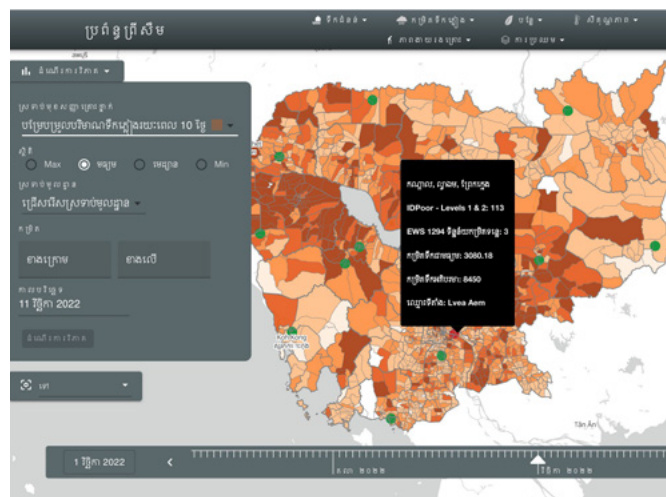
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PRISM is actively used by government systems in Indonesia, Sri Lanka, Mongolia, and Cambodia, while several other deployments across Asia and Africa are forthcoming. WFP also shares information from PRISM with its humanitarian and development partners – providing key data and information to a wide audience.

Enabling Climate-Responsive Social Protection in Cambodia

Historically, Cambodia has been exposed to nearly all types of climate-related shocks that disproportionately affect vulnerable households. For this reason, the current National Social Protection Policy Framework 2016-25 (NSPPF) aims to build the necessary infrastructure to make the system more efficient, sustainable, and impactful. One of the NSPPF’s broader priorities is to protect vulnerable households against climate-induced hazards through investments into robust data management systems, as well as improved coordination between social assistance and disaster risk management (DRM) actors. In response to recurring floods and the COVID-19 pandemic, the government of Cambodia significantly expanded its spending for social assistance from 0.1% of GDP in 2019 to 1.4% in 2021, now covering 17 percent of the population.²

In 2020, WFP developed and launched PRISM in Cambodia through partnership with the National Committee for Disaster Management (NCDM), which now operates PRISM with technical support from WFP. This has been a key element of WFP’s overall long-term objective to bring actors together and institutionalize linkages between DRM, anticipatory action, and shock-responsive social protection, contributing to the operationalization of the national Shock-Responsive Social Protection (SRSP) Framework.³ PRISM links various data streams such as field assessments, early warning systems, and satellite-based remote sensing with the national registry of vulnerable households, known as *IDPoor*,⁴ and other datasets to measure risk and impact.



PRISM supports localization and can be quickly configured to display the interface in local languages

In 2020 and 2021, PRISM helped inform WFP’s flood response by providing complementary top-up to the national “Cash Transfer for Poor and Vulnerable Households” programme, reaching 38,985 households. The WFP programme was designed and aligned with the national cash transfer programme, with both using the same data as defined in the government’s *IDPoor* database. PRISM provided satellite-derived geographical data on flooding that helped WFP localize the assistance to flood-affected areas.

This experience in overlaying hazard risk with demographic data is now being used by the government in partnership with WFP to design a new national cash-based shock responsive programme targeting flood-prone households, as well as looking to inform predictive targeting and anticipatory actions for vulnerable groups living in at-risk areas. In doing so, platforms such as PRISM have the potential to help improve the efficiency and effectiveness of Government-led social protection and DRM systems and programmes and ‘shock-proof’ them against the recurrent and increasing threat posed by climate change.

1 Draft versions of this report went through a peer review process and inputs were gratefully received from colleagues from the HQ, Regional Bureau Bangkok, and the Cambodia Country Office.

2 Karamba, W. et al. (2022) [Cambodia Poverty Assessment: Toward a More Inclusive and Resilient Cambodia \(English\)](#), Washington, D.C.: World Bank Group.

3 OPM (2022) [Operational Research on the WFP Cash Transfer Programme in Cambodia: Final Report, Phnom Penh: WFP Cambodia Country Office](#).

4 *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.

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