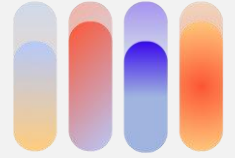


Using individual-level measurement to strengthen climate resilience and sustainable development

Insights from World Vision's BASIN Project



Key insights

- 1. Resilience declines with increasing frequency of climate shocks**, with more droughts showing a stronger negative impact on resilience than more floods or more storms.
- 2. Non-climate stressors can significantly shape resilience** outcomes, as illustrated by Vietnam's lower resilience scores being influenced not only by climate exposure but also by factors such as pests and saltwater intrusion.
- 3. Contextual and systems-level drivers of resilience require deeper analysis**, including market systems and value chains, to better understand how broader economic structures influence climate and economic resilience outcomes.

Background

The Revealing Resilience initiative works to expand the use of individual-level measurement to strengthen inclusive climate resilience and sustainable development. The initiative is funded by the Australian government and led by the University of Technology Sydney – Institute for Sustainable Futures with the International Women's Development Agency's Equality Insights program.

In 2026, Revealing Resilience collaborated with World Vision to support the use of individual-level measurement in a multi-country baseline assessment on climate resilience across Cambodia, Lao PDR, and Vietnam. This brief shares findings and learnings from this undertaking.

The **Building Climate-Adaptive Solutions through Inclusive Market Networks (BASIN)** project is implemented by a consortium led by World Vision Australia—together with World Vision partners in Cambodia, Lao PDR, and Vietnam, and the University of Technology Sydney. It aims to strengthen inclusive, climate-resilient agri-food systems across the Mekong sub-region.



¹Launch of the [BASIN Project](#)

Approach & Context

Through the BASIN project baseline, World Vision piloted a tool to measure climate resilience for community members with a goal of supporting climate-smart livelihoods. The Individual Self-Evaluated Resilience Measure (iSERS)¹ was embedded into the larger baseline survey across BASIN's three countries: Cambodia, Laos and Vietnam. The BASIN team lead the data collection and analysis supported by external baseline consultants. The Revealing Resilience team provided targeted support throughout the process.

The externally validated iSERS measures scores individual climate resilience with reference to four climate events: floods, drought, landslides, and severe storms. Each respondent only answered the iSERS questions for one climate event that was most significant for them. As illustrated in Table 1, the iSERS includes seven questions, six of which are scored out of 1. In future iterations of the tool, we recommend an update which would align all response options, which would make it easier to visualize².

Table 1: Items in the iSERS measure Questions and response options have since been updated.²

Questions		Response Options
1	If an {selected climate event} occurred, how likely is it that your household would be well-prepared in advance?	☐ Extremely likely - 3 ☐ Very likely - 2 ☐ Not very likely - 1 ☐ Not likely at all - 0 ☐ N/A - blank
2	If an {selected climate event} occurred, how likely is it that your household would recover in 6 months?	
3	If an {selected climate event} were to become more frequent, how likely is it that your household could change its source of income and/or livelihood, if that were needed?	
4	In the last two years, how often have you experienced an {selected climate event}?	Unscored ☐ More than 4 times ☐ 2-3 times ☐ Once ☐ Never - skip 5, 6, 7
5	In the last two years, how serious a problem has {selected climate event} been to your household?	☐ The most serious problem - 3 ☐ One of the serious problems of many - 2 ☐ A minor problem - 1 ☐ Not at all a problem - 0 (default response)
6	In the last two years, how serious a problem has {selected climate event} been to your community?	
7	Please think about the last {selected climate event} that affected your household. Did you know about it in advance?	☐ Yes - 3 ☐ No - 0

A total of 1,281 households were included across three countries, with data collected from one individual in each household. Stratified multi-stage cluster sampling was used, which means participants were selected from different groups and locations to ensure broad coverage and representative sample. This included cashew nut and vegetable farmers in Cambodia; rice, vegetable, poultry and livestock farmers in Laos; and rice, shrimp, and banana farmers in Vietnam. More than half (52%) of respondents were female, approximately 8 per cent of respondents were people with disability.

¹MacArthur et al. 2026 (10.1080/17565529.2026.2623010)

²UTS-ISF 2026 iSERS Climate Module V2

Country	Vietnam	Laos	Cambodia	
Storms Resilience	0.405	0.556	0.411	High resilience [$\geq 0.67 - 1.00$] Moderate resilience [$\geq 0.34 - 0.66$] Low resilience [$0.00 - 0.33$]
<i>n</i>	202	4	92	
Floods Resilience	0.336	0.484	0.384	
<i>n</i>	74	176	145	
Droughts Resilience	0.385	0.483	0.416	
<i>n</i>	72	62	14	

Figure 1: Average resilience scores out of 1, across disaster types by country

Note: Not all 1,281 respondents chose to respond to each climate hazard

Key Findings

Most of the surveyed respondents indicated moderate resilience as illustrated in Figure 1. The findings from the baseline, show that resilience decreases as exposure to climate-related events increases. Resilience appeared to decline more rapidly in response to droughts rather than floods or storms. Despite experiencing comparatively lower exposure to climate shocks, Vietnam recorded the lowest resilience scores, likely influenced by additional pressures such as pest outbreaks and saltwater intrusion.

There were no statistically significant differences in mean resilience scores between men and women, and between people with disability and non-disabled people. Given that this result differed from expectations, further analysis will seek to understand whether this reflects genuine patterns within the data or potential influences related to sampling and representation.

Recommendations

Further analysis is recommended to better understand the contextual factors influencing resilience among different population sub-groups, including value chain-based analysis to examine how market systems shape resilience outcomes.

Consider exploring other events such as pest-outbreaks, forest-fires and salinity intrusion.

Identify and use cut-offs, such as the three categories illustrated in Figure 1, to aid in sensemaking.

Learning brief prepared by Jess MacArthur of University of Technology Sydney – Institute for Sustainable Futures with contributions from World Vision Australia.

Suggested citation: MacArthur, J 2026. Learning Brief: Using individual-level measurement to strengthen climate resilience and sustainable development: Insights from World Vision's BASIN Project.