



Opportunities for Building Resilience: Post-Event Learning from the 2017 Peruvian Floods

Karen MacClune, Kanmani Venkateswaran, and Maria Fernanda Enriquez
ISET-International, Boulder, CO, USA

In January 2017, coastal waters off Peru warmed suddenly and unexpectedly. Low lying coastal storms dropped intense rainfall, causing rivers, ephemeral streams, and low-lying areas to flood. Repeated episodes of rainfall, flooding, and landslides affected the Peruvian population west of the Andes from Ica in the south to the northern border. The flooding continued for nearly three months, affecting over 1.5 million people, causing 162 deaths, and damaging critical infrastructure and hundreds of thousands of homes.

This type of flooding is not uncommon in Peru. Similar floods were experienced during the El Niño events of 1982-83 and 1997-98. However, unlike El Niño events, which can be forecast, this “Coastal El Niño” occurred without warning. The Peruvian government is now grappling with how to recover, with the knowledge that disaster events can and will happen again. The flooding, though a tragedy, is also an opportunity to understand the gaps and opportunities for developing resilience and fundamentally reducing disaster risk.

Using the Post Event Review Capability (PERC) approach developed by Zurich Insurance’s Flood Resilience Program, we examined what worked well in the prevention, preparedness, response and recovery phases of the disaster risk management cycle, and identify opportunities for further improvement. In doing so, we ground our evaluation in the social vulnerability and physical landscapes to clarify how and why the event unfolded as it did.

In particular we explore: the critical role of coordination and communication in disaster risk reduction and disaster management; the need for a diversified recovery and reconstruction phase that addresses not just infrastructure but also social recovery; the challenges posed by extensive development of high-risk lands and how they might be addressed given the governance and financial constraints at play in Peru; and the requirement that protection infrastructure be viewed in conjunction with its residual risk. We also highlight some of the most powerful success stories from the flooding, ranging from technical solutions to preparedness to community capacity building.