



Climate Change Adaptation,
Disposition, and Displacement
(CiCADD) Project



Research Institute for
Mindanao Culture
(RIMCU)

Beyond Infrastructure: Bringing People and Nature Together in Climate Adaptation

*Reflections from CiCADD's and RIMCU's participation in the
Nature-based Solutions Roadshow Bohol 2026*

By Chona R. Echavez and Leah Wilfreda E. Pilongo

What does it mean for a community to become more resilient to climate change?



From an infrastructure perspective, the answers may seem fairly straightforward: strengthen flood-control systems, improve drainage, restore natural buffers, or move households away from places where the risks have become too great. Yet the conversations during the Nature-based Solutions (NbS) Roadshow Bohol 2026 suggested that resilience is rarely that simple.

Held from August 12 to 14, the Roadshow brought together planners, researchers, government representatives, academics, environmental advocates, and development practitioners to explore how Nature-based Solutions can contribute to climate- and disaster-resilient development. A recurring concern across the discussions was this: how can development respond to climate risks without losing sight of the natural systems—and the people—that make places livable?

Working with Nature, Rather Than Around It

Nature-based Solutions begin with a practical idea: some of the challenges communities face may be addressed through actions that protect, restore, and sustainably manage ecosystems while drawing on the benefits these natural systems provide.

Climate risks, water insecurity, environmental degradation, and other development challenges are closely connected to the condition of forests, rivers, watersheds, wetlands, mangroves, coastal areas, and other ecosystems. When these systems are cared for, they can help manage water

flows, reduce exposure to some hazards, support livelihoods, and strengthen people's capacity to cope with climate-related risks.

For RIMCU, this opened an important connection with its work under the **Climate Change Adaptation, Dispossession and Displacement (CiCADD) Project**. If Nature-based Solutions encourage us to think about how ecosystems support resilience, CiCADD asks us to consider how people experience decisions made in the name of resilience.

The two perspectives meet in everyday life. Climate adaptation happens where people, places, infrastructure, institutions, and the environment come together.

When Being Safer Does Not Tell the Whole Story

Drawing on the CiCADD experience, Dr. Chona R. Echavez invited Roadshow participants to view adaptation not only in terms of what has been built or completed, but also in what happens to people afterward.

Consider a family living beside a flood-prone river. Moving them to higher ground may clearly reduce their exposure to flooding. A safer house is an important gain. But what if their livelihood remains near the river? What if transportation becomes more expensive? What if school, health services, or markets are now farther away?



The family may be safer from floodwater, but other difficulties can emerge. This is the **adaptation paradox**: an intervention may reduce one kind of risk while creating difficulties elsewhere in people's lives.

This does not mean that relocation or flood-control interventions have failed. Rather, these experiences give planners and implementing institutions a chance to ask what else to consider.

A Hazard Map—and a Life Map

Hazard maps remain indispensable. They show where flooding may occur and which settlements and structures are exposed. But the CiCADD experience suggests that another kind of map may also be useful- a **“life map.”**

Where do people work? Where do children study? How do families reach markets, health services, relatives, and other sources of support?

Changing where people live can also change their geography of work, care, mobility, relationships, and opportunity. A hazard map may tell us whether a household has moved farther

from the flood. A life map can help us ask whether that household is also in a position to rebuild its life.

A settlement, after all, is more than a collection of housing units. People also need livelihoods, schools, health services, transportation, markets, social relationships, safety, and a healthy environment. Some important sources of resilience are less visible. Relatives, neighbors, friends, and community groups often provide the everyday support that helps households cope.

Listening Beyond Consultation

This is also why participation matters.

The CiCADD experience points toward participation and co-design, where technical evidence is considered alongside community knowledge, local government experience, and professional expertise.

Communities often know things that maps, models, and engineering plans may not readily show: which roads become difficult during heavy rain, where people earn their living, who may struggle to evacuate, and why some families remain in places already known to be hazardous.

Listening to these experiences does not replace technical evidence. It adds another kind of evidence.

Asking Whether Adaptation Worked

During the presentation, Dr. Echavez introduced **SAFE-RIL** as a way to organize these concerns. It considers **Safety, Access, Functionality, Equity, Resilience, Inclusion, and Longevity**.

Safety asks whether people are less exposed to harm. Access considers whether they can still reach livelihoods and essential services. Functionality looks at whether an intervention works in people's everyday lives. Equity asks how benefits and burdens are shared. Resilience considers people's capacity to cope with future shocks. Inclusion asks whether affected communities are meaningfully involved, while Longevity considers whether the benefits can last.

These dimensions do not lessen the importance of technical performance. They broaden what successful adaptation might mean.

Adaptation Is More Than a Structure

Structural measures—roads, bridges, drainage systems, flood-control infrastructure, and safe housing—remain important parts of climate adaptation. But they work within a wider setting that may also include ecosystem restoration, land-use planning, early warning systems, livelihood support, social protection, governance, and community participation.

Adaptation, then, need not be framed as a choice between structures and systems. Structures are part of a broader adaptation system in which engineered, ecological, institutional, and social measures can support one another.

This was perhaps one of the useful reminders from the Bohol Roadshow: no single intervention has to carry the whole burden of resilience.

Keeping People and Places in the Same Conversation

Protecting a river matters because the river itself matters—but also because communities live around it. Restoring mangroves matters for biodiversity, but also because coastal communities may depend on the protection and livelihoods these ecosystems provide.

Building safer infrastructure matters—but so does understanding what that infrastructure changes in people's lives. Relocating a family away from danger matters—but so does what happens after the move.

Perhaps the question raised through the CiCADD experience is worth carrying beyond the Roadshow:

When another flood comes, will the people we relocated be more resilient—or will vulnerability have moved somewhere else?

The answer will not always be simple. The Nature-based Solutions Roadshow Bohol 2026 offered a space for different kinds of knowledge to meet—technical, ecological, institutional, and lived.

Climate resilience, in the end, is not only about protecting people from nature or protecting nature from people. It is also about finding better ways for people and nature to remain resilient together.



Layout Artist: Michael Lou U. Montejo