

1 Using indigenous knowledge to enhance community resilience to climate change in the mountainous region of Viet Nam

■ **Project:** Using indigenous knowledge to enhance community resilience to climate change in the mountainous region of Viet Nam
 ■ **Project leader:** Ho Ngoc Son, Agriculture and Forestry Research and Development Centre for Mountainous Region, Viet Nam ■ **Email:** hosonpt@gmail.com ■ **Grant DOI:** <https://doi.org/10.30852/p.4562>



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RESEARCH FINDINGS

Indigenous people have developed complex farming systems, cultural practices, and a knowledge base well-suited to their environments. Indigenous knowledge (IK) has the potential to further the processes of developing and promoting sustainable local and community development.

Many communities globally, especially those populated by indigenous people, already have the contextualized and relevant knowledge for addressing problems, including many climate risks.

The study found that ethnic minorities produce many native crop varieties and animal breeds. The varieties cultivated are said to be more resistant to drought and suffer less pressure from pests and disease.

For many of these crops, farmers can also save seed, thereby reducing costs and beneficially allowing further genetic selection for local conditions.

In addition to native crops, farmers use native or heritage livestock that are adaptable to the local climate and are more disease resistant. For example, black pigs and black chicken, many of which have been raised in the area for over 50 years.

LESSONS LEARNED

If indigenous knowledge were better integrated into adaptation planning and policies, its conservation and application would enhance resiliency to climate change in indigenous communities and beyond.

However, traditional coping and adaptation strategies as employed by the indigenous people might only prepare communities for some perceived risks, not necessarily for the uncertain and possibly different conditions brought by a rapidly changing climate.

Indigenous people's observations and weather forecasting systems in the future may become less meaningful or even misguide them in their decisions. In this way, communities might be well adapted to their current climate, but less able to adapt to climate change as existing knowledge is typically based on past experiences.

Combining indigenous and scientific knowledge on social-ecological systems is crucial for understanding their resilience.

Working within this collaborative framework, governments should seek to support this dualistic problem-solving approach and enhance access of local communities to relevant scientific information that both supports them and accommodates their knowledge. The best strategy in the context of uncertain climate change is to increase the adaptive capacity of vulnerable communities.

GAPS AND NEEDS FOR RESEARCH AND CAPACITY DEVELOPMENT



Research illustrates that Indigenous people in Viet Nam have significant resilience and are actively observing and adapting to change in a diversity of ways. Yet the **research remains fragmented** in that most focus on specific

populations, regions, and/or risks and few studies examine broader trends in understanding.

Within the context of Viet Nam, the study found the protection and development of indigenous knowledge remain limited due to the lack of information and awareness by government authorities. As a result, policies on all levels pay scarce attention to the use of native plant varieties and animal breeds or the conservation of indigenous knowledge. How this might impact indigenous people in the near future is of concern. **A conscientious collaboration** is essential to achieving good stewardship in building community

resilience to climate change. To best achieve this, more attention should be given to **improving communication and cooperation between scientists, public officials, and the indigenous people** of Viet Nam or in other countries in general.

As climate continues to change, the **further promotion of the use of indigenous knowledge in agricultural production and management** not only becomes essential in this Vietnamese context but also comprises a crucial component of agency and advocacy for the rights and voices of ethnic minority populations globally.

680+

Number of local people including Tay, Dao, and H'mong people with increased capacity to implement agricultural practices that are more resilient to climate change.

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2 Risk and resilience in the Pacific: Influence of peripherality on exposure and responses to global change

RESEARCH FINDINGS AND LESSONS LEARNED

The current trend of **increasing dependency** of developing countries on their richer counterparts for addressing the impacts of climate change is **unsustainable**^[1]. Developed countries and international aid agencies need to consider shifting their focus towards **growing the autonomy** of developing countries to address their own climate change adaptation needs.

Over the last few decades, most externally-sponsored interventions for climate change adaptation in the Pacific have **either been**

ineffective or unsustainable^[2]. Research shows that this is because these involve unfamiliar global/western worldviews, scientific reasoning and foreign languages, none of which encourage the adoption of these interventions by local communities. In the Pacific in particular, many communities become disenchanted, especially after their funding ends, because they ignore or subordinate their traditional knowledge^[3].

Many Pacific communities (and others in the Global South) have considerable stocks of

culturally-grounded knowledge for coping with environmental adversity^[4,5]. Such knowledge is often superior to external/global knowledge because it is locally applicable and has been tried and tested and is, therefore, trusted by key stakeholders. Research concludes that local or traditional knowledge should be **foregrounded** in adaptation interventions if these are to succeed. There is clearly much work to be done to **revive and disseminate** such traditional knowledge within the Pacific in order to ensure its **sustainable future**^[6].

GAPS AND NEEDS FOR RESEARCH AND CAPACITY DEVELOPMENT

Many western/global researchers talk about the barriers to climate change adaptation they encounter in developing countries without realizing that people in these countries also perceive similar barriers—around worldview, language and justification for adaptive action^[7]. **There should be more research into equitable**

conversations for adaptation in the Global South.

In many developing countries (including those in the Pacific), sustainable futures depend on **combining traditional knowledge and climate science**. For while the present climate emergency

may be unprecedented, Pacific peoples have had similar experience of climate change and disasters in the past. The exclusion of traditional knowledge will never produce the deep engagement with diverse communities that is needed to **sustain climate change adaptation**^[8,9].



▲ Having cleared their mangrove fringe in the 1950s, the coastal village of Navunievu (Bua, Fiji) started to experience shoreline erosion and lowland flooding to which they responded by building seawalls, now degraded. Today Navunievu is often underwater at high tide but, after talking to village elders, an autonomous adaptation strategy was developed that requires every young man from the village to build his family home upslope behind the village. This will see the gradual upslope migration of Navunievu over the next few decades, allowing the community to remain viable. (Photo: Patrick Nunn)



▲ In many Micronesian (Pacific) cultures, the construction of meeting houses (faluw) is key to cultural/group identity. This faluw at Waalooy on Maap Island (Yap, Federated States of Micronesia) has been rebuilt twice to accommodate rising sea level over the past few decades, as you can see from the three stone platforms. Pacific Island societies often have considerable cultural resilience that is not easily visible to outsiders but which should be harnessed for future climate change adaptation. (Photo: Patrick Nunn)

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 ■ **Project leader:** Patrick Nunn, University of the Sunshine Coast, Australia ■ **Email:** pnunn@usc.edu.au ■ **Grant DOI:** <https://doi.org/10.30852/p.4554>



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