

Local Knowledge as a Resource for Nepal: Building Partnerships with Scientists and Conservationists

Henry P. Huntington *

Conservation cannot be carried out solely by professional biologists and conservationists. This is true everywhere, and perhaps especially in places where professional resources are scarce. There are, however, other resources to draw on for ideas and actions to conserve the environment and the human livelihoods that depend on a healthy environment. The knowledge, experience, and practices of local residents can contribute greatly to conservation efforts, especially in partnership with professionals. Based on recent experiences in rural Nepal, I describe three examples of the potential for such collaboration, which I interpret in part in light of my own work in the Arctic.



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Conservation Notes

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“What does it say about our forests that we have red pandas and clouded leopards in this area?”
(Num, Sankuwasabha, April 2009)

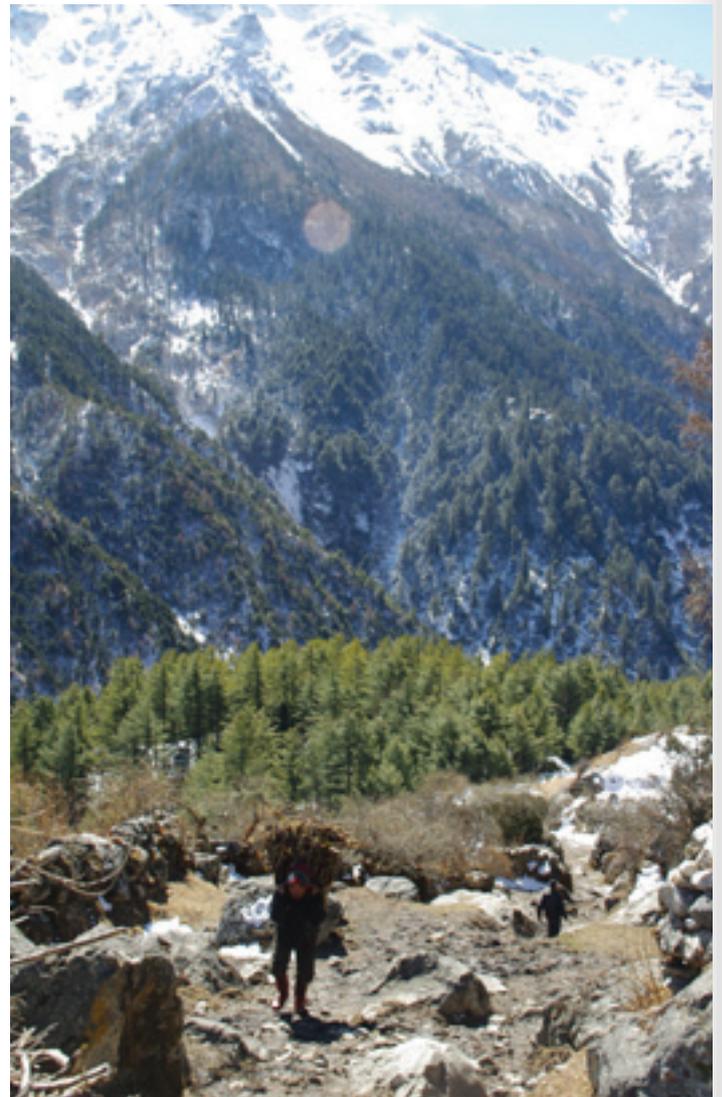


This question came up in a discussion with village leaders one morning, as colleagues and I were ascending the Arun Valley on a scientific reconnaissance trip. We were struck by the questioner's powerful concern for the local environment coupled with his clear understanding that conservation requires deep insight into how an ecosystem works, and how people act as part of that ecosystem (e.g., Parrado-Rosselli 2007, Huntington 2011).

The fact that the forests of the Arun Valley continue to support large predators and rare species is important. It indicates first a healthy forest, and second habitat for enough of these animals to live and reproduce. That is the good news. The challenge is sustaining the ability of the forest to support these animals and also the people who live there.

Local residents have a system for managing who cuts wood, how much they cut, and where. Such local systems can be a powerful basis for conservation, because they incorporate local culture and tradition. But social and environmental change can become too rapid, and overwhelm local practices. Therefore it is also important to evaluate local practices and systems to see if they continue to achieve their goals.

If so, they should be supported. If not, conservation biologists and others can work with local people to better understand local environmental and social conditions, because local residents have a great deal of information to offer. This can be especially powerful if combined with scientific approaches (e.g., Huntington et al. 2004a, b, 2011, Naidoo and Hill 2006). The man who asked the question was looking for help in finding the answer, and he also knows a great deal about his area. Recognizing what both sides have to offer is a good start for a partnership.



“What should we do to protect our valley slopes from erosion and landslides?”
(Tsum Valley, Gorkha District, February 2012)



“Local residents have a system for managing who cuts wood, how much they cut, and where.”

A second trip to Nepal, with different colleagues, brought us to Tsum Valley, where we spent time talking with leaders and elders to learn more about this beautiful and remote place. Here, at an altitude above 3000 meters, local rules govern how trees can be cut for building houses, in recognition of the scarcity of forested land. The residents of the valley are also very respectful of tradition and of the animals with which they share the valley. In April 2012, the local rule that no animals—wild or domesticated—are to be killed in this valley was recognized in a ceremony in which the Nepali Prime Minister took part. By itself, this is a powerful rule, but protecting animals also requires protecting their habitat. When rainfall and snowfall change, erosion can increase. And if the land is not taken care of, the situation can become even worse.

The labrang (priest) who asked how to protect the valley from erosion said that the Dalai Lama had recommended planting trees and plants on bare slopes. This is excellent advice, coming from within the religious and cultural tradition of the Tsumba people. Planting trees in barren areas and protecting trees on slopes, around springs and taps and trails have long been a part of Hindu and Buddhist culture and tradition, inherited through many generations. If the Tsumba are willing to follow this advice and continue traditional practices, they can do a great deal to protect themselves from the hazards and impacts of erosion and landslides. They can also learn from scientists and conservationists, to learn what weather patterns they can expect in the future, and which plants may be especially useful for holding soil in place. And those working with the Tsumba can also learn how recent changes compare with the past, and what has worked so far in conserving hillsides and habitat.



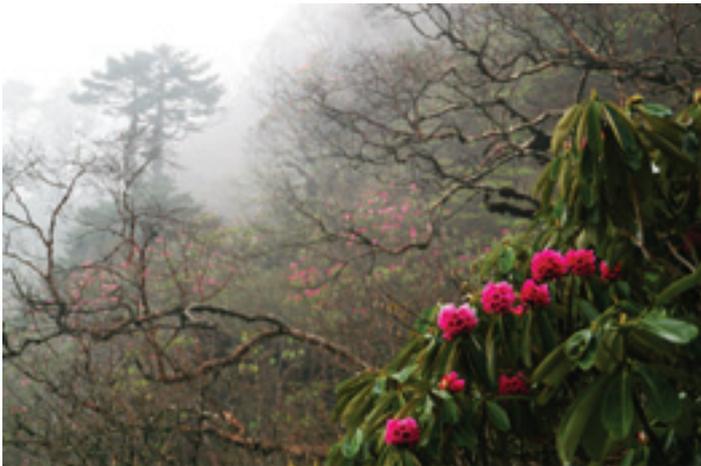
During our visit to Num, we went to the local secondary school. We gave a talk about climate change, explaining the effects of carbon dioxide and also what it means for people. One girl already knew what climate change was, and what kinds of impacts her village was seeing. For example, villagers reported seeing strange insects, and also that snow rarely fell in winter any more, whereas it used to snow every winter.

The schoolgirl asked her question without blaming others for climate change. She was also not expecting to wait for someone else to solve the problem. She simply wanted to know how she could help. Such willingness to act, to find a way to contribute, should be an inspiration to all of us who see challenges in the human relationship with the natural world. We talked about planting trees and other ways to sustain the local environment, recognizing also that she cannot save the planet by herself.

Some solutions do require global action, but many things can also be done locally. With similar thoughts to those of the schoolgirl from Num, George Noongwook, a St. Lawrence Island Yupik (Eskimo) from the northern Bering Sea, Alaska, wrote (2000) about the impacts climate change is having on his island community, concluding:

“What can we do about climate change?”
(Student at the Sinheswari Secondary School, Num, Sankuwasabha, April 2009)

We cannot change nature, our past, and other people for that matter, but we can control our own thoughts and actions and participate in global efforts to cope with these global climate changes. That I think is the most empowering thing we can do as individuals.



The question for scientists and conservationists is, how can we form partnerships with local communities and local people, both to help them and to harness the power of their ideas and their energy?

In all three cases, local traditions, needs, and goals point to strong a conservation ethic, even if those words are not used. Local ideas, knowledge, and aspirations are a good foundation for building sustainable practices that will conserve a healthy environment and a healthy way of life. If local perspectives are taken into account, in a cooperative process for developing rules to protect livelihoods and the environment, then the system may be able to respond more quickly to changes (e.g., Danielsen et al. 2007).

This idea, of working together, is exemplified by the “Sadbhaw” approach advocated by the Himalayan Climate Initiative, based in Kathmandu (himalayanclimate.org/hci). A Nepali word, Sadbhaw means mutual respect and trust. Local knowledge offers great depth in understanding about a specific area, including how people use their landscape. But it may lack the wider context of conditions across a region or over longer periods. Scientific knowledge can offer information across broad areas, but may lack an understanding of local details.

Putting the two together offers a way to bridge these differences and to make use of the strengths of both systems of knowledge, creating an atmosphere of mutual respect and trust. Ideally, this approach creates a partnership that encompasses everything from identifying problems to studying them to designing responses to taking action (Fernandez-Gimenez et al. 2006). Such an approach, and the outcomes it offers, benefit us all.

“Local ideas, knowledge, and aspirations are a good foundation for building sustainable practices that will conserve a healthy environment and a healthy way of life.”

Biography

Henry P. Huntington, Ph.D., lives in Eagle River, Alaska, USA, with his wife and two sons. He has been studying human-environment interactions in the Arctic for 25 years, and has published many articles and four books. Recently, he has had the opportunity to visit Nepal to compare the impacts of climate change at high latitudes (the Arctic) with those at high altitudes (Himalayas). His recent work includes applying scientific understanding to the practices of conservation in Alaska, Canada, and elsewhere.

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