Livelihood diversification for resilience in Mozambique

Diversity breeds strength — it’s true in nature, finances and agriculture. In Mozambique, diversifying livelihoods benefits communities. When erratic weather reduced crop yields in recent years, communities turned to the sea. Yet, fishers were already catching more fish than the ocean could sustainably provide, including fishing illegally with mosquito nets and during the closed season for shrimp.

The CARE-WWF Alliance worked with community fishing councils to raise awareness about the importance of allowing stocks to regenerate by introducing community-managed no-take zones, using proper equipment and respecting seasonal shrimp closures.

The Alliance also established farmer field schools to promote climate-smart agriculture practices and improved crop varieties that enrich soils and increase yields despite variation in rainfall. Participating farmers, some of whom also fish, increased crop yields and had access to adequate food 10.6 months each year, compared to 9.2 months just two years earlier. Indeed, a 2018 survey found that households in communities with farmer field schools were 13% more likely to experience year-round food security than households without this intervention. Similarly, while households in communities without no-take zones saw their weekly seafood consumption drop from an average of five to four days a week between 2014 and 2018, households in villages near these community-managed areas experienced stable seafood consumption levels over the same period.

Sustainable forest management supports development in Tanzania

In Tanzania, the Alliance worked with local communities to improve forest management and ensure they benefit from it. According to a 2015 study, Nachingwea village natural resource committees characterized their community forests as “somewhat” to “very” disturbed, due primarily to habitat loss, fragmentation and bushfire followed by encroachment for activities like illegal timber extraction, agriculture and charcoal-making. The committees were generally aware of their responsibilities, but reported insufficient capacity, transportation, gear or linkages to district authorities to enforce forest laws.

With Alliance training and support, the village natural resources committee carried out a forest inventory to determine which trees could be sold annually based on a combination of the forest’s ability to regrow, market demand for timber, and the product’s economic value. This inventory enabled the community to receive government approval for their harvesting plan, which supports sustainable management and community development. Ongoing Alliance trainings for district forest officers and the village natural resource committee strengthened their relationship and ability to enforce that plan. This inventory enabled the community to receive government approval for their sustainable harvesting
plan, which supports sustainable management and community development. As Tanzanian forest law requires, revenues support forest management (such as the bicycles and boots necessary for patrols) in addition to community development activities. The communities of Mbondo and Majonanga have prioritized using US$16,500 in sustainable timber revenues to build a nursery school and provide health insurance for vulnerable community members, like children and elders. Engaging community members in the process – from managing the forest to determining how revenue will be used to meet development priorities – creates a virtuous cycle that reinforces the well-being of people and the biodiversity on which they depend.

Adapting to climate change in Nepal
In Nepal, the Alliance worked with community organizations and the government at the community and ecosystem levels to help people adapt to climate change. In many watersheds, more intense and irregular rainfall is increasing risk of floods and landslides and undermining crop production and food security. Climate change is also affecting local water supplies, an effect often exacerbated by forest degradation and destruction. Understanding the linkages among drivers of social, ecological and climate vulnerability at different scales is important for sound watershed management planning and management. Rights-based approaches, like community learning and action centers, empower vulnerable women and marginalized people to participate actively in developing community adaptation plans so they can benefit from their implementation.

By bringing together upstream and downstream stakeholders, diverse communities have found solutions to the challenges in different parts of the watershed. The development and implementation of almost 400 local and community adaptation plans has resulted in more diverse livelihoods opportunities that reduce forest degradation and improve the resilience of over 280,000 vulnerable people. This includes stall feeding of livestock that used to graze in the forests and adoption of alternative energy sources that reduce the over-extraction of firewood and women’s work loads. Reducing non-climate pressures on forests, and actively restoring vegetation cover (for example, through soil bioengineering on existing landslide sites), reduces disaster risk in the future. Together, upstream and downstream communities are contributing to healthier forests that better withstand shocks, enable more reliable water supplies and reduce the risk of landslides and floods.

Conclusion
In Mozambique, Tanzania, and Nepal, community-based natural resource management and climate change adaptation helped reduce pressure on fisheries, forests, and freshwater. The three initiatives were grounded in the pursuit of viable alternatives to over-extraction and promotion of climate-adaptive livelihoods and other social benefits based on sound natural resource management. As these examples show, integrating development and conservation, from village to landscape levels, can help women and men earn income, feed their families and lift themselves out of poverty, all while respecting the biological limits of our one and only planet.