



Voices

OCTOBER 2002

In 1980, Bernadino Dumo and his wife Levy watched in fear as the rebel New People's Army invaded their land in Misamis Oriental Province of northern Mindanao. When the rebels began drafting farmers into their infantry soon thereafter, the couple moved to the municipality of Lantapan in neighbouring Bukidnon Province in hopes of a more peaceful and prosperous life.

They rented 6 hectares of public land in Mapawa, an indigenous Tala-andig community located just below Mt. Kitanglad Range Natural Park—home to the greatest diversity of mammals and birds in the Philippines. Although they found relative peace in Mapawa, the couple had difficulty adapting to the conditions of the region. The soil of their land is acidic and deficient in essential nutrients like phosphorus, and what limited value the soil does offer is often washed down the steep hillsides when heavy rains hit. New problems arise in the dry season, when village residents must walk a steep 3 kilometers to the nearest spring to collect drinking water. The isolation of Mapawa is exacerbated by the poor roads leading to the village, making it difficult to establish reliable links to markets.

Bernadino began working with ASB scientists in the mid-1990s to adopt a variety of soil-saving agroforestry technologies. For example, by incorporating natural vegetative strips (NVS) along contours in his fields, he has been able to successfully control erosion during the rainy season, thereby reducing the loss of precious soil nutrients. Because NVS involves naturally occurring vegetation and requires minimal maintenance, it is a technology that is well-suited to upland farmers with little extra income to invest in farming technologies. Bernadino has shared information about the low-cost NVS technology with other farmers in Mapawa, who approached him after noticing there was no flooding from his land during rains.

"My neighbours wanted to know why there was no flooding from my lands during the rains, so they came to ask me to share the technology I was using."

— BERNADINO DUMO

J Lewis



Bernadino now combines a variety of trees and crops on his land, including maize, cassava, sweet potato, pineapple, coffee, passion fruit, peas, taro and banana. He also has recently planted eucalyptus on several hectares of his land, and he uses the wood for fuel and construction. Once the trees reach maturity, Bernadino hopes to sell the timber to markets in the nearby city of Cagayan de Oro, capital of Misamis Oriental Province. Researchers are helping him make contact with these markets.

Bernadino is president of the Mapawa Landcare Unit, part of a larger movement of several hundred farmer groups on the island of Mindanao that seeks to spread technologies—such as NVS—that can help farmers meet their current needs while safeguarding local resources. Policymakers are supporting the Landcare movement by distributing local government funds and enacting local ordinances that provide incentives for adoption of these technologies. Through the efforts of Landcare farmer groups, local government entities and national and international researchers, a conservation ethic is developing, and natural resource protection is increasingly being viewed as a local responsibility. For instance, the number of incursions into the local Mt. Kitanglad Range Natural Park has decreased significantly in the past several years. The Park Director has attributed this decrease to the community collaboration and environmental awareness arising from Landcare.

ASB Voices is published by the Alternatives to Slash-and-Burn (ASB) Programme. The series aims to convey for a broad audience the insights and perspectives from people's real-life experiences and challenges in the humid tropics.

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