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This new book's bland title can fool you. "Beach Forest Species and Mangrove Associates of the Philippines" is not a mere compilation of "mine-eyes-glaze-over" descriptions of 97 species. This study provides insights beyond devastated mangroves to uplands scalped of tree cover. It sketches a paradox: One of the least studied ecosystems is more promising.

"Coastal forests… are not familiar to the average Filipino due to their early loss," note coauthors Jurgenne Primavera and Resurreccion Sadaba. "They've long gone unreported in the yearly Philippine Forestry Statistics… "

But the 2004 Indian Ocean tsunami and sea-level rise from global warming changed all that. They highlighted the neglected but increasingly needed "bioshield" role of "beach forest-mangrove belts."

Typhoon "Frank" in 2008, Tropical Storms "Ondoy" and "Pepeng" in 2009, and Typhoons "Pedring," "Quiel" and "Ramon" in 2011 exposed the lack of protective greenbelts. Beach forests thrive under full sunlight, inadequate water and poor nutrient conditions. They're useful also for rehabilitation.

Time Magazine listed Primavera as one of the world's top 100 environmental scientists. Sadaba is a full-time professor at the University of the Philippines-Visayas. Both collaborated in the 2004 "Handbook of Mangroves in the Philippines."

Beach forests are a "veritable botica or pharmacy, grocery and hardware store all rolled into one." They provide fruits, tubers, even dental floss. A favorite to flavor fish kinilaw is the tabon-tabon fruit. "Food and water are naturally packaged for transport in cocos nucifera," they note. Tagalogs know it as niyog. That's lubi in Bisayan or lahing in Tausug.

Many cities, towns and barangays sport "beach jungle names. Molave (vitex parviflora) is known as tugas. Eight towns from Aklan, Leyte to Zamboanga del Norte bear that name. Pitogo is cycas edentata. Three Pitogo towns are in Bohol, Iloilo and Zamboanga del Sur.

Full-time workloads for Primavera and Sadaba almost derailed what is the first hard look at "supratidal plants"—species that flourish "above the high tide line beyond mangrove's natural limits."

"We started field sampling in 2007" from Aklan, Eastern Samar to Masbate, Primavera and Sadaba recall. "We excluded most exotics, plus a few species no longer found in the highly degraded Panay coastline…. We included the traditionally important palm M. Sagu found in Agusan swamps" and some from landward basin mangroves.

Both scientists slogged on, although local residents chopped down some samples "out of need or ignorance." Termites wrecked some specimens and data sheets kept in extended storage.

In a mini-forest in Oton, Iloilo, only 40 out of 60 native species planted survived the harsh El Niño of 2010. The hardy survivors were mostly beach flora. "Of particular interest are seeds collected from

a tree of M. Pinnata in 2007. By 2011, this tree bore flowers, fruits and wilding for the next year.

“This is a remarkable performance,” the book notes. “The nitrogen-fixing M. Pinnata and other pioneer beach trees” could play an expanded role in the National Greening Program. This 2012-2016 project seeks to plant 1.5 billion trees over a denuded 1.5 million hectares, in the teeth of persistent illegal logging.

Cocos nucifera is among the most taken-for-granted beach flora. The coconut palm towers in 68 of 79 provinces. Its kind sprawls over 27 percent of agricultural land. Food, wine, roofing and, in these timber-short days, wood come from this tree. When you factor in their families, you find that livelihoods for 10 million Filipinos pivot around this tree. Cocos nucifera is a fixture in color-drenched Fernando Amorsolo paintings.

Scientists call it “the tree of 999 uses.” In his 2012 State of the Nation Address, President Aquino presented what could be the 1,000th use. In 2009, the Philippines exported 483,862 liters of coconut water, P-Noy said. That bolted to “a staggering 16.7 million liters exported in 2011.”

Countries are eager to buy more, recognizing its health benefits, “long enjoyed by Filipino and coastal South Pacific communities.” But can a decrepit industry of aging trees and slumping yields meet that demand?

Look at the track record. The Marcos dictatorship clamped on Presidential Decree 276 in 1973. This directed that “coco levies” be owned by cronies “in their private capacities.” Taxes, in effect, became individual loot. Robber coconut barons gutted the industry.

In the book’s “cautionary tale” box, we’ve set off our comments in brackets. Ownership and control of funds “shifted over 40 years under four presidents,” the box notes. It swung “from presidential associates (coco levy cronies) during martial law to government by sequestration” (after People Power).

“Then, it favored farmers” (through Davide Supreme Court decisions), “back to presidential associates with negotiated settlements” (the Corona Court allowed Eduardo Cojuangco to pocket 16.2 million San Miguel Corp. shares from levies). “How did… P150 billion from half a million farmers end up in the pockets of so few?”

Primavera and Sadaba hope that beach flora will “get the attention they rightfully deserve.” Their benefits as coastal greenbelts, medicine and biotechnology applications will come only if government rehabilitates a plundered industry, and private industry is spurred to tap their potential.

This country had a treasure trove of 400 medicinal plants, marveled then University of San Carlos botanist Franz Seidenschwarz. “One was commercially exploited,” he added. “Marijuana.”

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