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Looking for Food in All the Wrong Places

By Timothy A. Wise

MAPUTO: I spent another week in Mozambique looking for ProSAVANA, the much-touted, much-reviled Japanese-Brazilian-Mozambican agriculture project that has spectacularly failed to turn Mozambique's savannah-lands in the Nacala Corridor into a giant soybean plantation modeled on Brazil's Cerrado region. I was there doing follow-up research for a book.

I hadn't found much evidence of ProSAVANA two years ago (see my previous articles [here](#) and [here](#)) and I didn't find much now. Government officials wouldn't talk about it. Japanese development cooperation representatives spoke only of pathetically small extension services to a few small-scale farmers. Private investors were scarce. Civil society groups debated whether it is worth cooperating in the wholesale redesign of the program.

I wondered why anyone would bother. Like many of the grand schemes hatched in the wake of the 2007-2008 food price spikes, this one was a bust, by any measure. Still, ProSAVANA remains the Mozambican government's agricultural development strategy for the region. While farmers defend their hard-won land rights, it seems they will have to look elsewhere for agricultural development.

I decided to look elsewhere as well. I didn't have to go far. I arrived in Marracuene, 45 minutes outside Maputo, just after the rainy-season harvest and as the irrigation-fed winter season was beginning. Marracuene didn't get much rain or much of a harvest due to the drought that has parched much of southern Africa.

One farmer in the village of BoBole told me he'd earned barely one-quarter what he had the previous year from farm sales, and almost none of that was from maize, the Mozambique staple. Across the region, production is down, prices are up, and hunger is widespread. In Mozambique, 1.5 million people are facing food insecurity, [according to UNICEF](#), with 191,000 children expected to be severely malnourished in the next 12 months.

Diversity the key to surviving drought

In Marracuene, the maize harvest was almost a total bust. Fortunately, the farmers there grow a wide variety of crops, for home consumption and for sale. And they have irrigation, rehabilitated from an old

colonial plantation, so they have a second season. I saw healthy crops in the fields – cabbage, carrots, onions, potatoes, sweet potatoes, and cassava.

And I saw young maize plants on what turned out to be the association's collective plots, the small portion of the community's 250 acres that this 280-member association agrees to set aside and farm collectively. They work it together every Thursday morning. I watched as women, and a few men, prepared fields, watered new plants, and sprayed for pests.

Women mostly tend these farms and run the association as well. And the maize they are growing now is for seed, because the summer harvest was so bad that many farmers have no seeds for the next season. They save, exchange and recycle seeds, because they don't grow commercial hybrid maize, they rely on their own preferred native yellow maize. And they keep their community seed bank just for times like these.

In the district farmers' union office, Mohammed, the Kenyan volunteer who is the local agroecology promoter, showed me small jars of seeds, explaining that this is now all that is left of their seed bank after the drought. The rest is planted on those collective plots. Mohammed was confident they would grow enough maize seed to get farmers back on their feet.

This was one self-reliant, climate-resilient bunch of farmers. Many bunches, actually, with 7,000 members in 19 active Marracuene-area associations, all affiliated with UNAC, the national farmers' union. Their drought preparedness was no accident. ActionAid has been working with the alliance of Marracuene farmers unions, through UNAC, to promote agroecology, conservation agriculture, and climate-resilient farm management.

I saw them all during my visit to two of the associations, in Bobole and Popular. I saw careful mulching to hold in water and add organic matter to the soil. I saw intercropping in beautifully prepared raised beds, designed to promote drainage, avoid flood damage, and retain moisture during drought. I saw organic manure-based fertilizer awaiting application in the newly sown fields. (Mohammed confessed that some farmers were mad at him because local livestock farmers used to give away their manure; now they sell it due to the demand the project has helped create in the community.) I saw abundant crop diversity.

Self-styled agroecology revolution

I was most struck by the communities' commitment to its native yellow maize. It predated ActionAid's promotion of alternative cropping strategies. Farmers in Marracuene had simply decided that hybrid white maize offered them no significant advantages over their local saved variety, which produces small cobs but is dependable (if not this year) even under conditions of sporadic rains and limited fertilizer applications.

They were apparently so committed to rescuing this local variety that they followed the lead of a volunteer from Brazil, who showed them how to better select seed for purity and performance. As with many so-called “local varieties,” the quality had eroded over time due to uncontrolled cross-pollination with other maize varieties, including hybrids provided by international donors or the government. By selecting the best cobs and the purest kernels from those cobs, growing them out in the fields, then repeating the process, farmers restored the purity and performance of a preferred variety of maize. One they did not have to purchase every year.

It’s the kind of participatory plant breeding that is rarely considered when governments and international donors – and the neo-Malthusians predicting the end of food supplies – call for urgent investment in improved seeds. They mean one thing when they talk about improved seeds: hybrid maize sold by national and multinational seed companies. It is part of the new green revolution for Africa that, like the old one for Asia and Latin America, depends on purchased seed every year, from companies such as Monsanto, and heavy applications of inorganic fertilizer, supplied by multinational firms such as Yara.

On their own, these do nothing to improve the fertility of soils. Think of a trout pond stocked every year by the authorities so fishermen can catch fish.

Give a person a fish, goes the adage, and he eats for a day. Teach him to fish.... Well, teach him to fish from a stocked pond, and he won’t eat for a lifetime, he’ll eat for as long as someone can afford to keep stocking the pond. Teach him to create and maintain a healthy pond that sustains life – *then* he will eat for a lifetime.

The soils are farmers’ ponds, and Marracuene’s were being fed by crop diversity, just the kind of approach promoted in a recent expert report, [“From Uniformity to Diversity.”](#)

Intercropping is great for soils, building organic matter, adding needed nitrogen for maize and other crops, and reducing input costs. But it also diversifies risk, including nutritional risk in a drought. Mohammed told me that very little maize came out of the fields in this year’s extreme conditions, despite their drought-tolerant, improved variety. But drought-resistant crops like cowpeas, cassava, sweet potato, and okra survived, providing needed food.

Judite Manhica, the tall, strong woman who leads the association, said she didn’t expect a food crisis in her community after the drought. She farms just an acre of land, but she says it sustains her family.

Agroecology is by no means the norm yet in Marracuene; Mohammed estimated that maybe 40 percent of farmers are now employing the practices, or some of them. But he shows the patience of a true agricultural extension agent. He said farmers saw their neighbors do well with the new methods and they slowly were coming around. Mohammed said his efforts to introduce drought-tolerant sorghum

and finger millet crops hadn't taken hold, mainly because farmers in southern Mozambique are not accustomed to growing or eating them. But maybe in due time they will.

Misplaced priorities

I asked if the government was supporting their efforts in any way. Mohammed was charitable, pointing out free bags of organic fertilizer the provincial agriculture department gave them. But he couldn't name another serious government contribution to sustainable agriculture. Neither could anyone else I spoke with.

I've seen little evidence, in fact, of any serious agricultural policies aimed at the 3 million small-scale maize farmers across Mozambique who eke out a living, with eroded local seeds, rudimentary tools, no credit, no irrigation, and no extension agents like Mohammed showing them how to put life back in their soils and food on their tables.

Instead, their government promotes large-scale foreign investment that threatens their lands and their livelihoods. And the international community, led by the Gates Foundation, pressures African governments to adopt restrictive seed laws that threaten farmers' rights to save and exchange seed, as they do in Marracuene, while promoting the patented varieties being sold by Monsanto and other seed companies.

The day I was in Marracuene, African leaders were gathered in Harare, Zimbabwe, to advance the so-called Arusha Protocol on "Plant Variety Protection." That is the catch phrase for measures to guarantee the intellectual property rights of commercial plant breeders.

The African Food Sovereignty Alliance (AFSA), denounced the effort in [a statement](#). "AFSA is committed to ensuring that farmers, as breeders themselves as well as users, remain at the centre of localised seed production systems and continue to exercise their rights freely to save, use, exchange, replant, improve, distribute, and sell all the seed in their seed systems," said coordinator Dr. Million Belay.

Thus far, the government of Mozambique has dutifully reformed its seed laws to conform, creating obstacles to the kinds of real solutions – to hunger, poverty, and climate change – farmers in Marracuene are creating for themselves.

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