The seed keepers’
TREASURE

Challenged and threatened by development intruding on their lands and traditions, the seed keepers of the Philippines’ Cordillera region fiercely held on to their native rice varieties. Now, the world is discovering the precious gems in their possession: heirloom rice.

For thousands of years, the indigenous tribes of the mountaneous Cordillera region in the northern part of Luzon Island in the Philippines placed their fate in the hands of chosen women. They are the “seed keepers” and they are tasked with harvesting the life force of their rice. Seed keepers select the grains to be saved and sown for the next planting season, thus playing a crucial role in the turnover of the next rice harvests. Before harvesting begins, they scour the field and take great care in picking the panicles with the best form and structure. “When we bring rice into the genebank and make it available for breeding, the value in that comes in specific genes,” said Dr. Sackville Hamilton. “Maybe the aroma gene, maybe something special about the texture, the taste, the resistance to diseases, and many different attributes. We can generate a value that’s good for farmers out of the material in the genebank, just by virtue of its genetic properties. We can combine these genetic properties into other varieties and make, we hope, better varieties.”

But these native rice varieties were not always viewed this way.

Out with the old, in with the new

When IRRI started, in the 1960s, the mentality was: “We need more food.” Dr. Sackville Hamilton explained. “IRRI knows how to produce more food, higher yields, with more fertilizer, with dwarf genes, all those kinds of things. We developed the technology that replaced the technologies that farmers had at the time.”

But every community had its own culture, its own way of growing rice, and its own varieties. So, Dr. Sackville Hamilton said that by adopting IRRI’s early technologies, “We just threw away their old technology and replaced it with the new technology.”

The new technology included new high-performing rice varieties and vegetables. The Banuaue terrace farmers in Ifugao Province, impressed by the new varieties, swapped their heirloom rice varieties for nonindigenous, high-yielding rice varieties, which can be planted and harvested twice a year, and also for temperate vegetable crops promoted by the Philippine government through the Green Revolution.

The high price of change

But the new rice varieties and vegetable crops required expensive inputs such as fertilizers and pesticides. Years of heavy use of pesticides and commercial fertilizers diminished the fertility of the soil. It also “accelerated the poisoning of the rice terraces,” thus destroying agrobiodiversity and making traditional rice paddy cultivation of fish, clams, and crabs no longer feasible. The spiraling cost of pesticides and chemical fertilizers had put farmers in debt. When the farmers were forced to stop using agrochemicals because of their high prices, the yield capacity of the rice in the Banaue terraces suffered drastically. Robert Domoguen, chief information officer, Department of Agriculture in the Cordillera Region, reported in 2008 that farmers who tried to plant high-yielding varieties in their fields stopped doing so when they observed that, without chemical fertilizers, the succeeding crops grown in the same paddies produced low yields. He added that modern varieties also required pesticides to protect them during diseases and pest infestation.

Genetic reservoir

But heirloom rice has intrinsic values to outsiders as well. The seed keepers were the original rice plant breeders. The enormous diversity of rice they developed in the Cordillera region is like a big box of genetic tools that serve as a crucial line of defense against the threat of insects and diseases.

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In this perfect recipe for poverty, many farmers found themselves without income for their other needs. They had no access to the trade within the community. Over the years, much of the indigenous people’s knowledge and wisdom have already disappeared. And, with further neglect, many of what was left could also be lost soon. Only through continued use in the fields can heirloom rice be preserved.

The conservation of heirloom rice is more than just an exercise in nostalgia. “We don’t know about all the culture,” said Dr. Sackville Hamilton. “All the knowledge associated with it [the varieties] gets lost once we put them in the genebank.” If we can find a way to provide better livelihoods, in which farmers can use heirloom varieties, then these varieties will remain,” he added.

Rice renaissance women

The answer to the seed keepers’ prayers came from two women who used their limited personal resources and passion to help preserve heirloom rice cultivation. One of them, Mary Hensley, a Peace Corps volunteer in the Cordillera in the 1970s, was enamored of the rice terraces. Saddled with a minuscule marketing budget, the company’s effort to produce and export heirloom rice without disregarding the people’s way of life. It incorporates the culture, needs, and aspirations of the people into the production process, because preserving traditional ways is not only about financial rewards. More importantly, it is also about respect.

“Our process is participatory,” Ms. Garcia explained. “Of the more than 87 varieties of heirloom rice in the project areas, only 17 were chosen for their export potential. But we do not require farmers to plant only specific varieties that we want.” Some fields are planted with rice varieties for export. Others are planted with the varieties of farmers’ choice for their own consumption.

Key to a brighter future

Money from the export of heirloom rice is breathing life back into the languishing indigenous tribes by transforming them into thriving agricultural centers. Some of the people who left the region for jobs in cities are now returning home, and the land they once called their own has become a means for preserving the fragile cultures of their ancestors in their fields.

Heirloom rice isn’t merely a link to the past any more. It is now key to the Cordillera’s brighter future.

Culturally conscious development

Ms. Hensley teamed up with Vicky Garcia, founder and executive director of Eighth Wonder Rice, an international organization based in Milan that promotes sustainable, environment-friendly agriculture, respects the cultural identity of local people, and advocates animal well-being.

Ms. Hensley nominated three varieties of heirloom rice to Slow Food’s Ark of Taste, an international catalog of heritage foods in danger of extinction. These are the Imbazon from Ifugao, the Omionio from the Mountain Province, and the Chong-ak from Kalinga. In July 2010, Slow Food Foundation approved the inclusion of the three varieties of heirloom rice in the Ark of Taste.

Inclusion in the Ark means that these rice varieties meet the Foundation’s standards for taste quality, environmental sustainability, and respect of the cultural identity of the producers. Ms. Hensley stated. All products listed in the Ark are recognized to have real economic viability and commercial potential.

This sets the stage for the world market. The Cordillera’s heirloom rice is a new option for the consumer, and it is now more accessible than ever before. “Their [these people’s] knowledge of heirloom rice in the Ark is a recognition that these rice varieties can indeed contribute to the world’s food security,” she said. And the Cordillera’s heirloom rice is not just an economic engine for the region and a means for preserving the fragile biodiversity of the terraces and the cultural identity of the indigenous people. But beyond the obvious financial boon, protecting its Geographical Indications (GI) is vital to the Cordillera’s image and a means of preserving the fragile biodiversity of the terraces and the cultural identity of the indigenous people. Ms. Garcia and Ms. Hensley are working to keep their rice alive and restore it to its former glory.

The other treasure of the Cordillera

With the listing of the first three varieties, the Cordillera terrace farmers are a step closer to giving heirloom rice a legal status under protected Geographical Indications. This is a special type of intellectual property protection for names of regional foods and other agricultural products to distinguish them in the market and help preserve traditional cultures, geographical diversity, and production methods.

Geographical Indications not only ensure that customers are not confused or misled by copied products made by other brands, but that the genuine producers can also benefit from the goodwill of internationally recognized brand names. If they succeed, Imbazon, Chong-ak, and possibly other heirloom rice varieties cannot be used on products that haven’t been traditionally grown in the Cordillera terraces. No other place on the planet can claim it produces these varieties. For example, the grains from Imbazon varieties cultivated, harvested, and processed outside the Cordillera region cannot be called Imbazon rice. This would make heirloom rice an economic engine for the region and a means for preserving the fragile biodiversity of the terraces and the cultural identity of the indigenous people. But beyond the obvious financial boon, protecting its Geographical Indications is vital to the Cordillera’s image and a means of preserving the fragile biodiversity of the terraces and the cultural identity of the indigenous people.

Ready for the world

Ms. Hensley and Ms. Garcia are convinced that heirloom rice is ready for the next level. “Their [these people’s] knowledge of traditional terrace agriculture and the plant breeding that has resulted in these varieties should be legally protected,” said Ms. Hensley. So, they contacted Slow Food Foundation for Biodiversity, an international organization based in Italy that promotes sustainable, environment-friendly agriculture, respects the cultural identity of local people, and advocates animal well-being.

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