



The *Romance* of Biodiversity

Jacques Cousteau converted her. Watching and admiring his documentaries as a child, “I always wanted to be a scientist,” says **Gisella Cruz Garcia**. Though the family lived in urban Lima, Peru, “I was different; I liked going to rural areas to see plants and nature.”

A New Arrival

Majoring in biology and ecology, Gisella graduated at the top of her class from Lima’s Universidad Nacional Agraria La Molina. She studied biodiversity along Peru’s Pacific coast, in the Amazon rain forest, and also in the Andes mountains. In 2001 Paul Peters, a Dutch student, arrived in a tiny Andean town to study medicinal plants. “He hardly spoke Spanish, only English. I was the only one who knew any English, and had to help him communicate with workers,” Gisella recalls. “Then the romance started. We’ve been together ever since!” She moved to the Netherlands in 2003, and married Paul, an agronomist.

For her Master’s degree at Wageningen University, Gisella chose an unusual research combination: plant science and social science. Her work was published in the *Journal of Ethnobiology & Ethnomedicine*—a rare achievement at the Master’s level.

Traditional Knowledge

During her doctoral studies, Gisella received two prestigious summer fellowships that gave her the opportunity to learn essential methodologies and provided unique, unforgettable experiences. In 2007, she and eight other Ph.D. students spent two months with Bolivian Amazon tribes, “without electricity, bathing in the river, cutting firewood each day. We saw the relationship between people and environment, and their traditional knowledge about how to use plants passed from generation to generation, managing and preserving biodiversity.” Then in 2008, a European Science Foundation program took 15 Ph.D. and postdoctoral students from diverse backgrounds to Spain. “Archaeologists, biologists, geneticists, historians all tried to understand the dynamics of agriculture in traditional societies, from thousands of years ago up to now,” says Gisella. “I wanted to participate because, to know where we are going, it’s important to understand where we have come from.”

Thanks to her UNESCO-L’Oréal Fellowship (2007-2009), says Gisella, “I can now carry out my [rice ecosystem biodiversity] research in Thailand! It’s going excellently. I’ve been on two long trips, to Thailand and the Philippines. In one village, I could identify, observe, and study

other wild food plants in the rice landscape,” including water spinach, tamarind, and water lilies. Research on rice, the world’s most important crop, usually considers the plant in isolation, but often rice farmers depend on other nearby plants for food, fuel, or construction materials, and for medicinal uses.

Importance of Being Polite

As the only researcher in those Thai villages, where few speak English, Gisella had difficulty finding anyone to help with her research. But once she learned the culture, things grew easier. “Each country has its own ways and social norms. I have to adjust to that, starting from how you sleep [e.g., on the floor]. It’s not only about research, but also about performing in their society, being polite. I love it!”

Gisella hopes her methodology is applicable in other places as well. Ultimately, she’d like to work for an international organization, sustaining biodiversity in developing countries. “It’s so important that research is not only on paper, but also that results are implemented according to needs of local people, [especially] poor farmers—for both their livelihood and their agriculture.”

‘Fight for Your Ideals’

Though most plant scientists are men, “it makes no difference to me,” Gisella asserts. If you like science, “do not be afraid! Try it,” she urges. “Do what you really like, put all your passion into it, and fight for your ideals. If you’re happy and you enjoy it, you’ll have more opportunities and motivation.”

For women scientists, “It’s important to have someone who understands and supports your work,” Gisella acknowledges. Luckily, she and Paul have similar ideals and careers. Now an importer of organic, fair trade foods, he accompanies Gisella on Asian research trips. “I go with him to talk to villagers, farmers, and companies, to also support him in his work.”

“Gisella thinks very creatively. She came up with amazingly innovative work for her Ph.D., because she was awarded this wonderful UNESCO-L’Oréal Fellowship,” says her supervisor, anthropologist Lisa Price, associate professor in Wageningen University’s Department of Social Sciences. “Her holistic approach is unique in agricultural research. She’s concerned not just about plants, but about the human element, applying it to people’s lives. She’s a wonderful role model for young women.”



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