

Subsistence Aquaculture in Developing Nations

Teach a Person How to Raise a Fish....

Long ago, I went to graduate school at Auburn University to teach people how to raise fish who would otherwise not have something to eat that day. At the time, I had never heard the phrase “food security” but I knew what hunger was and I wanted to help my fellow human have enough to eat. I received a Ph.D. in fisheries and allied aquacultures and learned many ways to raise many kinds of fish, but life intervened and it was more than 20 years later that I retired from the Alaska Department of Fish and Game and could finally join Peace Corps to fulfill that goal. I was sent to Zambia in 1999 as a fisheries specialist with the Rural Aquaculture Promotion Project. I had been taught well at Auburn, but not how to dig a pond with just a hoe and a wheelbarrow and to fertilize it with garden wastes. Small scale farmers in Zambia did not have money for earthmoving equipment, pumps, concrete, feed pellets and so forth. They had to get by with what little they had and our job was to teach them how to do it.

The ponds we taught our farmers to build ranged in size from 100 to 300 sq. meters and the idea was to be able to harvest 10 kilograms (kg) of fish from every 100 sq meters every six months. That would not be a lot of fish for a farmer in the US, but in Zambia, it made a difference between putting protein on the table, selling the extras for money for school, clothing and medicine or not. We taught the farmers how to build ponds that would not leak, stock just the right number of fish and add things they would have otherwise discarded that would directly or indirectly feed the fish. We all worked with farmers within about a 20 kilometer radius of our houses, mud brick with straw roofs, no electricity, no running water, but we were happy.

One day our APCD, Dan Irvine, sent Volunteers with USAID’s Farmer-to-Farmer program to teach our farmers how to form fish farmer organizations, how to budget and plan, market their fish and so on. After I finished my service, Dan asked me to edit a newsletter for RPCVs from our program and to get the Peace Corps liaison to put an article in it about the Farmer-to-Farmer program. I contacted him and thought, what the heck, I’ll just send him my resume as well. He agreed to write the article, which he did, but then also decided, what the heck, he would just send my resume to the non-governmental organizations (NGO’s) that find volunteers for Farmer-to-Farmer. A few weeks later, I got a call from Winrock International wanting to know if I could go to Tajikistan to help restore their trout and carp aquaculture after it had been destroyed by the Taliban (Tajikistan is just north of Afghanistan). A couple of weeks after that, I received an e-mail from Citizens Network for Foreign Affairs to ask if I could go back to Zambia to help my old Peace Corps program teach fish farmers how to avoid inbreeding in their fish stocks. So I did both of those assignments, but then went back to work in Alaska and had to turn down several more opportunities for Farmer-to-Farmer projects because I no longer had the time.

A few years passed, and Hurricane Katrina hit the Gulf Coast of the US. For the first time in its history, Peace Corps was asked to assist in the United States. I asked my boss for a leave of absence; first she said yes, then changed her mind, Peace Corps kept calling every few days as the situation was desperate, so I quit my job and went down to USA-1 helping out a disaster relief center in Biloxi, Mississippi as a Crisis Corps Volunteer. After returning to Alaska, more Farmer-to-Farmer aquaculture

projects followed in Kyrgyzstan and the Republic of Georgia. Some Jesuit friends of mine asked me to teach some nuns in Zimbabwe how to build just the same kind of ponds I had taught farmers to build just to the north in Zambia in Peace Corps. Here's that pond being built:



Farmer-to-Farmer took me back to the Republic of Georgia again a couple of years later, to Mali this past spring and I am headed back to Mali in October 2011 to teach more fish culture. Here is a picture of the pond the Mali farmers built in April 2011 based on the Peace Corps's Rural Aquaculture Promotion Project in Zambia:



Peace Corps opens doors and what they start in one place spreads on to others.