

Intro to Permaculture Tropical Food Systems Video Transcript

We're going to journey again to look at design patterns, this time to the tropical Caribbean Island of Cuba. I was able to travel there in 2013 for the International Permaculture Conference, and visited the site we're looking at. You can see footage of the site in the video I made that is linked to below, entitled "Cuba Permaculture Pilgrimage."

Cuba had a major shock in 1991 with the fall of the Soviet Union and the loss of its fuel and fertilizer imports and subsidies, so they had to rapidly transform their food supply to locally grown and organically managed. They devised many strategies and techniques and were greatly influenced by Permaculture.

The site that we're looking at is inland, in the City of Sancti Spiritus, and is an Organiponico, which is an urban organic garden. This site is about 1.15 acres or one half of a hectare. Organiponico's are highly productive food systems and are found throughout Cuba.

This organiponico has five major elements I'm going to point out, and how they are related. Firstly, there's the intensive irrigated vegetable production beds. They produce every common vegetable that grows in the tropics, salad greens, squash, peas, tomatoes, and many more.

Second, there is the food forest. This is a multi-storied jungle of food plants, including bananas, citrus, mangoes, guava, and many, many more. It's a virtual botanic garden of tropical fruits. There's some nice imagery of it in my video linked below.

Next, there is the Mediterranean garden, which is located on the hot west-facing slope. This grows drought hardy herbs, cacti and succulents.

Next, there is the worm composting facility, located in a shade house. This is really the fertility engine of the whole system. Vegetative wastes are produced in the food forest, herb garden, and vegetable production area. The worms help to transform those wastes, and any other organic material brought in, back into highly potent fertilizer, which is then applied to the nutrient-hungry vegetable crops.

Finally, we look at the water flow and see that the food forest was placed in the low area. All of the drainage from the site and adjacent properties is directed and collected in a pond at the bottom, where fish are raised. This water can also be used as a nutrient rich source of irrigation, as well as habitat for beneficial aquatic organisms like frogs and salamanders.

There are clever and integrated small-scale Permaculture systems like this all over Cuba that greatly enhance the food security and ecological integrity of the Island.