

Feature Farmer

Dash and Erika Kuhr

The Hawai'i Institute of Pacific Agriculture

Kohala, Hawai'i

Area under production:

10 acres (1 acre market garden and 9 acres under diversified agroforest)

Years in production in

Hawai'i: 11 years

Crops grown, animals raise, other goods & services?

The Hawaii Institute of Pacific Agriculture's (HIP Ag) mission is to practice, teach, and deliver regenerative agricultural education programs. In North Kohala, we provide agriculture and nutrition education to students grades K-20. At the DOE Kohala Complex we provide in-school workshops and garden-based cooking classes, High School Farm Mentorship, and Farm to School (F2S) and Garden to Cafeteria (G2C) coordination. On our Farm, we offer field trips, a Summer High School Internship, and a year-long Post Secondary Apprenticeship. In the community, we offer support to local farmers by hosting workshops on improving crop production. To further that support we recently developed an aggregation site to increase farmers access to cold storage and a food-safe wash pack. Our four farm locations serve as our classroom for our field trips, workshops, High School Internship and Apprentice program. We have a 1-acre market garden that produces kale, collards, eggplant, pumpkin, radishes, green onion, fennel, Japanese turnips, and herbs.



We have three sites that makeup 9 acres of diversified tropical agroforestry plantings. Some of the main crops we grow on these sites are bananas, plantains, papaya, citrus, breadfruit, avocados, macadamia nuts, soursop, jackfruit, rollinia, coconuts, kalo, cocoyams, cassava, turmeric, ginger, galangal, ashwagandha, kava, and cacao. We also make value-added products such as Ginger and Turmeric Powder, Dried Bananas, Ashwagnadha, and Kava Tinctures, and Honey.

Number of employees and/or family members involved?

Husband and wife, Dash and Erika Kuhr founded HIP Ag in 2008. Currently, we have 7 full-time employees, 1 part employee, and 5 Farm Apprentices.

Production System

Market Garden: We rotate our vegetable crops with cover crops to give beds time to rest between plantings. In 2018 we started using Korean Natural Farming to make our own IMOs and amendments. We spray our garden twice a week based on the different needs and cycles of our crops. We also have a vermiculture system and we use the castings to make our own seed mix, compost tea, and as a fertilizer to top-dress our beds. We built traditional thermophilic compost piles with our field waste and turn them at least twice a week. When available we use wood chips to mulch our eggplant and brassicas. **Agroforestry:** We use tankage or manure to fertilize our agroforestry systems when they are first installed. We maintain plantings by providing them abundant mulch to suppress weeds, retain moisture, and maintain soil health. This mulch comes from banana interplantings that are harvested weekly, as well as green mulch from coppicing companion plants such as crotalaria, gliricidia and pigeon pea



Pest Management

We follow organic practices and encourage this from the other growers we are contracting with as well, we have just started the process for organic certification this year.

Slugs:

We take the threat of Rat Lungworm very seriously. We take various preventive measures to prevent slugs, and we are extremely vigilant throughout the entire process of growing, harvesting, washing, and packing produce. We do routine inspections and collections at night to prevent growth population numbers. We set traps and use Organic Materials Review Institute (OMRI) certified slug bait. We thoroughly inspect all produce when harvesting, prior to washing, during washing, and again as we pack it for delivery.

Food Safety

At HIP Ag, we are constantly improving our food safety systems. Our Kohala Food Hub Manager has FSMA Training and we are currently finalizing our requirements to become Group Harmonized GAP certified through North Shore Economic Vitality Partnership. Through the Kohala Food Hub we offer local farms support and resources to increase their food safety systems and protocols.

Strategies for controlling costs:

We have been investing in shared infrastructure for our farm and other farms in our area. This includes the facilities at the Kohala Food Hub (KFH). Currently, we have a wash pack and cold storage and eventually freezer storage. Early next year we will be launching an equipment share and down the road there will be a certified kitchen for value added food production. We believe that a rising tide raises all boats and if farms can share access to resources, this reduces costs and liabilities for everyone.



Were you impacted by the flooding in April 2018?

All of our production was affected that year. In North Kohala it didn't seem to stop raining all year long. Our vegetable crops suffered from lack of growth or rot, fruit production was very low for citrus and avocados, the soil was often too saturated to work and less people attended markets due to bad weather. It was a very challenging production year for us.

Marketing Strategy & Pricing

We price our products competitively while still honoring the time and effort we have put in. We see growing food as a community service. It is a high investment, high risk, low return, labor of love business. We just restarted a CSA to bring more financial stability to our farm during the summer months when markets are slow and production is abundant. We primarily market through social media. We have an excellent communications director that gets the word out to the community via Instagram and Facebook about what is happening on the farm and what products we have available. We have found that a lot of people have an interest in tropical and exotic foods and are eager to learn more about healthy eating.

Places you sell your products

We sell at the Hawi Farmers Market under the banyan trees, Kohala Local Grown, Kohala Department of Education, CSA in North Kohala, Hawaii Food Basket Da Box, and KFH Local Food Market Place.

Promotion and keeping up with market trends:

We have been working on finding ways to increase the amount of food going into the Farm to State program. We developed the Food Hub to be that catalyst. Kohala Food Hub has primarily been created to create community infrastructure for increasing distribution of fresh produce to the Hawaii DOE Farm to School Aina Pono Program. With the success of Kohala pilot and Mililani, the state government has decided to roll out F2S to schools statewide. This facility will enable and empower our community to become growers for the DOE and other markets. This is the future of regional food production, aggregation and distribution.

In developing our systems for the Kohala Food Hub, we decided to use the Local Food Market Place software, the same mobile market system as Sustainable Molokai. On the website, farmers and backyard producers can post what produce or farm products they have available. Buyers are able to make purchases within a purchasing window (Friday to Monday). After the purchasing window, Growers then harvest based on what was ordered. Kohala Food Hub supports with order management, receiving, sorting, storing and packing the produce orders for weekly pick-up or delivery.

Give us an idea of what the future holds for your farm!

To address some of our crop production issues and increase production we received support from NRCS to put up high tunnels and a new irrigation and water retention system. We will be putting these up this year. We will also be focusing on increasing production of crops that we know the HDOE has a high demand for like tangelos, nang phaya bananas, lau leaf and cocoyams. We want to start a banana macropropagation system. This will enable us to increase clean banana keiki for our farm and others who are interested in increasing banana production. This year we will also host workshops on banana macropropagation and fruit tree orchard care.

We are working towards getting an 'awa grinder so we can increase the amount of fresh frozen stock that we have available. We also are hoping to include large scale dehydration systems and a hammer mill as a part of the food hub. This would increase our efficiency and production of ginger, turmeric and other root powders and expensive equipment to other producers.



New products or services you are planning:

There is still a lot to work out with our equipment share, but we are excited to roll out this program early next year.

What advice you would give to other aspiring farmers?

Farming is not only a career path, it is a lifestyle and a labor of love. It is a career where you never stop learning and growing, where there are always new problems to face and issues to solve. The land is your greatest teacher, so do your best to be observant to its ever giving wisdom. Be patient, humble, diligent, persistent, and tenacious in your pursuits. It is said that it takes seven years until your farm is successful. Start small, find community resources that offer guidance and support, have a good plan and be flexible to change. Find a few crops that you are able to grow well and work towards diversified market outlets and income streams.

Inspire others by practicing and teaching what you love. Create food safety systems in the beginning. Develop a short, mid, and long term crop plan. Write out the goals and objectives of your farm including long-term goals, strategic objectives, measurable results, activities, and a calendar of events. It is also helpful to plan out a DARCI (Delegator/Decider, Accountable, Responsible, Consulted, and Informed) grid within your team so management runs smoothly. Remember to be grateful to have the privilege to work with the land and grow food for your community.