

**Sustainable Agriculture Skill Panel Forum**  
**January 24, 2012**  
**Education & Training**

Chair: Cam Muirs

Facilitators: Alison Colby

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**Discussion Outline:**

- I. Introductions: Why are we here?
- II. Setting the Context Discussion:
  - a. Panel Chair's Overview
  - b. What is the current state of communication between educational entities and the agricultural industry on education and training?
  - c. What is the current state of labor and labor shortages affecting education and training?
- III. Preferred Vision in 10-20 Years: Best Case Scenario
- IV. Develop Priorities
  - a. What are the opportunities or supporting forces that will move us closer to our best case scenario/vision?
  - b. What are the barriers or restraints that hold us back from moving closer to our best case scenario/vision?
- V. Outline Actions for Priorities (time permitting)

**I. Introductions: Why are we here?**

- Networking and collaboration
- Bringing resources and funding for ex-offenders
- Any information
- Labor market data for Ag
- What can be done for those out of high school and college to get into Ag
- Partners in the industry
- Help people with their land
- In the future we need to grow our own food – major paradigm shift
- Correctional facilities need training for inmates in Ag
- UH knows we must take the lead on energy and sustainable Ag -- \$24M grant
- Knowing Ag resources for at-risk youth and the hardest to employ
- Opportunities to move population to workforce, e.g., probation
- What farmers need re: workforce; network with others
- Farmer/educator – now get more people engaged
- Network, partnership, how to get high schools and post-secondary schools ready
- How to outreach to younger generation
- Charter/Hawaiian schools are doing good job – how to expand this to others

- DHHL lands are still so empty, but good organization/newsletter...how to get more information and grow interest in gardening, recycling, etc.
- Break stereotype of a “typical Ag student”
- CES – entrenched with Ag/farmers; identify problems, create solutions; right now Big Island could = Ag leaders; how to go forward
- As an educator, stimulate interest and grow ideas to move forward; partnerships
- At risk = cream of crop of those hard to engage; how to do this
- Build network - what kind of organizations, what they’re doing, how to fit resources to that
- How better to match the workforce to skills needed; training into right programs
- DOE building partnerships/experimental projects to engage students
- Food sustainability – we must bring youth and non-traditional students to become profitable farmers
- Charter schools are teaching traditions of Native culture (sustainable and modern techniques in own families and communities)
- Need to articulate Ag curriculum and change practices to enhance soil through natural farming. Ag curriculum should not be just about books, but starts with kids/youth. We must romanticize Ag again.
- Spread good news of natural farming from ancestors – healing the environment with no waste to higher quality food
- Hear what the concerns are and how to bring resources/new technologies to those
- How to become sustainable like before
- Ag is important; we need to address the 2 billion people who are hungry, but fewer people are involved with Ag; learn how we can better assist with sustainability
- Advocate increased investment by the State in Ag at all levels
- Curiosity but fear that we might not have enough food and need help
- I know there are highly motivated young people who need to be connected to opportunities and resources; how can I help?
- How we go from information from different sources, from agencies, regulators to farmers, how to bridge best management practices to farmers and vice versa; information flow from farmers
- Learn; see gaps in training and support needs for local farmers
- Want to make sure small gardens don’t interfere with Ag industry
- Love to learn how others of many sources of diversity grow gardens (one resource – NHERC Heritage gardens)

## II. Setting the Context Discussion

### *Panel Chair’s Overview*

Education and training are vital components in the development and expansion of our future and existing workforce. Having a responsive workforce system that can readily address the needs of farmers and aspiring agricultural entrepreneurs is absolutely

essential to sustain and grow this industry. Incumbent worker training, coordinated work-based modules, career exploration and development strategies are all key activities here.

- a. Center for Entrepreneurial Support in Agriculture. What are the primary areas for which this center needs to provide support to enable new and innovative entrepreneurial development in the agricultural industry? Location? Who is willing to help?
- b. Long Term Educational Support. What programs are needed to enable the re growth of the agriculture industry and improved sustainable food security in Hawai'i? How can communication be improved among stakeholders (DOE UHH, UHM, existing farmers, future farmers, food distributors, community) to articulate what is presently offered and what is needed? Who is willing to help?
- c. Educational Extension Service. What services and training opportunities do farmers need from their extension service to best support the re growth of agricultural industry and improved opportunities for new farmers? How can CTAHR and CAFNRM pool their resources to best serve the famers? Who is willing to help?

***What is the current state of communication between educational entities and the agricultural industry on education and sustainability?***

- Problem: people are too busy growing crops to get education
- Teachers should teach children importance of farming in their own yard – not enough teachers are teaching this
- Can't learn farming in school only – need hands-on, not just academic
- Action education is needed so Community Colleges are investing, but need to align higher education with economic leaders and rebuild that connection
- Lots of Ag Education Resources on the Big Island, but we lack partnerships and have untapped potential and don't fit
- No communication between high schools and Ag industry as to what is needed post-secondary school
- Cattlemen: priority = educating youth K-20, but the industry doesn't know how to connect. On the DOE side we're losing an emphasis on providing Ag education to students. A DOE and industry connection is needed.
- Both short-term and long-term needs for the Dept. of Ag, DLIR and Hawaii Community College to have connections, but there is still a disconnect between education and the Ag industry. Short-term training in equipment, welding, etc.
- Also need to think broader – also include those on technological innovation, research of new crops, other research, new food science technologies, regulations, etc. Scope is large, not just child and farm, but child and career opportunities and needs.
- Current state of education: public not educated with knowledge of economic importance of environmental health

- Disconnect – try to connect them to opportunities here in Hawaii, rather than leave. Not just farming, but all aspects of the Ag industry
- Need to create positive regulatory framework and reduce economic barriers so youth and Ag can succeed; currently we're not promoting Ag
- Needs to start with base, to interest kids at the base. We have such a knowledge base that will be lost, along with different crops (e.g., kalo); currently we're not linking mentors with kids
- Link college students to the land and to the farm; partnerships (e.g., UHH, Shipmen, Ha) to support tuition, etc.
- Growing up here in Future Farmers of America (FFA), it is so valuable in teaching hands-on. The FFA programs are shrinking drastically.
- Not enough communication with small farmers. This is difficult because they're so busy, but they could be great mentors.
- Research and other support are needed, but we need the farmers to tell the needs. We need a pipeline to get youth into farming. Farm tours are not enough. The community colleges are currently trying to deal with this.
- Classes can teach, but it's hard to find a realistic place to practice hands-on

***What is the current state of labor and labor shortages affecting education and sustainability?***

- There are labor shortages on the Big Island. There's no system in place for people willing to work hard on farms. No "nurses' registry" equivalent for farmers to get to a decent wage. No systemic approach for small farms.
- How to transfer the academy model to high schools, e.g., academy for construction, where industry supports that
- Large corporate farming industries are not sustainable, not buying local is a detriment to small farms; we need to support/engage small farms
- High school grads have no land, no money, e.g., the only job is on the golf course. There's no continuity between the DOE and the Ag industry. How to build support?
- A college degree is not leading to higher positions. We need to teach higher level skills through more education.
- Sustainability has many aspects. Small Ag is important, but it can't not support large Ag efforts. We need to support state, national, and global efforts, too. We need increased productivity, education, technology Ag of all types is important. How do we link resources to meet educational needs of the industry?
- Of the 42 high schools in the state, less than ½ have Ag programs. We need more Ag education to prepare teachers. High stakes test cause students to double up in subjects like math and English and doesn't allow room for electives like Ag, resulting in program shortages.
- 65% in a recent poll show many don't think college is necessary. No focus on career readiness instead of just college.
- Hands on skills are not taught in K-12, we focus on test taking instead.

### III. Preferred Vision in 10-20 Years: Best Case Scenario

***10-20 years from now, from a workforce development perspective, what is the best case scenario for assuring vibrant education and training for the agriculture workforce?***

- We will have a clear, quantifiable goal to accomplish, with policy levers and planning done beforehand. Figure out a balance of biofuel vs. food production. Hawaii Clean Energy Initiative laid out numbers, wants to be 70/30 sustainable.
- Every school, campus, etc. learning how to grow things for that community so farmers feel supported; innovation centers for Ag to learn new things and share, combination of small and large.
- Mentoring is centralized, coordinated for specific questions, e.g. taro, available to all
- Farming elevated as an economically viable career option for youth
- Youth are encouraged to farm by parents, who support and encourage children to seek careers in Ag
- Learning Center K-16 in one place per district
- The State re-invests in Ag Education for K-12
- Reinvestment in Future Farmers of America
- Ag becomes a priority at K-16; University is re-invested in professors to work with farmers across the state on technology, etc.
- There is communication between all levels
- Those in the prison system will be included and there will be increased marketing to Ag industry about the benefits of hiring ex-offenders, such as federal bonds, tax credits, etc.
- The industry will have more Extension Agents
- People will be able to economically survive in Ag jobs
- Older people from the mainland who come to farm will also have outreach and support
- Current farmers will be more successful, with resources available to them, more coordination and supportive partnerships between UH, DOE, Industry; more profitability
- Legislators and leaders will be on-board
- The overall health of our community will be stronger, with the contribution that Ag provides, and a recognition by the community of Ag's contributions
- There will be value-added product education support
- A Living Farm, a well-rounded Ag production with a 2-year program for interested people to live there and work to test-drive Ag work career
- There will be access to land, education, capital; access to land and Ag parks; political support to get farmers on the land
- By education teachers on the values of Ag, they can put lessons into the context of Ag, e.g., create a doctor of education for teachers over the summer with mentoring on a ranch/farm, and then they take their knowledge to the classroom.
- Farmers will have ways to see what people need and are buying for economic sustainability

- Parents will be involved, via PTA, etc.
- In 20-30 years, there will be new crops to take the place of sugar. There will be lower unemployment, with more opportunities for ex-offenders.
- State realtors agency will be involved to make land available with better communication
- Hawaii County will develop mapping of important aAg land using scientific criteria
- We will be using Ag lands for agriculture, not high end residential properties
- The whole spectrum K-20, but also included and addressed are young adults who are out of high school without skills or direction; engage in adult schools for jobs or further education.
- Inclusive, bigger, broader

#### IV. Develop Priorities

<i>What are the <b>opportunities or supporting forces</b> that will move us closer to our best case scenario/vision?</i>	<i>What are the <b>barriers or restraints</b> that hold us back from moving closer to our best case scenario/vision?</i>
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**Priority 1: Institutional/Organizational Resources and Partnerships (B)**  
**(16 votes)**

<ul style="list-style-type: none"> <li>• FFA Program, community colleges, UHH, UHM – all are partners with lots of things going</li> <li>• There are a lot of farmer organizations, USDA NRCS, Farm Service agencies and industry organizations</li> <li>• Creative partnerships between community colleges, Perkins money and correctional institutions to provide Ag tours, certificates, &amp; other opportunities</li> <li>• Provide training in prison system to grow food.</li> <li>• Provide more structured training such as certificates, etc. This is happening now and can be built upon</li> <li>• Potential for support from County and State government - DOA, etc.</li> <li>• Commitment by UHM and UHH to support small farmers and industry</li> </ul>	<ul style="list-style-type: none"> <li>• Communication; building trust with small farmers to get them engaged in discussions and solutions</li> <li>• Difficulties scheduling events like this – when are days available? Evenings, weekends?</li> <li>• Make tools available when it is convenient for farmers (night is often best)</li> <li>• Farmers often keep to themselves</li> <li>• Invasive species, e.g., coffee borer beetle - lack of trained eyes to detect, lack of money for inspectors</li> <li>• Environmental education needs to start young to create a culture</li> <li>• No clear, system-wide articulation of skills needed A-Z</li> </ul>
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**Priority 2: Developing an Agriculture Mindset/Culture (C)**  
**(7 votes)**

<ul style="list-style-type: none"> <li>• There is an urgency about sustainability and defining what it means</li> <li>• Local institutional support for buying local (CCs, PTAs, etc.)</li> <li>• Current enthusiasm for gardens at every school</li> <li>• Current State DOA programs</li> </ul>	<ul style="list-style-type: none"> <li>• Need to increase willingness to do Ag work -- not welfare</li> <li>• People need help with resumé and communication skills to become capable workers</li> <li>• People need to be more physically and mentally fit</li> <li>• Consumer buying habits (Costco, WalMart, etc.) negatively impacts local Ag profitability</li> </ul>
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**Priority 3: Access to Land, Water and Capital Resources (D)**  
**(3 votes)**

	<ul style="list-style-type: none"> <li>• Difficult to access to land, water and basic tools/equipment; difficult to compete with mainland</li> <li>• Overregulation (where does it end?) discourages people from going into the workforce</li> <li>• Land and water access; irrigation</li> <li>• Lack of living wage and higher quality of life</li> </ul>
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**Priority 4: Funding Resources (A)**  
**(1 vote)**

<ul style="list-style-type: none"> <li>• Currently there is money, resources, grants to support and succeed in the workforce</li> <li>• Hawaii Community Foundation, work by UH with veterans is finally getting together</li> <li>• SARE-USDA also want partnerships – SBIR, Ag innovation, other grants focused on plants and partnerships</li> <li>• Specialized funding sources for specialized populations with existing foundations if there were a plan</li> <li>• State funds are focused on Ag and Energy. Collaboration is key: many funding opportunities are only for industry partnering</li> </ul>	<ul style="list-style-type: none"> <li>• Communication, building trust with small farmers to get them engaged in discussions and solutions</li> <li>• Farmers often keep to themselves</li> <li>• Difficulties scheduling events like this – when are days available? Evenings, weekends</li> <li>• Make tools available when convenient for farmers (night is often best)</li> <li>• Declining number of extension agents, specialists, high school Ag teachers</li> <li>• Decreased \$ from state, etc., for Ag in educational system K-20</li> </ul>
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**V. Outline Actions for Priorities**

**Priority 1: Institutional/Organizational Resources and Partnerships**

- Specific leader of effort, point person who is empowered to connect resources, coordinate partnerships
- Hold more and smaller skill panel meetings to focus on specifics like “Developing Partnerships”
- Form steering committee to bring pieces of partnership together, convene regularly
- Increase efficiency of partnerships to avoid duplication, drive ideas forward efficiently
- Find resources to bring people together to build collaborations and partnerships, to make things happen
- Need a Community Sponsored Ag (CSA) in each community
- Reinvest in Ag education across the system, increase positions like teachers, specialists in Ag K-16 champions
- Integrate other three priorities into the process of partnerships; don’t lose sight of other three priorities