

**Sustainable Agriculture Skill Panel Forum**  
**June 7, 2012**  
**Strengthening Diversified Agriculture**

**Chair:** Leslie Mullens

**Facilitator:** William Jacincto

**Recorders:** Caroleen Tabata & Stan Fichtman

**Discussion Outline:**

- I. Introductions: Why are we here?
  - II. Setting the Context Discussion:
    - a. What is the current state of communication between educational entities and the agriculture industry on strengthening diversified agriculture?
    - b. What is the current state of labor and labor shortages affecting strengthening diversified agriculture?
  - 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)
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**I. Introductions: Why are we here?**

- Support diversified agriculture (mentioned by 5 attendees)
- Listen and learn (mentioned by 5 attendees)
- See how the College of Tropical Agriculture and Human Resources can grow the agriculture industry (mentioned by 3 attendees)
- Supporting diversified agriculture is the best opportunity
- Help everyone make money
- Gather groups to make an impact to sell agricultural goods
- Future of Hawaii's keiki
- Keep agriculture going for the next generation
- Create a venison industry in Hawaii
- Learn and collaborate
- Resolve food issues and create sustainability
- Reconnecting students with the 'aina
- Support agriculture as part of a mission
- Corrections Office has a mission to partner for offenders released from the judicial system and in need of employment
- Feel like diversified agriculture has a great future in Hawaii

- Growth of aquaponics
- Build an Agriculture Industry that is resilient
- Share what public schools do for agriculture
- Information gathering for Moloka'i farmers
- Needs assessment needs to be done for Moloka'i
- Bring group's attention to agricultural problems – now and future
- Potential for resources for wind and solar projects; Hawaii has potential
- Food security – make issues related to that into laws
- Share what is done in high schools and public schools
- Ensure everyone has a voice in agriculture
- Find out why \$3.5 billion is leaving our state and what are we going to do about it
- Take information back to share with other farmers
- Find out what makes farming successful
- Local resource sustain local economy
- Learn issues and challenges
- Support agriculture efforts and meet needs
- Understand agriculture labor needs to be proactive
- Be an economical resource
- How skills and knowledge be developed for agriculture
- Gain understanding about sustainability
- Reconnect with members of the community
- How all needs tie together to help develop the industry

## II. Setting the Context Discussion

### ***What is the current state of communication between educational entities and the agriculture industry on strengthening diversified agriculture?***

- Communication is good at the college level
- DLIR's agricultural regulations have changed for hiring of young people into agriculture
- Conversation with education does not include workforce issues
- Fix and make easier to address challenge to get into agriculture
- Message needs to be developed
- Lack of opportunities for high schoolers
- Larger institutions (government, universities) tend to work with larger companies, not smaller family farms
- Information overload or no information; there's no happy medium for farmers
- Need a liaison or other entity to match parties
- On Moloka'i, we've got land and water, but no farms. No one wants to go into farming. A large gap exists between the industry and education.

- There is a gap between government, farmers and schools to bring curriculum focused on agriculture
- On Moloka'i, a Directory of Agriculture Resources is lacking
- We have great communication today
- On Maui, there is no central area for resources and information
- Go to all schools – private and home school – not just the public schools
- On Moloka'i, what can Workforce Development provide to the schools? There is a lack of information flowing from government to schools
- There are resource shortages within UH; we get quite a bit of feedback on that

***What is the current state of labor and labor shortages affecting strengthening diversified agriculture?***

- A lot of interest in interning and learning about organic farming
- Housing in Maui County is very cumbersome to link employers, employees and housing
- Agriculture is hard work. It is hard to encourage individuals to create a farm and become agricultural employers.
- Being able to find opportunities in agriculture is currently lacking
- Next generation want to work labs and not on the fields; they are clean jobs
- There is no “one place” that everybody can go to
- No students looking for jobs in over 10 years. I’m not sure of Department of Labor rules. There is a shortage in field labor.
- It’s difficult for farmers to house workers because of state and county laws
- Employment regulations
- On Moloka'i, larger farmers pay more in wages and therefore staff leave small farms
- On Moloka'i, it’s a subsistence economy. How is the government addressing that?
- Way to attract labor has change, the way to recruit now must change
- “WWOOFer Model”
- No positive feedback to growing our own food; no drive to learn all skill sets necessary to be a farmer
- Passion for farming currently lacking in youth
- The issue is that it is not a job shortage, it is a labor shortage
- Youth needs to better know agriculture and what the agriculture industry is
- Labor force that is displaced can and should be tapped for expertise
- Broaden subsistence farming; bring it under the umbrella for labor support
- Need to motivate students
- Missing vocational training in schools
- Need to identify what makes agriculture attractive for students; lots of students are interested, but we need funding
- In schools, students are not being exposed to various agriculture skills

### 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 strengthening diversified agriculture?***

- First, we have a hydrogen-based economy. Sugar is replaced. Current administration is the instigator of this change. More happy people and cooperation among farmers.
- We have enough water for everyone
- Price of produce increases on Maui
- Web-based database that is used to shape best practices so that 90% of our food is locally grown
- Thriving communities across the island sharing resources.
- New crops
- Having adequate shelter for farm workers
- More agriculture parks – large landowners
- Homes with backyard gardens
- Dairies
- Agriculture is integrated into other educational programs, i.e., science, engineering, math, science
- Young people inspired at school system
- Concept of farming is broader – pre K – 12 Woven into curriculum – fully integrated
- On Moloka'i:
  - Fishermen fishing
  - Able to drink valley water
  - Each home has a garden
  - Families growing sweet potato, etc.
- Communities working as a co-operative
- Having Kula farmers grow cold weather crops
- Transition homes for ex-offenders in communities and there are turned into places of healing
- Enlightened government that would allow farmers to farm by modifying regulations
- On Maui, a model of sustainable agriculture
- Government is a supportive partner
- People are not afraid to take risks and come up with solutions
- On Moloka'i, shared resources and partnerships
- Watershed has forest garden below and clean water
- Diverse skills for workforce; co-op society; share skills
- Make community-grown food accessible; farmers paid enough; and there is appreciation for agriculture
- We need an educated workforce that has many skills because agriculture is diverse
- Continuous training outside workplace is necessary to continuously improve

**IV. Develop Priorities**

<p><i>What are the <b>opportunities or supporting forces</b> that will move us closer to our best case scenario/vision?</i></p>	<p><i>What are the <b>barriers or restraints</b> that hold us back from moving closer to our best case scenario/vision?</i></p>
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**Priority 1: K-12, College: Integrated Agriculture curriculum (public/private/home) (27 votes)**

<ul style="list-style-type: none"> <li>• Design and oversee community Agriculture Park for part-timers</li> <li>• Maui Land &amp; Pineapple program from big landowners to individuals</li> <li>• Enthusiasm and drive by youth to create an agriculture farm to learn and be a successful farmer; a business incubator for agriculture</li> <li>• Web-based core curriculum that students can access; create online on demand</li> </ul>	
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**Priority 2A: Increased government support, i.e., inspectors, advertising, funding, permitting, regulations, statistics (22 votes)**

<ul style="list-style-type: none"> <li>• More people in brokerages; variety of growers</li> <li>• Support smaller farmers with advertising</li> </ul>	<ul style="list-style-type: none"> <li>• Length of time for permitting</li> <li>• Soft skills training needed</li> <li>• Can't separate the land from workforce development</li> <li>• Not enough food on Maui (part of Governor's message two years ago); food production is not a priority</li> <li>• Government policy that negatively impacts agriculture</li> <li>• Solutions for state must encompass all types of agriculture and must be island-specific</li> </ul>
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**Priority 2B: Land repurpose partnerships; open new agriculture parks as training spaces, i.e., incubators (22 votes)**

<ul style="list-style-type: none"> <li>• Maui County follows lead of Hawaii County for food self-sufficiency</li> <li>• Examine community plans</li> <li>• Agriculture parks based on elevations; agriculture models for different micro-climates</li> </ul>	
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**Priority 4: Marketing & PR (for recruitment, general awareness, education) regarding agriculture industry (12 votes)**

<ul style="list-style-type: none"> <li>• Moloka'i – Needs assessment for agricultural workforce in 24 months</li> </ul>	
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**Priority 5: Air quality and contamination solutions (11 votes)**

<ul style="list-style-type: none"> <li>• Encourage and support unconventional projects</li> </ul>	<ul style="list-style-type: none"> <li>• Wasted resources</li> </ul>
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**Priority 6: Business Support Services (10 votes)**

<ul style="list-style-type: none"> <li>• Assessing needs, styles, and integrate agriculture education into K-12; set a goal and create a vision that is motivating!!!</li> <li>• Focus with teachers and industry people to do presentations that students listen to and share with friends</li> </ul>	<ul style="list-style-type: none"> <li>• Misinformation out there on the agriculture industry; it deters the younger generation from getting into farming</li> <li>• Business knowledge for farmers</li> </ul>
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**Priority 7: Central Directory of Agriculture – supportive resources (concierge) (9 votes)**

<ul style="list-style-type: none"> <li>• Industry recognized certifications</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a centralized resource directory</li> <li>• Agriculture statistics are incomplete and non-existent on state level</li> </ul>
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**Priority 8: Existing infrastructure use plan, i.e., reservoirs, ditches, etc.) (7 votes)**

<ul style="list-style-type: none"> <li>• Extension – marketing issues, commerce and distribution, farm liabilities</li> <li>• Leverage current infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical drift wipes out crops and deteriorates quality air, creating contamination</li> </ul>
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**Priority 9: Segmented training plan, including mentorship/apprenticeship) (6 votes)**

<ul style="list-style-type: none"> <li>• Creation of a safety net for farmers</li> <li>• Certified kitchens</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of agriculture inspectors</li> </ul>
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**Priority 10: Research and Adopt/Adapt “Best Practice” Models  
(4 votes)**

<ul style="list-style-type: none"> <li>• Craft marketing message to attract new farmers into the industry</li> <li>• Formation of marketing and other co-ops</li> <li>• Travel scholarships for Moloka‘i students to observe and learn about agriculture</li> <li>• Willing workers on organic farms</li> <li>• Increase training and pool together resources; constantly update</li> <li>• Mentorship and apprenticeship programs</li> </ul>	
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**V. Outline Actions for Priorities**

**Priority 1: K-12 COLLEGE INTEGRATED AGRICULTURE CURRICULUM (PUBLIC, PRIVATE, HOME)**

- Develop a farm reality show to solicit interest
- Determine speaker/expert pool as a resource (list of educators, etc.)
- Align curriculum to standards – look for flexibility with integration
- Create a Junior Plant Scientist Project
- Put together a curriculum team of experts (involve teachers)
- Look for external grants
- Look for partners to work together for grant opportunities
- Get buy in for DOE, DOA and DOH
- Look for models from other states – could also be models outside of agriculture
- Future Farmers of America – incorporate at all schools
- Survey and find local talent – create list
- Outline a plan of action
- Identify the needs of the farmer
- Identify courses students need for a career in Agriculture.
- Educate counselors on the career of agriculture (they can assist with the link to industry)
- Always involve parents in engaging students with agriculture
- Create more competitive opportunities for students, i.e., get corporate sponsors to donate money for competitive research projects for students
- A “School Garden Coordinator” at every school
- Make sure there is true integration from K-12 and secondary education; determine the incentives
- Create opportunities to talk story with all levels of educators

- The pilot plan needs to be evaluated each year
- Identify the integration examples that already exist and share with all – work on creating a mindset for people to have
- True networking
- Identify Subject Matter Experts and develop a survey
- Look for external support – funds, resources, in-kind and time
- Develop a plan to engage the DOE, CTAHR, etc.
- Develop a team of stakeholders

**Priority 2A: INCREASED GOVERNMENT SUPPORT (INSPECTORS, ADVERTISING, FUNDING, PERMITTING, REGULATIONS, STATISTICS)**

- Educate the public on what government resources are out there
  - Talk story sessions on each island community and with community associations
  - Introduce needs assessment survey on-line for 2 weeks
- Report back out on needs assessment survey
- DOA Inspector on every Island
- Needs assessment baseline self-sufficiency study for Maui
- Reinstate transparent data on agriculture production statewide
- Government should “Buy Local” for DOE lunches and meals
  - Revised procurement laws to favor local producers by island
- Define grant opportunities on each island

**Priority 2B: LAND REPURPOSE PARTNERSHIPS TO OPEN NEW AGRICULTURE PARCELS AS NEW TRAINING SPACES (INCUBATORS)**

- Hilt-Like farm trust
- Allow cluster housing for the farmers on agriculture properties