

*These notes reflect all input that was gathered at the April 4 and 5 Kaua`i Agricultural Forum, and do not necessarily reflect the views and opinions of the event organizers or other participants. Some input is not properly categorized, but is listed where it was recorded at the event.

Land Challenges

- Need to protect and preserve best ag lands
- Affordability of land
- Public lands leased for ag should be fully utilized in the best interest of a diversified ag sector
- Land ownership is highly concentrated
- Long-term lease difficult to obtain
- Property insurance too high
- Right to farm on ag land-- 'gentleman's estate' interference
- Flawed CZO and enforcement of zoning
- Ag park development
- Ag performance to purchase ag land
- Enforce ag land usage
- Set aside prime ag land for food vs biofuels
- Give guidance to the county
- Need a policy to farm with clear guidance to and from the county
- Farm dwelling agreement needs to be enforced
- Need land reform (win-win)
- Need to be able to house real farmers
- Sustainability permitting and zoning (NZ model)
- Local food needs met first
- Designate ag land with gravity flow water
- Determine carrying capacity
- County accountability--give the county guidance on what is needed

Land Strategies

Land Access for the Community to Farm Sustainably

- Ag Parks offer tax incentives to land owners to provide private land for public farming; state and county plots
 - Create a demonstration site
 - Funding from progressive non-profits (i.e. Rex Foundation)
- State and County land made available
- Present/Absentee land owners
- Community Gardens
- Agro-forestry, food forests, orchards

Local Food Needs Met First

- Sell it on Kaua'i first, then ship surplus (i.e. beef calf industry on Kaua'i)
- Local growers need to get into larger local super markets
- Identify local food needs/wants and plant accordingly

Sustainability Permitting—Concise Guidelines

- Set for what is required to comply
- Ac-hoc committee created to identify minimum criteria (i.e. grey water, compost toilets, natural/recycled material building, water catchment, alternative energy, etc)

Provide a List of Key Elements that are Necessary for Ag/Food Production

- Include elements that are disallowed (waterways and rights (ahupua'a system), buildings and uses, septic—black/grey water, crops. Livestock, taxation/paperwork)

Labor Challenges

- Lack of skilled and non-skilled labor
- High cost of labor (living)
- Housing for farmers and farm workers
- Need more young farmers—education, mentoring, values
- List of specialists needed for technological needs
- Demonstration sites for training
- Retrain maintenance workers
- Crop subsidies to farmers
- Education at early ages/schools
- Educate elected officials about Ag
- Affordable health insurance
- Pay farmers what we pay soldiers
- Tool production to repairs
- List of new jobs going to be needed and training programs to match
- Govt support/incentives for training
- Programs for reforestation (labor opportunity)
- Rehab programs for prisoners
- School garden at every school (creating interest)
- Partner with national organizations to bring training programs here
- Own banks and infrastructure
- Propagate locally-grown building materials (train in new ag technologies)
- New economic systems to pay laborers
- Tax incentives for land going to support labor
- WWOOF models/agri-work tourism
- Retrain/learn from Kapunas
- Service network/discounted for ag workers
- Train ag enforcement workers

Labor Strategies

Housing for Labor

- Communal housing as a possibility
- Low income and/or temporary housing
- Housing constructed with local building materials
- Plantation-style housing

- Sustainable and appropriate technology housing (solar hot water, bamboo construction)
- Proven working farm with increasing sellable biomass
- Proven need for labor
- Workparty groups (barn-raising equivalent)
- Ag worker employment agency—guild/co-op
- Replication of successful models
- Training programs—listing specialists needed
- Symbiotic relationship—landscapers and farm workers
- Rehabilitation and community service (KCCC)
- Civilian Conservation Corps (CCC)—modern equivalent/plant trees everywhere!
- Environmental needs
- Recruiting of laborers
- Sustainable labor vs. unsustainable (horses, ducks, chickens, donkeys and mules)
- Gentleman farmers and high cost of housing, labor, and land increases cost of food
- Labor ethics—abusive to laborers
- Consciousness shift in children and adults
- Import substitution = profitability = better attitudes and new awareness

School curriculum—education in agriculture—creating new labor force

- Practical skills—autonomy
- Connect with the aia
- School demonstration gardens (basic skills)
- Reforestation and aquaculture (basic skills)
- Biology, botany, Animal husbandry
- Field trips to working farms, including hardwoods and ranches
- Green technology and ancient technologies
- Educating elected officials in agriculture and sustainability

Training Centers

- Field workers
- Nursery workers
- Shop and maintenance
- Equipment operators
- Ag training for Hawaii

Ideal labor situation

- Loving your work
- Variety of duties
- Cross-training
- Upward mobility
- Improving skills
- Farmers coop
- Independence vs. indentured servants
- Triple bottom line

- Insurance/healthcare
- Employee ownership
- Living wages vs. profit
- Housing available on farm
- Community support
- True CSA (risk sharing)
- Access to seed money
- Limiting liability (incorporate)
- Mondragon system (top income owners not more than 4x more than bottom)

Strategic Goals

- Network with national and international organizations
- Formulate parameters and definitions for worker housing (see above)
- Create training programs (see above)
- Establish farmer/labor coops (unite laborers with labor)
- Gleaning-coordinate
- Island-wide WWOOF
- Central clearinghouse for labor—employment agency
- Formalize the ideal labor situation (see above)

Existing Projects, Stakeholders, and Initiatives (Labor)

- WWOOF
- Community gardens
- School gardens
- College (KCC)
- Waipa Reforestation
- Permaculture
- Hawaiian Mahogany
- Work-trade for education—apprenticeship—Kauapea Farms /KCC
- Thousand Gardens
- Community Kitchen—farmers market and Mana Ohana in Hanapepe
- Na `Aina Kai
- Coffee Company—prisoners
- John Pia—Anahola Ancient Cultural Exchange/Taro patch
- Present community
- Farm Bureau
- Large land owners
- State ag land
- Farmers
- Permaculturists
- Organic farmers

Capital/Financing Challenges

- Availability and dissemination of information

- Agricultural loans are inadequate
- Lack of sources of venture capital
- Need liability insurance to sell to grocers
- Seed money for start-ups
- Alternative currencies
- Grant resource office
- Microloan availability
- Carbon credits for ag operations
- Achieving sufficient economy of scale to attract investment and purchase needed equipment
- Local systems of sharing equipment
- Financial system is to the detriment of growing food—need reform
- Barter
- Need cooperatives (for all sorts of things)
- More major entitlement grants
- Farmers don't have time/skill to apply for grants
- Pre-sales to farmers (CSA)
- Ag credit union
- We are not at the bottom yet—making locally-produced, sustainable options is more appealing

Capital/Financing Strategies

- Create a local investment opportunity office
 - Look for talent
 - Look for investors
 - Link to form or expand enterprises
- Expand technical assistance for grant and loan applications, business plans, and creative financing
- Establish a revolving loan fund (thru nonprofit or bank)
- Identify how much money is needed to fund a sustainable agriculture system
- Put pressure on banks to provide more funding for ag
- Educate govt representatives on goals and finance needs of ag community
- Overarching Strategy=Let's feed ourselves on Kaua'i

Capital/Financing Existing Projects, Initiatives, and Stakeholders

Projects/Initiatives

- Small Business Development Center
- Lending institutions
- KIUC Business loan
- USDA loan fund
- Micro loan fund in development (SBDC, Bank of Hawaii)
- CSAs and Consumer Coops

Stakeholders

- Large landowners
- Banks
- County/State govt
- Farm Bureau
- USDA/Rural Development
- Current equity investors
- KCC/Rural Development Program
- Developers
- Social philanthropists
- Renewable energy investors
- Seed companies
- DBEDT (\$ for business plans)
- GIRC&D

Water Challenges

- Irrigation systems need maintenance and improvement
- Unresolved public / private water rights issues
- Water should be managed at the watershed level
- Lack of comprehensive, long-term, island-wide plan for water
- Improve water storage
- Kaloko Reservoir
- Need to adopt a grey water ordinance
- Water for food versus water for other uses (need to inventory and prioritize)
- Composting toilet regulations
- Capture storm water runoff
- Upland forest restoration to have healthy watersheds (natives)
- Riparian restoration for erosion
- Well-water numbers are heavily regulated
- Pesticides and pollution
- Scale down water systems
- Water conservation on municipal side
- Need to incentivize and legalize rainwater catchment
- Taxation of ornamental water use
- Biological wastewater treatment should be used
- Establish base natural stream flow and restore
- Reduce dependence on petroleum in municipal water
- There is no potable drinking water available in ag parks being developed
- Need to restore healthy native ecosystems in watersheds
- Cattle near streams
- Auwai restoration
- Unsustainable management of watershed natural resources
- Water quality / protection

Water Strategies

- Best practices to improve water use on farms
- Promote water catchment policy
- Include ag water delivery in mission of County Water Department
- Require study of effects of well drilling on in-stream flow
- Establish base line values of water quantity and quality
- Support existing watershed councils (west side, Hanalei, nawiliwili, maola`a)
- Establish watershed council for all areas that don't have them
- Adopt a state law that establishes watershed councils and gives them planning authority (Oregon State Law)
- Education
- Unite existing regulatory boards
- Strategic planning by watershed councils with local authority
- Getting grey water policy changes to allow reuse (state legislature)
- Restore instream flows by petitioning CWRM on a watershed by watershed basis
- Protect, develop, maintain reservoirs
- Prevent water privatization
- Initiate a water rights summit - task force to identify agencies and their responsibilities
- Get county to reduce petroleum dependence for water delivery (grey water, dry toilets, water catchment)
- Urban storm water run-off protection ordinance (hydraulic protection)

Marketing Challenges

- Need more "Buy Local" education
- Expand and promote unique Hawaiian ag products
- Marketing management- farmers need training
- Need ag cooperative to promote marketing strategies
- Need to develop eco/ag tourism
- Need to strengthen "Made in Kaua`i" brand for food
- Need new word for "Victory Garden"
- Labeling / signs needed
- Farmers integrated into public school system
- Need certification / enforcement to preserve product integrity
- Farmers need help accessing online resources (need a directory)
- There is no awareness of Kaua`i specific sustainable local crops (what is unique)
- More organic presence is needed at the Farm Bureau County Fair - USE the county fair
- Funding for marketing programs
- How do people know where to buy? More promotion of CSAs, Farmers Markets, and other places where local is available

Marketing Strategies

- Branding and education / promotion:
 - Enhance “Kaua`i Grown” and other local-product awareness programs
 - Use County Farm Fair to educate the public
 - Increase usage of print media
 - Create public service announcements and utilize other media outlets.
- Establish a clear market management and business training program
- Connect farmers to the web and technology
 - Training
 - Create tools for farmers (list of clients, farmer inventory, online shopping carts)
 - Build system as a model and base in on existing models
 - Public computer kiosks
 - Order “groceries” with delivery
 - Make certain of “person” identity behind technology
- Farm tours and other eco/ag-tourism
- “Taste of Kaua`i” only local food event
- Create labeling and signage for local products (similar to Whole Foods)
- Tournaments / contests / competitions (new products, chefs, farmers)
- Certification for ecologically-minded products
- Cooking classes / books / education to help people use local ingredients
- Farm dinners / visits
- Create an ag cooperative to distribute, assist with value-added, provide bulk insurance, market, conduct education and outreach programs, bulk order inputs, facilitate resource sharing, directories
- Mobile certified kitchens
- Survey buyers - what do they need?
- Real time online available inventory
- Utilize artists for marketing
- Utilize school programs for media marketing

Crop/Commodities Challenges

- Products must be uniformly graded and standardized
- Need detailed production cost, transportation, and marketing / distribution information for main crops
- Crop production (yields) needs assistance to be enhanced
- Price instability
- Need more opportunity for value-added products
- Remove legislative road blocks to value-added
- GMO corn threatens non-GMO
- Need import tariffs to give an advantage to local crops
- Restore taro production in all watersheds
- Need to diversify crops
- Equitable price: need better information about cost of production

- Need ag cooperatives and commodity groups to set prices and work together
- Need to utilize green manure / cover crops more (education, research, availability, training)
- Need more seed saving
- Need feed crops for livestock
- GMO testing threatens all biodiversity and needs to be contaminated
- Need to protect seed integrity legislatively
- Need crop research to identify easiest crops to grow

Crop/Commodity Strategies

- Identify all research that has already been done and put into one space (online) for ease of access and education
- Identify key educators
- Create a local feed system (need list of local plants that would work and additional research)
- Secure on-island sources for inputs
- Demonstrate integrated systems – plants, animals and aquaculture
- Establish community gardens to diversify, preserve biodiversity, etc
- Crop and seed saving / propagation that is Kaua`i centric (Kaua`i Seed Bank and Regenerations Botanical Garden efforts supported and expanded)
- Increase funding and programs for research related to small-scale, rather than being primarily focused on plantation / large-scale agriculture
- Identify existing commercial kitchens available for community use
- Build new community commercial kitchens in each district
- Crop research:
 - Low-input crops
 - Effective companion planting (insect resistant relationships between crops)
 - Traditional Hawaiian / pacific island crops
 - Market potential studies
 - Cost of production analysis
 - Get the information to farmers and overcome communication barriers between farmers and the university

Pests / Disease / Invasive Species Challenges

- Need more support capability assisting control
- Lack of funding for research
- Need papaya / fruit-fly deinfestation facility
- Varroa mite
- Fruit-fly education to lessen impact is needed
- Biosecurity at ports is lacking
- We need to grow natural biocontrols on island
- Taro snails

- Invasive species are currently directed to the waste stream
- Need to improve the soil to increase resilience
- Weeds spread on farm equipment, shoes, animals
- New pests are being introduced on imported foods
- Need to establish better detection, reporting, and response systems
- Weed seeds and species are sold and easily available
- There is not enough community awareness about what to / not to plant
- Need better measures to prevent the introduction of GMO papaya seed
- Disease is being imported
- The widespread use of herbicides is creating super pests (challenge to growers)
- Landscaping plants
- Invasive species in non-ag lands are affecting ag resources (such as water quantity and quality)
- Alleopathic species
- Loss of grazing land to invasive species
- Lack of knowledge about how to control invasive species – need research and education
- Lack of staffing of HDOA. Regulation
- Lack of national recognition for inspections (need more when people come to Hawai`i)
- Too easy to transport interisland and from continental US
- Crop damage from animals
- Weed seeds and larvae are in compost
- Lack of pest ID network
- Need more education from Ag Extension – CTAHR
- GMOs
- Biological control of pests is needed
- Need more research on organic methods for controlling pests / disease / invasives
- To avoid contamination, EIS statements are needed from all the airlines, Matson, Young Brothers, cruise ships...

Pests / Disease / Invasive Species Strategies

- Tap into existing infrastructure (under KISS) to create a task force for ag, similar to what the landscape community has been doing.
- Prevention:
 - Focus on buying local / producing locally
 - Discourage imports and introductions
 - Increase inspections (importers pay for inspections)
 - Empower and educate farmers to prevent the spread of invasives through self-regulation and best management practice.
- Management:
 - Support and secure funding for invasive species management on Kaua`i through coordinated effort of stakeholders / existing

- programs
 - Establish farmer's pledge program to prevent invasives
 - Distribute and produce maps and materials specific to agricultural pests on Kaua`i (interactive online database)
 - Establish a position for a Kaua`i county environmental and ag liaison.
- Education
 - Link buy local / Kaua`i-made campaign to invasive species prevention messages
 - Provide ahupua`a based integrated pest management workshops for farmers and backyard gardeners
 - Incorporate invasive species info into all ag education programs and events.
- Early Detection
 - Establish communication network for reporting and rapid response specific to farming community
 - Train farmers in early detection to identify priority species
 - Provide pest alerts as outbreaks occur that reach out to ag community.

Distribution Challenges

- Difficulty for small-scale growers to meet quality and quantity standards
- Need to expand market share/diversify crops to avoid competitions
- Lack of communication between producers and wholesale consumers
- Need for directory of ag-related businesses
- Need facilities for treatment, handling and packing
- High transportation costs
- Need for a slaughter-house facility
- Need for more commercial kitchens and value-added product opportunities
- 24/7 farmers markets
- distribution center
- commodity groups and cooperatives (price setting)
- need for community cannery
- system for harvesting excess produce (gleaning)
- gleaning CSA system
- cooperative processing for all ag-related products
- distribution of inputs (use gravity wherever possible)
- educating/informing consumers about buying/supporting locally produced food and products
- localize production and distribution of food within watersheds
- utilize existing systems for distribution/transport
- coordinated distribution of necessary inputs
- commercial kitchens in community centers
- food stamps allowed to be spent on farm fresh produce

- better distribution of taxes

Distribution Strategies

Facilities

- warehouse
- commercial kitchens
- refrigeration
- dehydration
- pasteurization
- packaging and shipping
- processing (hot/cold foods, fruit, veggies, meat, value added products, timber)
- compost/green waste
- information/data processing

Cooperatives

- Shipping
- Transportation
- Marketing/advertising
- Insurance
- Financial
- Labor
- Lobbying
- Price-setting
- Inputs
- Equipment
- Water
- Facilities

Education

- State and county involvement (federal too)
- Schools, dept. of health, dept. of human services
- cookbooks, recipes, classes

Marketing

- “Buy Kauai” branding
- State Department of Ag
- Cooperative brokerage
- Cookbook
- Kauai Farm Bureau
- HOFA
- Bulletin boards
- Radio/news/media/internet

Directory

- Producers
- Wholesale
- Retailers
- Export markets

- Paid advertisement

Existing Distribution projects/initiatives/stakeholders

- Michaels' kitchen
- Malama Kauai
- Common Ground
- Hanalei community center
- Kauai Farmers Co-op
- Farmers markets
- Noni Land
- Esakis
- Kauai Producers
- Kauai Fresh Farms
- Farm Bureau
- Dept of Ag
- KCC
- KauaiAbundance.com (Randy Roe)
- Karen Mavec
- Craig's List
- Grocery stores
- Restaurants
- Caterers and private chefs
- Vacation rental/property management companies
- Private schools
- Fruit stands
- Roadside vendors
- Gleaners

Waste/Resource Stream Challenges

- Reliance on large quantities of fertilizer and other inputs from overseas
- Green waste is under utilized
- Materials recycling facility where processed green waste made available to farmers
- Educate and support zero waste policies
- Curbside recycling program
- Encourage neighborhood green waste sites and use of compost/mulch
- Salvage useful construction materials and agricultural waste

Waste/Resource Stream Strategies

- divert cardboard stream to farms
- make our own "paper"
- recycle all organic waste/composting
- analysis of composting associated with health risks to reduce/eliminate stigma
- construction of a recycle web-page

- create regeneration stations
- decentralize the waste stream
- education on how it can be made easier
- land application and bio-remediation (sheet-mulching)
- need for community shredder/chipper/grinder
- plastic processing/manufacturing
 - -develop facility to convert plastics products into useable material
 - -look at alternative products than plastics
 - -develop market for recycled plastic products
- education/outreach for increased use of composters/compostings
- Ag. planning to deal with waste effectively and efficiently

Hazardous Materials

- Bio-remediation for HazMat
- Develop effective composting program for HazMat
- Develop program to link w/MSW HazMat transportation and containment program (CHARM)
- Reduce/eliminate the need and use of HazMat in Ag. application
- Develop education opportunities to increase use of alternatives to HazMat

Scrap Metal

- improve current system for increased efficiency for reuse/resale
- create agricultural specific scrap depot

Humanure

- Legitimize composting toilets and the use of by-product
- Encourage the use of this system and product
- Develop Health Dept. protocols for safe handling
- Create vermiculture application system

Collection/distribution system

- vegetative waste
- food processing waste
- livestock waste
- scrap metal
- humanure
- grey water

Waste Priority goals:

- Recycle / Compost all organic waste (ban organics from the landfill). An integrated solution for Ag Industry, Businesses and Resorts, and Residents.
- Develop decentralized, community based waste / resource management facilities (regeneration stations) to close the loop for neighborhoods, community gardens and small farms.
- Utilize bio-remediation to manage difficult / high impact materials (petroleum based hazardous waste, biosolids, food process waste, etc.).

- Develop a recycling / re-manufacturing facility to produce local building materials out of the applicable resins and recycle anything else.
- Develop cooperative programs to provide organic waste as a feedstock for cattle and other livestock, and to utilize livestock to assist farmers in land clearing and land management efforts.
- Increase the use of composting worms and small-scale vermicomposting.

Legislative Objectives Challenges

- Affordable worker housing
- Tax policies discourage agricultural use of land
- Need for comprehensive study of Ag. lands
- Exemption of GET for retail sales of locally grown and sold food
- Can't sell value-added products at Sunshine Markets

Legislative Objectives Strategies

- codify county rules for community garden uses
- permitting for value-added products
- directing enforcement fees to active Ag.
- codify composting as an acceptable practice
- codify green-building practices
- fruit fly re-evaluation of transport laws
- worker housing!
- permitting compost toilets
- IAL-Important Ag Lands (enforce)
- carbon sequestration laws
- community group/government partnerships
- prevention of GMO Taro
- legislation to restore rivers/streams
- state lands for personal/community gardens (long term leases)
- Victory Garden equivalent program
- sustainability zoning (NZ-overlay planning)
- ecological/culturally significant sites/areas incorporated into zoning
- HI lobby at national level for tariff breaks or subsidies for export crops/farm products
- allowance of locally produced building materials
- grey water initiatives
- health care for Ag. workers

Research and Education Challenges

- Need business training for farmers
- Need better market supply/demand forecasting
- Need market potential studies for different crops
- Lack of institutional educational training programs
- Lack of curriculum within school Ag. programs

Research and Education Strategies

- Tuition/scholarships for farmer training
- Research/develop imported inputs alternatives
- Utilize retired Ag workers and Kupuna for educational purposes
- Research on health issues re: pesticides/herbicides
- Watershed councils for education
- Mentoring program that links Kupuna to Keiki
- Educate and inform the county government about federal/state legislature
- Technical support for farmers (non-school based)
- Documenting benefits of home/community gardens and dissemination of information
- Research weed control alternatives
- Utilize the County Fair as educational opportunity
- Document/enforce pesticide regulations
- Funding made available for Ag. extension, CTAHR and other agencies

Existing Research and Education projects/initiatives/stakeholders

- Healthy Hawaii Initiative (PAN Plan and Ag/Nutrition task force)
- Serving Healthy Food in School Cafeterias
- SNAP- Supplemental Nutrition Education Program
- OCET through KCC has on-going classes
- UH extension (Roy)
- Ag in the Classroom - County Office of Economic Development
- Mayor in support of after school programs
- Existing school gardens (Kalaheo, Hanalei, Kilaueua, Kanuikapono, Kula)
- Community gardens at Neighborhood Centers
- Dept. of Health
- Dept. of Education
- Malama Kauai
- Kauapea Farm - Seed to Table and Farm Incubator programs
- Waipa Foundation

Programs that need updating/improvement - potential collaboration opportunities

- KEDB
- A+ Program
- Summerfun
- Boys and Girls Club
- FFA
- 4H
- Running Start Program
- Lions Club
- Rotary Club
- YMCA/YWCA