Animal Feed Workshop  
August 15, 2012  
Group 1 Notes

**Opportunities**

- High cost of imported feed can make it easier to reach threshold necessary to make growing local feed feasible.
- Needs to pass economic feasibility
- Some areas may be more conducive to growing feed (i.e. flat land) and so it may be necessary to include large land owners in the discussion.
- The current global situation plus the presence of seed corn companies in HI can lead to actual steps towards growing feed.
- Synergies exist between seed corn companies and feed. Seed corn companies have proven that corn can be grown in HI that have resulted in more potential models for growing our own feed.
- To this point projects for feed have been small scale but there is opportunity for more.
- Seed corn companies can bring their worldwide experience to bear in dealing with this issue.
- Question needs to be answered as to how much animal feed is needed
  - 2008 values estimated that 45K tons of feed were brought into the state
- Mikilua Poultry uses about 9000 tons of feed per year so there is demand.
- Seed corn companies can do research to identify the most suitable corn for HI.
- Research is available to analyze feeds for nutritional value.
- Can use locally available waste materials (like papaya) to make algae for biofuels and feed
- Press cake by-product from biofuels can be a good feed source.
- If cost to producers of inputs is brought down then this would result in positive externalities
- Identifying available lands and infrastructure could be the first steps to identifying an appropriate feed for the area. Feed could be dependent on island by island available resources.
- Combining available resources can provide new types of feed.
- Good and healthy agriculture provides a good collateral benefit in good natural resources conservation
- Can use new and innovative ingredients like insects.

**Challenges**

- Do the economics line up in creating feed with regionally available feed sources?
- Scaling up available research to be commercially viable
- Locally produced products may not be available dependent on the island.
- Need for facility to blend and mix feeds especially for non-ruminants
- Lack of consistency of feed and feed inputs
- Food safety issues that could arise due to contaminated feed
- No one ingredient will be able to meet all the feed needs
- Need to look island by island to trim down transportation costs that could incur.
Transportation costs may mean that a large industrial scale feed mill is not feasible but rather a decentralized system may be better.

Flat land is mostly available on Oahu for corn but 80% of cattle is on the Big Island.

Need research to continue the analysis of feed for nutritional value

Lack of research infrastructure

Lack of collaboration between research and industry

Lack of funding for research institutions

Invasive species can be introduced via new crops being brought in for feed ingredients.

Research needs to be brought up to the level to make economic sense.

Use resources that are readily available in HI.

Declining rainfall due to climate change means water is a limited input

Declining trade wind trends point to climate change issues

Infrastructure (both man-made and natural) are needed to maximize rainfall capture

Agriculture uses a lot of water

Labor shortages facing farms

Available/Needed Resources

- Funding is needed
- Coordination needs to happen between research institutes, government, and the private sector
- Need a pilot project to show proof of concept
- Need to get their commercial side up and running
- Infrastructure
- Need to relook at what can be used as feed ingredients
- Use combination of existing, naturally occurring resources to do feed
- Use low cost options
- Solutions need to be situation specific
- Specialized facilities may be needed
- Funding needs to be used in a directed way and needs to be accountable.
- Need for a collected master plan.
- Need to identify a leader to continue with these efforts.
- There is an over dependence on academia and there should be more inclusion of industry partners.
- Policy exists now to facilitate local feed.
- Leadership now has agriculture as a priority and is pushing feed forward
- Changes in political leadership often lead to a loss of momentum.
- Need to focus and control on what can be controlled
- There is the political will now and so need to ride that wave and move forward while the opportunity presents itself.

Priority Issues
• Need to focus by determining what animal and what area is a priority
• Need to stay focused and not go too far into research but require a proof of concept.
• Need to look island by island for solutions but utilize the OI feed mill
• Identify an alternative protein source rather than focus on just corn. Small percentage reductions in cost can be found in other areas.
• Need to be realistic in goals
• Find a local substitute to create a unique HI feed product that could potentially be marketed out of state.
• Need to get back to the producers to identify where cost reductions can match up with current research.
• Bring together specific, focused groups around similar livestock animals with producers and research institutions.
• Pigs may be the easiest to start with as their feed is more flexible.
• Need to know what ingredients are available
• Need for good data
• Support the relationships between producers and extension agents
• Work with extension agents to collect better data