

# PORK

Appendix C

## **SWINE TASK FORCE REPORT**

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Coordinator

The legislature this session passed House and Senate Concurrent Resolutions requesting the Department of Agriculture, the College of Tropical Agriculture and Human Resources, and the Hawaii Farm Bureau Federation to establish a task force to develop long-term solutions to effectively protect the livestock industry in Hawaii.

The first step was to convene a meeting of the swine industry on July 26, 2007, to identify issues, problems and opportunities. Industry strengths and weaknesses were reviewed. The number of times each was mentioned provided an indicator of relative importance. At the end of the meeting a committee was formed to summarize ideas and develop a plan.

### **Strengths**

- Demand and markets - 13
- Attitude and commitment - 6
- Small family farms, family involvement - 5
- Feeding recycled food waste - 3
- Jobs for communities - 2
- Quality genetics - 2
- Support groups willing to help - 1

### **Weaknesses**

- Marketing - 10
- Costs (feed, fuel, transportation) - 7
- Waste management - 4
- Herd health - 4
- Slaughter - 3
- Land - 3
- Weak support - 2
- Producer education - 2
- Lack of labor - 1
- Transfer to next generation - 1
- Theft - 1

The Action Committee members are:

- Halina M. Zaleski, Coordinator
- Jeri Kahana, Hawaii Department of Agriculture Quality Control
- Valerie Kaneshiro, President, Hawaii Pork Industry Association, M & H Kaneshiro Farm, Kauai
- Ron & Daphne McKeehan, Ahualoa Farm, Hawaii
- Chris O'Sullivan, Pat's Piggery, Oahu
- Jeff Peterson, Land O'Lakes
- Wayne Shimokawa, Shimokawa Farm, Oahu
- Alan Takemoto, Hawaii Farm Bureau Federation

Evelyn and Elliot Telles, Jay's Hog Farm, Oahu  
Noel and Mary Texeira, Texeira Hog Farm, Maui  
Calvin Wong, Wong's Meat Market

From the summary of strengths and weaknesses the main areas to address appeared to be marketing and costs. These were discussed in more detail at Action Committee meetings on August 16 and 20, 2007. The main points raised are discussed below. It is important to consider what the farmer can control.

## SWINE INDUSTRY STATUS

Number of farms in 2005: 230, same as in 2001 (HASS, 2005)

Number of sows in 2005: 5,000, down 1,000 from 2001 (HASS, 2005)

Average farm size: 4.5 acres (Sharma et al., 1996)

County	Number of farms	Number of sows
Hawaii	30%	6%
Kauai	13%	8%
Maui	26%	30%
Honolulu	30%	56%

Swine farms are small family farms with limited land, limited resources, and limited economies of scale.

Hog slaughter in Hawaii, January through September, 2007: 15,519 hogs, of which 10,442 or 67% were live imports from the mainland.

## STRENGTHS

All swine farms in Hawaii are family farms. Farm products have value in feeding the ohana and in supplying luaus and parties, as well as in commercial sales. Pigs are an important part of Hawaii and Pacific island cultures.

Producers rely heavily on family labor. Farms provide a place where children can learn by watching and helping their parents. Children learn not only about livestock and agriculture, but also life lessons such as the value of hard work. Farms commonly provide useful activity (and exercise) for underemployed or retired family members. As well as using family labor, farms provide job opportunities for the community, both on farm and in related areas such as processing.

Most larger farms have grown gradually from smaller farms. Farmers have a lot of experience among themselves. Swine farmers are independent, but understand that they face similar problems. Farmers generally do not regard each other as their main competitors. The primary

competition is from mainland pork.

Swine farmers can produce quality fresh pork, a much needed commodity in the state. The demand for local pork is strong and the price in Hawaii is much higher than on the mainland. On-farm sales of hogs (slaughtered on site by the customer) are strong and provide a good price. Producers know the demands of their specialized niche markets, such as the sale of very young pigs and the sale of sows for kalua pork. Quality genetics is available to produce the pigs the market demands. Local slaughter can supply specialty products such as intestine, but locally-grown carcasses are generally not differentiated from mainland-grown following commercial slaughter. There is a lot of room for industry growth by displacing imports of live pigs.

Swine farms contribute to recycling food products, pallets, and some construction materials. Feeding waste food products and agricultural and processing by-products provides a low cost but labor intensive feed source and reduces the waste stream. Pallets are burned by small farms to cook food waste. Waste or recycled construction materials are often used to build piggeries.

Hawaii has a hard core group of swine farmers that are committed to and involved in industry organizations. Hawaii farmers cooperated to build the Hawaii Livestock Cooperative slaughterhouse. The Hawaii Pork Industry Association is active in supporting the swine industry. Support groups such as the National Pork Board are willing to help producers in Hawaii.

## **MARKETING**

Producers must be aware of the changing market place and take advantage of niche market opportunities. The main competition for local pork is cheap mainland pork. Consumers are often not aware of the quality differences between fresh pork and imported pork. Tourists do not know the difference between kalua pork and imported pork butts laced with liquid smoke. Producers are losing markets to imported pork.

1) Price for pigs must be high enough to cover costs. How can a farmer get a premium price? The best price return to farmers is through on-farm sales and most sales are made directly from the farm. Most of the demand is from immigrants and overall demand is steady. On-farm sales go up and down with the economy.

2) Quality of local supply must meet consumer desires. Producers must sell a pig that matches consumer desires. The quality demanded by market is:

- very lean for roasters
- some fat for carcasses

Percent yield is best for large, lean hogs.

3) Do consumers know where food comes from? Consumer education on locally-grown pigs is needed. Locally-grown pigs are not well differentiated from mainland pigs. We do not have a brand that identifies local pork.

4) If we develop a market demand for locally grown pork we have to be able to supply it. Consistency of local supply is not adequate meet market demand. If we stopped imports we

could not supply the market. Demand and supply have to grow together.

5) Producers cannot niche market as individuals. Sales cooperation among producers could improve quality, reliability, and supply special markets such as suckling pigs and chefs wanting to use local products. Market research is needed.

6) Country of origin labeling (COOL) would create additional costs (or limit sources of supply) for hogs which are imported for local slaughter and used by processors to supply the demand for fresh pork. Producers see mainland pork rather than foreign pork as the primary competition that pushes prices down.

## **SLAUGHTER COSTS**

Questions were raised about the viability of swine slaughter facilities under current conditions. Local facilities lack economies of scale. On Oahu and Maui questions were raised as to whether the income from pig slaughter would be enough to support the facilities. On Oahu the high cost of building a new facility, coupled with the decline in cattle slaughter, makes it difficult to keep the facility operating. On Maui, the decline in pig numbers has led to fewer days of operation. There are no remaining swine slaughter facilities in West Hawaii and commercial pigs have to be trucked to Hilo for slaughter.

1) Cost of slaughter is too high, especially on Oahu. Hawaii Livestock Cooperative (HLC) was built to handle beef as well as pigs, but because the cattle numbers are not available, the pigs are having to carry the costs. Could custom slaughter be an option (cost, USDA regulations)? Could HLC sell pigs similarly to on-farm sales? Could producers get permits for slaughter?

2) Inspection. State inspection was done by lay inspectors but discontinued in 1990s. Federal inspection requires a veterinarian and results in greater use of condemnations as opposed to trimming.

3) On-farm customers gain the following:

- intestines and blood (no condemnations)
- avoid cost of slaughter but commonly pay a higher price for the pig
- hot fresh pork (not chilled)
- locally-grown pigs

4) The HLC slaughterhouse will sell to individuals. Customers can buy locally-grown pigs and have them slaughtered at the slaughterhouse. Considerations include:

- pigs are USDA inspected
- risk of condemnations
- if customers have a bad experience they have no other choices

5) If customers buy locally-slaughtered mainland pigs instead of mainland carcasses they get:

- whole carcass with head
- offals, blood
- carcasses that are chilled

## **FEED COSTS**

Feed costs are high and the trend is higher and higher. No local grain-based feeds are produced locally, so the cost of transportation adds to the cost of feed.

1) State subsidy is temporary. Can producers ask for another 2 years? What progress would the industry have to show? What benchmarks would be appropriate? At a minimum, producers should be able to show investment in farms.

2) In order to raise more pigs, prices have to cover costs. Farmers have to balance labor costs (fixing pens, picking up and cooking food waste) against purchasing costs (feed, supplies). Cheaper feed, possibly based on dehydrated garbage, would free up time spent on garbage to fix pens and care for more pigs.

Dehydrating garbage to increase storage life and make it possible to feed as a grain seemed to be a good idea when tried on a small scale on Oahu, producing a feed but the machine used was unreliable with many breakdowns and unreliable availability of parts from Australia. If garbage contains any meat products it can not be fed to cattle so the market is limited to pigs.

Cooked broken eggs from the poultry industry could be a good protein source for pigs. Availability of feed sources such as border rows from seed corn production and by-products from biofuel production could be looked into.

Hilo is testing a Korean machine that turns agricultural waste (not garbage) into either animal feed or compost. Brewer's grains can be used in it. The demonstration model processes 2 ½ tons in 3 hours, a larger model can process up to 20 tons. Can agricultural waste and brewer's grains provide a balanced ration? Could the product be supplemented with soybean meal?

On Oahu farmers are paid to pick up garbage; or Ecofeed will deliver for free. Honolulu has a bylaw requiring recycling of food waste for establishments over a minimum size and this bylaw has benefitted the farmers. On the East Hawaii and on Molokai supplies are limited and farmers have to pay for garbage.

3) Feed quality and cost are concerns with imported feeds. Picking up feed can be a long drive.

## **TRANSPORT COSTS**

1) Shipping feed by ship is costlier but more reliable than shipping by barge. Barges have many delays. Matson is the leader; when Matson acts, Horizon follows. Jones Act prevents use of foreign vessels, but the reliability of foreign vessels could be questionable.

The Swine Task Force needs to talk to shippers after our needs and numbers are clear. Could shipping costs be subsidized?

2) High transport costs greatly limit the shipping of pigs from the neighbor islands for slaughter on Oahu for the fresh pork market.

- 4) Transport costs for feed and other production inputs are especially high for Maui and Molokai.
- 3) Fuel costs are high and rising. Can we control fuel costs? Can we get exemptions to lower the cost?

## **LAND COSTS**

1) Urban encroachment is impacting the availability and cost of agricultural land. Can we preserve important agricultural lands? Agricultural redistricting is a barrier. What is needed for farmers to be successful? Pig farms are restricted to Ag 1 zoning. Appropriately zoned land is limited and the cost is high.

Encroachment and land availability is more of a problem on Oahu than on the neighbor islands. On the other hand, most pigs are raised on Oahu because it is the primary market for fresh pork. Could we end up with guerilla farming on Oahu?

2) Livestock Agricultural Parks. The length of lease is 20 years in agricultural parks, which allows for investment by producers. Currently no agricultural parks allow livestock. Are there zoning restrictions? Allowing livestock in existing parks could lead to integrated production and more sustainable practices. Are livestock a risk to vegetable crops?

3) Agricultural Development Corporation. Will lease rental cost from ADC be affordable? What insurance is required?

## **LABOR COSTS**

Cost of labor is high and farmers compete with other employers. Family labor is commonly used, but hired labor is important, especially on larger farms. Producers have trouble finding workers. Pig farming is hard work. Issues raised were:

- availability of part-time labor
- seen as unpleasant job
- worker safety

Producers can increase their success in hiring good labor by:

- giving responsibility to good workers
- providing housing, medical, and other benefits

More efficient use of labor can reduce costs.

## **WASTE MANAGEMENT COSTS**

Producers are willing to take action to reduce potential pollution and run-off risks, but they need economically-feasible regulations and affordable options. Waste management regulations need to be designed for farms with very limited land availability. The average farm size is 4.5 acres and obtaining more land for waste application is not an option for the majority of farmers. Swine farms are Animal Feeding Operations (AFO); none are large enough to qualify as Concentrated Animal Feeding Operations (CAFOs). The CAFO rules have created a de facto ceiling for the size of swine farms in Hawaii.

- 1) Cost of meeting changing regulations is high. Programs need to provide funds up front, not reimburse.
- 2) An all or none approach as used by the Natural Resources Conservation Service does not work and often results in no improvements being made.
- 3) Labor intensive systems are hard to maintain.
- 4) Producers need a variety of alternatives. Need a good working model for alternatives. Alternatives might include:
  - recognizing lagoons as a best management practice, but a lagoon takes land
  - central processing? Can haul waste if covered and not leaking, but this is costly. Need to follow-up on tanker truck; options are to sell or keep it.
  - composting
    - biogas digester, with biogas used to cook food waste and reduce fuel cost; generating power is not cost effective

## **HERD HEALTH COSTS**

Introduced diseases, such as Porcine Reproductive and Respiratory Syndrome (PRRS) in the 1990s and more recently circovirus 2, have caused serious losses to swine farmers. Wild pigs are carriers of pseudorabies and brucellosis and constitute a continuing threat to domestic pig farms.

Producers need access to a veterinarian who can help improve herd health, and who can write prescriptions. Private veterinarians are not interested. Hawaii is a small state, and does not have much to offer a swine veterinarian.

State DOA veterinarians are regulatory only. Legislation to expand the list of diseases to which they can respond was suggested. This should be written so they can respond to emerging or economically significant diseases.

An extension veterinarian (large animal, not companion animal) with swine or livestock experience and licensed to practice in Hawaii is needed. An extension veterinarian can diagnose diseases and educate producers. An extension veterinarian can work with private veterinarians where possible. Farmers could pay for testing.

## **OTHER COSTS**

The cost of doing business in Hawaii is high. Costs not detailed above include:

- water
- insurance or bonds
- theft (not as much a problem in recent years as it was previously)

## **INCREASE EFFICIENCY, REDUCE COST**

Producers can increase efficiency and reduce costs by:



- using new technology
- waste feeding
- reviewing farm processes, looking for long-term outcomes and dollar value

Swine farms are small family farms with a limited land base (average of 4.5 acres) and limited cash resources. Producer ability to increase efficiency is limited by capital costs of improvements:

- cost to increase efficiency
- cost of space per animal; with more space producers can rest pens
- maintenance requires on-going labor and investment

Producer education is important if farmers are to improve management. Areas for education include:

- herd health and biosecurity
- facilities
- feeding waste
- genetics and artificial insemination
- baby pig management
- business management; margins are narrow, no time to learn from mistakes
- production records
- computer skills
- check-off

## **BRINGING IN NEW FARMERS**

If old farmers retire, how do we bring new ones in? Can existing farms be passed on to a new generation. Farming is a business. Starting and expanding farms need a business plan and a realistic income/profit potential. Youth are looking to make money.

Costs are high for new producers:

- can they afford an existing farm?
- can they find land?
- start-up costs?

Youth do not know about farming. Can youth be interested in farming? Possible actions are:

- get grants for student experience
- strengthen high school agriculture programs to attract better students, teach as science
- Mao Farms offer scholarships

Benefits of farming are:

- lifestyle is main benefit of farming - have to love what you do
- can be own boss

Early retirees are one pool of new pig farmers.

## **GENERAL CONCERNS**

There is a high threshold for getting help, for example, the feed subsidy only applies to farms with over 50 sows. On the other hand, the threshold for regulations and for being deemed commercial is much lower. Programs need to take into consideration that swine farms in Hawaii are small family farms with limited land and limited cash resources. Local farms lack economies of scale.

Farmers are very independent and many do not participate in industry organizations. Farmers often do not recognize the benefits provided by industry organizations. Communication needs to be improved.

Not all farmers are willing to change. Not all are ambitious. Sometimes farmers blame others for their problems.

### **QUESTIONS FOR PRODUCERS**

Are you planning to increase, stay the same, or decrease production?

For each suggested action/change, would it be likely to make you increase or not decrease production?

What changes are needed for farmers to raise more pigs?

In order to raise more pigs, prices have to cover costs. Farmers have to balance labor availability and costs (fixing pens, picking up and cooking food waste) against costs of purchased materials (feed, supplies). Cheaper feed would free up time spent on garbage to fix pens and care for more pigs.

### **PROCESS**

Outer island meetings are being coordinated through the livestock agents. Each outer island meeting involves the livestock agent, the local task force representative, and one or two other task force members. The meetings are being combined with PQAPlus Certification training.

Producer meetings:

Kauai, September 15, Waimea Neighborhood Center

Hilo, September 27, Waiakea Research Farm

Waianae, October 6, Land O'Lakes

Maui, October 13, Cooperative Extension Office

Molokai, October 25, Cooperative Extension Office

A survey containing the recommendations in the summary document prepared by the task force will be mailed to all swine farmers.

### **ACKNOWLEDGMENTS**

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Hawaii Pork Industry Association

Rollin Olson/Walco

## **RECOMMENDATIONS**

These recommendations are not in order of priority. Preliminary importance scores assigned by the Swine Action Committee are indicated. Scores are on a scale of 1 to 5 with 1 being the highest importance.

1. The swine industry with the support of the Hawaii government should develop a lower cost feed using dehydrated garbage. Dehydrating garbage in a centralized facility located on Oahu can produce more than enough feed for all the pigs in the state. The technology is available, with prototypes having been tested on Oahu and the Big Island. Dehydration has the potential to produce a reasonably priced balanced feed with many of the storage and handling advantages of grain-based feeds. Advantages are: low cost feed, opportunities to make a more balanced feed, reduced labor needs on farms, possibility of storage, use of local resources, removal of food waste from the waste stream, ease of assuring cooking and safety, ease of handling. Score 3.1
2. The Swine Task Force, other livestock industries, Hawaii Department of Agriculture, House and Senate Committees responsible for transportation, and members of Hawaii's congressional team should meet with shippers to see whether shipping costs can be reduced or subsidized. The swine industry should be prepared to present data on our needs and numbers. Score 1.6.
3. Hawaii Department of Agriculture should convert all loans to the Hawaii Livestock Cooperative into grants. A meeting should be held with all facilities slaughtering swine to determine what other measures will help to ensure that they can continue operations. Score 2.1.
4. Waste management programs and rules should be based on economic feasibility. Partial or incremental improvements should be allowed, because the current all or none approach most commonly results in no improvements or farm closures. A broader range of best management practices should be approved, including collection of waste without land application. Flexibility by the Natural Resources Conservation Service (NRCS) and other agencies is crucial, because approaches developed for mainland farms may not be appropriate in Hawaii. The Swine Task Force, other livestock industries, and the Hawaii Department of Agriculture should meet with NRCS and the Hawaii Department of Health Wastewater Branch to develop adjustments to make programs and rules workable. Score 2.1.
5. Hawaii Department of Agriculture should modify the operating restrictions on the Animal Industry Division veterinarians so that they can address any emerging disease or outbreak of economic significance, instead of being limited to listed diseases. Funding should be increased accordingly. Score 2.8.
6. The College of Tropical Agriculture and Human Resources should hire an extension veterinarian. This veterinarian should develop recommendations for medications appropriate to treat or vaccinate for common problems and inform farmers of sources where medications can be obtained. Score 2.2.

7. The swine industry and Cooperative Extension should assist producers to develop better biosecurity to reduce disease spread and cost. Score 2.8.

8. The state government should make a strong commitment to preservation of agricultural land for the raising of livestock. Score 1.7.

9. Producers should show commitment to a united industry organization. This organization should work to educate and communicate our concerns with government and regulatory agencies so we work together and not against each other. The industry should work with state agencies to develop programs to support and encourage small farms to continue and to expand. Score 2.5.

10. Industry and the College of Tropical Agriculture and Human Resources Cooperative Extension Service should work on education programs for producers. Areas for education include:

- herd health and biosecurity
- facilities
- feeding waste
- genetics and artificial insemination
- baby pig management
- business management
- production records
- computer skills
- check-off

Score 2.8.

11. Producers should work on being more efficient and reducing costs. Government can support the industry by working to reduce costs for fuel, feed, shipping, utilities, etc. Score 2.0.

12. Industry should work on having a consistent supply of high quality products. Score 2.3.

13. Industry should work on marketing, branding and educating consumers to increase awareness of local pork. A Hawaii pork web page could be one tool. Government should assist. Score 2.3.

14. The College of Tropical Agriculture and Human Resources should perform research in the areas of the quality of local pork (reducing drip loss), best management practices for Hawaii's family farms and environment, and selection of genetics that perform best under Hawaii's management styles. Score 2.7.

15. To ensure equitable assistance to both smaller and larger farms, government programs, such as the feed subsidy, should be based on a proportion of gross hog sales income. Most swine producers start small and expand gradually, so having a pool of viable small farms is important to the long-term sustainability of the industry. Score 2.0.