ALTERNATIVE VALUE CHAINS: JONES FEED MILLS CASE STUDY

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During the development of our supply of niche market hogs, we had the opportunity to get in touch with the Jones Feed Mills Group. The Jones Feed Mills were looking for a market that would provide income to small family farms. The Jones Group decided to tour the duBreton processing plant in Rivière-du-Loup in Québec to see if creating a partnership with the Breton Family would fit with the ideology of their Mennonite and Amish suppliers.

After the visit, meetings were held with the community to see if barns could meet the standards of the Certified Humane® certification. It was decided that 3 site productions would best fit into this program. Also, it was economically beneficial to do complete depop - repop, so the health of the animals could be maintained. In this program, no antibiotics are allowed during the lifetime of the market animals.

At this time, the Jones network consists of 37 different farms. Farrowing units range from 180 to 200 sows. The nursery barns and the finishing barns are on different sites. The biggest finishing barns are not more than 500 head. All nursery and finishing sites are working with all-in, all-out.

For biosecurity, sites use the Danish entry system.

These are some of the highlights of the Certified Humane® program:

A. Feed

FW 1: Wholesome, nutritious feed

a. Pigs must be fed to meet or exceed nutrient requirements as determined by the National Research Council.

b. Pigs must be fed a wholesome diet which is:
   1. Appropriate to their species, stage of production, and age.
   2. Fed to them in sufficient quantity to maintain them in good health; and
   3. Sufficient for their nutritional needs.

FW 4: Substances prohibited in feed

a. No feedstuffs containing mammalian-derived protein are permitted, with the exception of milk and milk products.

b. Pigs must not be fed or implanted with any growth promoter or fed antibiotics deliberately to boost growth or feed efficiency.
c. Antibiotics may only be given to individual pigs for therapeutic reasons (for disease treatment) and only under the direction of a veterinarian.

FW 9: Easy availability of feed
a. For ration feeding pigs in a trough, there must be enough feeding space (1.1 times shoulder width) for all pigs to feed simultaneously. A feeding place is described as space required by a single pig while eating.
b. For ad lib feeding there must be no more than:
   1. 6 pigs per feeding place when using a dry feeder with no full head barriers between each feeding place;
   2. 10 pigs per feeding place when there are full head barriers; or
   3. 14 pigs per feeding place when there is the opportunity to mix water with the feed (wet and dry feeders).
c. If wet feeding of sows indoors is used, head and shoulder barriers must be erected between each feeding place.

FW 12: Weaning
Piglets must not be weaned from the sow before the fourth week after farrowing, unless a veterinarian confirms that the welfare or health of the sow or piglets would otherwise be adversely affected. When batch farrowing practices are used, the average age of the batch at weaning should be 28 days or more.

FW 13: Creep Feeding
Solid feed, of appropriate nutritional and palatable quality, must be provided to all piglets from 10 days of age but inaccessible to the sow.

B. Water

FW 15: Water supply
a. All pigs must have access to an adequate supply of clean, fresh drinking water each day, except when directed by the attending veterinarian.
b. Special care must be taken to ensure that drinkers are adjusted (height and flow rate) so that water is accessible for every pig.

FW 16: Extra drinker when using wet and dry feeders
When wet and dry feeders are used (i.e. both the feeder and drinker are within a single pig place), an additional drinker must be supplied in the pen.

A. Buildings

E 1: Records of features of facilities that promote animal welfare
a. For all accommodations, the key points relating to welfare must be recorded in the farm log book or on the farm site plan, and if practical, be displayed at or near to the entrance to each building and be amended accordingly.
b. These must include:
   1. Total floor area;
2. Building area available to pigs; and
3. Current number of pigs in relation to age and weight, and consequent feeding, drinking, and bedding space per pig.

C. Lying Area/Floors

E 11: Lying area
a. Pigs kept indoors must be kept on, or have access at all times to, a lying area (see E 14) that is:
   1. Of solid construction (i.e. not perforated);
   2. Bedded to a sufficient extent to avoid discomfort; and
   3. Either sloped to provide drainage or bedded to a sufficient extent to provide a dry surface.
b. Pigs kept in outdoor systems must have access to a comfortable, dry lying surface of sufficient size to allow all pigs to lie down at the same time. In inclement weather, (i.e., rain, snow, cold) the pigs must have access to a covered comfortable, dry

D. Space allowances

E 13: Total floor space
Pigs must always be provided with a total floor space no less than 1.5 times their minimum lying area.

E 14: Bedded space for growing pigs
The minimum bedded space and total space allowances for growing pigs are as follows:

<table>
<thead>
<tr>
<th>Live weight</th>
<th>Lying area</th>
<th>Total area</th>
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<tbody>
<tr>
<td>(kg)</td>
<td>(lbs)</td>
<td>(m²)</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>120</td>
<td>264</td>
<td>0.57</td>
</tr>
</tbody>
</table>

E 15: Space allowance for sows and gilts
Sows must be given a minimum total floor space of 37.6 sq. ft (3.5m²)/sow for mature adults, and 28.9 sq. ft. (2.5m²) /sow for first and second parity animals, though this may
exceptionally be slightly altered (for different breeds, genetic lines) with the agreement of the Humane Farm Animal Care Inspector. Lying area must be at least equal to the square of the length of the pig, which roughly equates to a minimum of 16 sq. ft. (1.5m²) for each adult sow and 11sq.ft. (1m²) for first and second parity animals. (See E23 for farrowing space requirements)

E 18: Freedom of movement
The pig must be free to turn around without difficulty at all times. Individual stalls or crates that prevent pigs from turning around (except for hospital pens) and tethers for pigs are prohibited.

E 19: Confinement
Pigs must not be closely confined or restrained except in the following circumstances, and even then only for the shortest period of time necessary:
1. For the duration of any examination, routine test, blood sampling, treatment or operation carried out for veterinary purposes;
2. While they are being fed on any particular occasion;
3. For the purpose of marking, washing or weighing;
4. While accommodation is being cleaned;
5. During artificial insemination; or
6. While they are awaiting loading for transportation.

E. Farrowing Systems

E 23: Farrowing area
a. A sow must be housed in a farrowing environment that is bedded (such as straw) and allows her to turn around.
b. Approximately 48 hours prior to farrowing materials must be provided in sufficient quantities and be of a type which allows sows to carry out their natural nesting behaviors. Sawdust and sand are not acceptable as nesting material for the sow.
c. Traditional straight, narrow farrowing crates are not permitted.
d. Established farrowing systems such as the sloped farrowing pen and outdoor pastures with huts are all acceptable substitutes for the traditional farrowing crate.
e. Farrowing Pens must be at least 6 x 8 ft (1.8 x 2.4m).
f. Farrowing pens of 10 ft x 10 ft (3 x 3 m) are preferred because they provide more room for the sow to move around, but when using pens of this size or larger, a protected zone for piglets must be provided. The protected zone must be at least 8 sq.ft. (0.8 m²) in size and be zone heated.

E 25: After farrowing
a. Sows must be kept in the farrowing area for at least 28 days after farrowing.
b. Piglets must not be weaned from the sow before the fourth week after farrowing, with the average age of each farrowing batch being 28 days or more, unless a veterinarian confirms that the welfare or health of the sow or piglets would otherwise be adversely affected.
F. Environmental Enrichment

E 27: Stimulating environment
a. Pigs are naturally inquisitive and show a high level of motivation to perform rooting behavior. They must, at all times, have access to straw or other suitable media such as wood chips, sawdust or peat for the expression of rooting, pawing, mouthing and chewing behaviors.
b. Provision of other objects for manipulation, such as chains, balls and materials such as rope is also required.

E 28: Mitigating abnormal behaviors
a. When pigs develop abnormal behaviors that injure other pigs (e.g., tail, flank, ear, or vulva biting), they must promptly be given additional stimuli to encourage foraging or other non-injurious behavior.
b. When such incidents occur, the caretaker must implement ways of avoiding/eliminating the problem.
c. Each incident must be recorded, together with action taken, in the farm records.

E 29: Isolation
a. Pens must not be sited or constructed in such a way as to isolate any pig from the sight, sound or odor of other pigs, except for quarantine.
b. Sick or injured pigs may be isolated temporarily for treatment after consultation with the veterinarian.

A. Health Care Practices

H 1: Animal Health Plan
a. All pig units must have a written Animal Health Plan (AHP) that is regularly updated in consultation with a veterinarian.
b. The AHP must include:
   1. Details of any vaccinations;
   2. Information on treatments and other aspects of herd health;
   3. Causes of morbidity and mortality, when known;
   4. Tolerance limits on overall herd performance;
   5. Bio-security provisions; and
   6. Cleaning and disinfection policy

H 6: Care of sick and injured animals
a. Provisions must be made for segregation and care of sick and injured animals. Any injured, ailing or distressed pig must be:
   1. Segregated; and
   2. Treated without delay (including seeking veterinary care when needed); or
   3. If necessary, humanely killed according to the American Association of Swine Practitioners and the National Pork Producers Council’s euthanasia guide.
b. Urine and dung from hospital pens containing sick and injured animals must be disposed of separately to reduce the risk of spreading infection to other stock.
c. Pens must be constructed to facilitate effective cleaning and disinfection of surfaces and the possible removal of a carcass from the box.

**H 9: Physical alterations**

a. The only potentially injurious husbandry procedures that are allowed under the Animal Care Standards are as follows (except those done for therapeutic reasons by a veterinarian):

1. Needle teeth of newborn pigs may be trimmed as early as possible and not later than 48 hours after birth, or in the case of weak or sick piglets, within 3 days of birth.
   a) Tooth trimming must only be carried out by a trained and competent person.
   b) No more than the first third of the tooth may be removed.
   c) The procedure must leave an intact smooth surface to the teeth.
   d) Grinding of the sharp point of the teeth is preferable to clipping, as this is less likely to break the tooth or remove too much of the tooth.
2. Ear-notching is prohibited as a routine method of identification. Ear tagging, slapmarking and tattooing are permissible.
3. Tail docking must not be carried out routinely. If the risk of tail-biting exists, other measures should be taken to prevent tail biting such as environmental enrichment or reducing stocking densities. If by veterinary recommendation tail docking should be done, HFAC must be notified before tail-docking is permitted. The method and age of the animals, as well as the justification for the procedure will be reviewed. Following review the producer will be notified on the decision from HFAC.
4. Castration of pigs is permitted but must be done before pigs are 7 days of age. If older pigs are castrated for veterinary reasons, anesthetic and post-operative analgesic must be used. Castration must be done using sanitized equipment.
5. The trimming of tusks in boars may be undertaken only by the attending veterinarian, or other competent and trained person, and only to ensure the safety of other animals and protect caretakers from injury.
6. Nose rings are prohibited.

b. All of these practices must be performed in a way that minimizes suffering and by veterinarians or trained and competent caretakers.

**REFERENCES**

Humane Farm Animal Care (HFAC) web site: www.certifiedhumane.com