Producing Pork on a Small Scale: Planning

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Before entering the hog business (or expanding production), the small farmer must have a good game plan on paper. The plan must include marketing, a budget, a cash flow plan, a production schedule and a building and pasture layout. The old saying "If it isn't written down somewhere, then it doesn't exist" is very appropriate here. Planning does not ensure success, but failure to plan will insure failure. It is not enough to think about a plan, you must put them on paper and carefully consider alternatives.

Marketing

For a product to have value, there must be a market for it. Pork production is no different. Before starting a new enterprise or expanding an existing one, you need to know what product you are raising and the market for the product. For example, you may want to sell 200 pound pigs. If there is no place to sell these pigs for an acceptable price, why raise them.

One advantage for raising pork on a small scale is the growing demand for “natural”, “pasture-raised”, and “organic” pork. Some consumers will pay a premium for such products, if they are available. There are also small processors that can only handle small numbers each day, making an ideal partner in this type of market. Meeting this market demand will require careful planning on your part to produce the type of product needed. Market demand should determine the scope of your operation.

Budget

Once you have a marketing plan, the next step is developing a budget. The marketing plan will give you an estimate of income. You need an estimate of the money required to produce the pigs needed for your market.

Feed costs make up 65-80% of the variable costs required for pig production. Just knowing the amount of feed needed and the price will give you a good estimate of production costs. Assuming you sell 16 pigs at 250 pounds for each sow each year, you will need 925 to 1000 pounds of feed for each pig sold at 250 pounds. Other costs, such as utilities, fuel, labor, veterinary care, etc., make up the remainder of the variable costs.
Production Schedule

The production schedule is the first place to start. The production schedule is an orderly plan of swine production events, including breeding, farrowing, and weaning of sows and the timely movement of pigs through the growth period to market time. The production schedule is the framework of efficient production. It allows us to estimate the facilities, feed, labor, capital and other resources necessary to produce pork.

To set up a production schedule, you must know how many pigs are needed, when they are needed and pig survival. Next you need litter size and farrowing rate. Now you can calculate the number of sows to breed. To market 1000 pigs a week, 90 to 100 sows must farrow every week. To farrow 90 to 100 sows, 105 to 130 sows and gilts must be bred each week. To market 10 pigs every 6 months, 1 or 2 sows must farrow every 6 months, and 2 to 3 must be bred every six months.

After a tentative production schedule is established, we can generate a cash flow and a budget for the startup year and a normal year. We must go through these steps before deciding to enter pork production or to forget the whole thing and go fishing.

Table 1 gives some examples of typical production schedules for a small hog operations. With low investment facilities, it is important to have a production schedule which allows slack time for cleanup of facilities. A schedule with less frequent farrowing will generally result in less disease and parasite buildup.

<table>
<thead>
<tr>
<th>Number of sow groups</th>
<th>Farrowing frequency, days</th>
<th>Weaning age, days</th>
<th>Maximum litters/sow/year</th>
<th>Potential pigs/sow/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>80</td>
<td>42</td>
<td>2.28</td>
<td>18.25</td>
</tr>
<tr>
<td>3</td>
<td>42</td>
<td>35</td>
<td>2.33</td>
<td>18.64</td>
</tr>
<tr>
<td>4</td>
<td>35</td>
<td>28</td>
<td>2.47</td>
<td>18.78</td>
</tr>
</tbody>
</table>

A production schedule is derived by the number of groups the sow herd is divided into. The fewer groups, the less frequently they will be farrowed. For small, low-investment operations the 2, 3 or 5 group schedules are more frequently used. The farrowing interval is the time in days between farrowing one group and the next group.

Weaning age depends of the facility, management and nutrition available for weaned pigs. The small producer usually must wean pigs at older ages because of limited facilities for young pigs. The practice of weaning pigs controls the entire schedule. Sows will generally return to heat or estrus at 4-10 days after weaning.

The production schedule determines the maximum potential litters per sow per year; however, in practice this potential will never be fully achieved. Some sows and gilts will not breed or conceive and will lower the average litters per sow per year. In turn, the litters per sow per year determines the potential pigs per sow per year.
The small farmer may have many different enterprises which contribute to the cash flow of his operation. If pork production is wisely scheduled, available labor and other resources can be more efficiently used on all enterprises.

The regular nature of scheduled pork production encourages timely completion of recommended practices. This contributes greatly to the success of the operation.

**Building and pasture layout**

Laying out the “pig farm” depends on what you want to do and what your neighbors will let you do. Pasture production requires land, shelters, fences and time, but provides flexibility. It is still confinement production, but animals are confined to areas that maintain vegetation during normal growing seasons. Production using drylots or concrete floors, regardless of the number of animals, is considered an Animal Feeding Operation (AFO) and must be operated within the Alabama Department of Environmental Management AFO/CAFO rule. For this type of production, waste management is an important issue. The waste handling and management involves you along with qualified professional (engineers, crop consultants), Alabama Cooperative Extension System professionals, regulatory agencies and your neighbors. The following steps should clarify this part of the decision making process:

- Make sure you have a good working relationship with your neighbors, especially those on adjoining land. Most nuisance suits result from poor communications between neighbors.
- Identify the land you have available for the operation, keeping in mind that all land may not be suitable for swine production. Get copies of soil and topographical maps, as well as aerial photographs, plat maps and weather information (rainfall patterns, seasonal wind velocity and direction.)
- All waste collection, storage and transport structures (including building slabs and pits) on the site must be designed, and the construction monitored by a licensed professional engineer. A nutrient management plan should be prepared by a certified crop advisor.

Developing a good game plan will get you started on a path of success. Other issues, such as genetics, final market weight, sources of feed, are covered in other publications located at http://www.aces.edu/animalforage/swine/SmallScaleProd.php.