

# New look pork production – a view from America

One of the leading visionaries in pig production is Professor Dr John Deen from the University of Minnesota. In this article John shares his vision with us.

Globally, pork producers are under pressure. Well documented and dramatic increases in the cost of feed, labour and construction, along with changing consumer attitudes, have become key drivers for a new look industry.

You could be forgiven for thinking that the outlook is gloomy for swine producers, but the present challenges also provide great opportunities. According to Professor Deen, when things get too comfortable, people get too comfortable, and things do not progress and in most markets today raising pigs is not very profitable.

Production models from the past no longer apply – the sector has changed and moved on. One consequence of that move is that the whole pork supply chain is more open to new ideas and new technologies – especially those that promise greater efficiency and better margins.

One of the aspects of swine production that has been studied at the University of Minnesota is how producers think about controlling costs. In the past, minimising cost of production has been the focus of many producers, and few have considered the other component of production economics – maximising revenues.

## Market pressures

The financial manipulation of unit purchase costs is largely beyond the control of producers in most markets and they have, to a large extent, to work with what the market dictates. However, the potential for manipulating output by maximising each pig's survival and growth rate is far higher.

In the future, producers will have to look more closely at the cost of raising pigs that do not grow as efficiently as they can. This 'lost opportunity' cost is far easier to control using biological means rather than input costs such as feed. Basically, because prices are more volatile and trending higher, we will no longer be able to waste inputs. With prices having approximately doubled glob-

ally over the past two years, feed now accounts for as much as 75% of the cost of production in some markets.

Along with this rise in input costs, in some markets the value of the product is also increasing – but to a lesser extent – partly due to a decrease in supply.

Professor Deen believes that this is moving the industry towards a higher value product. In other words, each pig is becoming that much more valuable and, as a result, the cost of failure is increasing.

Recognising and addressing these 'hidden' costs will become an essential part of successful swine production. This will undoubtedly require a change of mindset by an industry that has traditionally focused on input costs, but the current economic climate is as good a catalyst as any.

According to Professor Deen any technology that enhances the efficient use of valuable resources will be a great benefit. For



example, we will see an emphasis on feed conversion efficiency and products that can reduce feed input and increase growth rates.

## Lost opportunities

One of the biggest lost opportunities suffered by the pig industry is the loss of growth that occurs when male piglets are physically castrated when a few days old.

Compared to intact boars, castrates have a lower feed conversion rate, grow more slowly and produce a carcass that has less lean and thicker back fat. Putting it simply, it costs more to produce less.

In the past, when feed prices were less critical, attention was focused on other issues, such as infection control, which could make a big difference to production efficiency. Plus, of course, there was no viable alternative to physical castration if producers wanted to raise full grown pigs without a high risk of boar taint. Now, when prices are high, the market is far more interested in innovations that promise to give back those lost opportunities.

According to Professor Deen, one such innovation is the boar taint vaccine that has been used commercially in Australia and New Zealand for over 10 years. More recently, it has been successfully introduced in over a dozen or more countries worldwide. Professor Deen thinks that boar taint vaccine is entering markets at a time when decisions on how to raise pigs are being re-evaluated and decision makers in integrated companies will quickly see the benefits of improving feed conversion and re-gaining the efficiency of growth which they have been losing as a result of castrating piglets.

This product works like a vaccine to block the activity of the testes temporarily in the finishing stage and thus remove the risk of boar taint in the carcass. But, because it becomes fully effective only a matter of weeks before slaughter, the pig spends most of its life growing like an intact boar.

This means pig producers can maintain a much more efficient feed conversion and get better growth in the fattening stage as it is not overall feed conversion that is the issue

*Continued on page 15*

*Continued from page 13*

here but it is the marginal feed conversion – the feed conversion during the latter stages of the barrow's life when it lays down more back fat and feed conversion is less efficient.

In some markets the large amount of back fat laid down in the late fattening stage is a block to larger carcasses. When this is avoided by using boar taint vaccine then larger carcasses will become acceptable. Even in non-castrating markets this product will bring benefits.

In markets where carcass size is restricted due to boar taint, it will allow producers to make use of the efficient growth in the finishing stage and be able to sell bigger, more valuable carcasses.

The increasing communication up and down the pork supply chain is another factor which is facilitating the adoption of new ideas and management systems in the industry.

This means that new ideas and products that have benefits for more than one part of the supply chain are more likely to be taken on. This is one of the benefits of the increasing vertical integration that we are seeing in the pork sector.

This increased communication reaches as far as the consumer and the resulting transparency will also affect producers and their methods of production.

There is an increasing dialogue with consumers and pork producers are getting



more questions about their production methods. So, there is a growing concern in the sector over consumer acceptance and consumer recognition that there are alternatives, such as physical castration. As markets refine there will be a real attraction to products that deliver this kind of acceptance.

So, does this all mean the end for the smaller producer? Not necessarily.

According to Professor Deen, as there are small producers who do a good job, there will still be a place for those that can utilise their inherent husbandry skills. However, there will be much more emphasis on production and real pressure on smaller pig producers in some markets – those that produce 15-18 pigs/sow/year.

## **Proximity to feed source**

Those producers that do prosper in the future are more likely to find themselves closer to their feed source.

Feed has to be available but there is an increase in energy costs, so transportation is more expensive. Also, the waste from swine units will be more valuable as fertiliser prices continue to increase.

There will be a bias in the new market towards integration with grain production. The location of the swine production will be driven by proximity to crops and fertiliser. It will become focused on areas that can produce pork more capably and best utilise the resources they have.

Swine production is undoubtedly changing. The new look industry is likely to be more efficient, more integrated and more consumer aware.

Feed conversion efficiency will become an important production parameter and cost cutting will focus more on making the most of swine physiology to reduce the losses associated with inefficient production.

Necessity is the mother of invention – and the pork industry needs to find more efficient ways of producing a high quality product! ■