

Reduction of Antimicrobial Medication

Point of production: Breeding
Country of origin: Netherlands



Dutch farmer Kees van der Meijden has achieved the enviable goal of reducing antibiotic use to almost zero, while at the same time, improving pig performance.



Kees took a series of different management steps which have all combined to achieve these results and lower

costs on his unit. It all followed a massive fire in 2013 which meant huge reinvestment in the farm and an opportunity to use new and innovative techniques. It is a 1,000-sow breeding farm, also rearing their pigs.

The issue - Antibiotic use

Frequent and inappropriate use of antibiotics results in antibiotic resistance. Treating resistant bacteria requires higher doses of antibiotics. There are a number of 'last resort' antibiotics that must be preserved. Within both human and animal health, there is a drive to reduce antibiotic use to protect long term health interests.

The solution - Best practice

There are strict protocols for hygiene throughout the farm and Kees has different colours to differentiate between animal categories in different parts of the unit to minimise any cross contamination. For example, in the farrowing room the corresponding colour is blue so the flooring and all the main equipment such as the shovels are blue.



Beneath the flooring in the farrowing house is a novel cooling system which cools down the manure to under 15 °C. The system reduces ammonia at the source and the amount of manure stored within the farm. Kees also re-uses the heat released from the manure as energy for the piglet flooring and other farm

facilities which saves energy costs.

As well as hygiene, the other key factor is staff training and management protocols. Kees has clear, detailed protocols used by all stock workers, so he can unify his working processes.



Stock workers are given practical training including how to recognise animal behaviour. This way, they all make the same decisions. Everyone gets the same level of information which means they can consistently deliver good results.

"Our goals are high health, a high production level and to have the best training facilities. In 2014, we designed new pig accommodation, focusing on good internal and external biosecurity. Animal health is the priority and hygiene is one of the top factors for this." Kees van der Meijden

Cost/Benefit analysis

- ✓ Antibiotic use has dropped to almost zero.
- ✓ **Ammonia production has been reduced by 85%, providing cleaner air, higher animal health, a better working environment for the employees and fire protection.**
- ✓ Improvements in the breeding herd amount to production of one piglet more per sow per year than a few years ago.
- ✓ **In the finishing herd, the pigs can reach the right slaughter weight three weeks earlier.**
- ✓ The pigs are quiet and the atmosphere is relaxed which is a good indicator for high animal welfare.
- ✓ **There is a saving on energy costs, through using the cooling plate system, which has a heat exchanger to warm up the water.**
- ✓ Improved performance 33 piglets per sow per year.
- **The investment for this business was €1,500 per sow, including the feed system, the building and also the education rooms and terrace.**

Additional information

Kees also provides training and education programmes at his facility, designed for investors, pig farm managers and stock workers.

Further Research & Project Links

<https://www.eupig.eu/>
Link to technical report
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