

Life is good on the Family

Groups of four sows nurse their young together and the piglets learn to pee into a urinal. In Venhorst in the Dutch province of Brabant, a consortium is doing research on an innovative eco- and animal-friendly shed design called 'The Family Pig'. Everything revolves around the question of what makes pigs happy.

TEXT RENÉ DIDDE



PHOTO: THE FAMILY PIG

It is 'raining' food from a rotating arm hanging from the ceiling of the shed.

Sows and piglets jump about and tumble over each other. They rootle for the scattered pellets with their noses. It all looks more playful than the pigs crowding around troughs in conventional pig sheds. And the pigs certainly have space in this shed: over 1000 square metres for the sows and their offspring.

Groups of four sows nurse their young together, each quartet in its own section where they raise about 60 piglets together over five weeks. The 60 piglets, whose curly tails are not docked, forage more freely than piglets in conventional sheds with their slatted floors and slurry pit.

'Pigs are naturally social animals and this makes them happy,' says Tjacko Sijpkens. 'And a happy pig is healthier, stronger and produces tastier meat.' As a business advisor, Sijpkens noticed some years ago that pig farming didn't have a great image. What with animal welfare issues, the problem of

excess manure and ammonia emissions, this sector often comes under fire.

So in a newly constructed experimental farm in Venhorst in Brabant, the business advisor from the northern province of Groningen took the initiative in May 2019 to start a 'living lab', where numerous new ideas are tested. This venture is called 'The Family Pig'. Wageningen is contributing to the project with expertise about animal behaviour and wellbeing.

In the 'nurseries', the piglets are fed by their mothers for the first five weeks, but soon start foraging for feed pellets too. The sows

leave the nursery after a few weeks and return together to a central space. The piglets live for 24 weeks, a week or two longer than in the conventional system, in which they are separated from their mothers after four weeks rather than five. 'Scientific research has shown that contact between pigs at a young age improves their social skills, so they don't bite each other, for instance,' explains Liesbeth Bolhuis of the Wageningen Adaptation Physiology chair group. The pigs' behaviour is recorded by students and – especially in this coronavirus period – by video cameras.

**'Pigs are social animals
and this makes them happy'**

ly Pig farm



SUPPORT FOR THE FAMILY PIG

The Family Pig is working in a consortium on a new concept, with support from the European Union, the ministry of Economic Affairs and the province of North Brabant. Working with founder Tjacko Sijpkens and his company Big Developments, and Wageningen University & Research, are ICT company Noldus from Wageningen (producer of a chip with a track & trace system in the pigs' ear tag), Inno+ (energy-saving climate system, mainly cooling), and construction company Dura Vermeer. The budget for five years is 4.3 million euros, 2.5 million euros of which is public funding. Other contributors are Agrifoodcapital and Boekel municipality, with knowledge and a plot of land, respectively.

Elsewhere in the shed is a urinal which the piglets learn to pee into. When they do so, they are rewarded with a drop of syrup out of a pump. For their faeces, they are directed to a different section, dubbed the 'poop-al'. 'The great advantage of separating excreta at source is that no ammonia is formed,' explains Sijpkens. That reduces nitrogen emissions into the environment and the negative impact on local residents and the farmer. But that is not all: 'It is also nicer for the pigs themselves,' says Liesbeth Bolhuis. 'Because a high concentration of ammonia leads to stress and affects their sense of smell. And smell is the most important sense for pigs, for recognizing others of their species.'

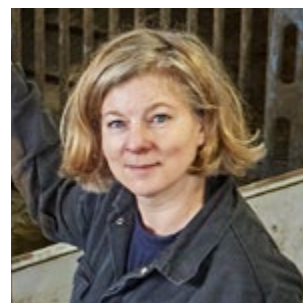
RATIONAL BASIS

Bolhuis was involved in developing the shed from the first brainstorming sessions on Sijpkens's question 'what does the pig want?' 'We want our assumptions about a 'happy pig' to have a rational basis. So we

are studying the interactions among the pigs, and between the pigs and this new shed system.'

Is the financial and economic model of The Family Pig an attractive prospect for conventional pig farmers? Doesn't it make the pork much more expensive? The costs of building a Family Pig shed are the same as those of a conventional shed, says Sijpkens. 'The separate sanitation costs the same as a slurry pit, for instance.' Extras such as the nurseries and the food scattering system do not add to the expense, and costs incurred for feed are the same. 'We think we save on medical costs and on transport. And our piglets grow faster to the 120 kilos at which they are ready for slaughter. This way we avoid the expensive transport from the breeding farms to the pig farms where they are fattened up, which is also stressful for the pigs.'

The Family Pig is not necessarily bound for a free-range butcher's shop that sells local meat, or for the organic section of the super-



LIESBETH BOLHUIS

Behavioural physiologist at WUR

market. 'We want to serve all market segments,' says Tjacko Sijpkens. 'We don't look at the label of the meat, but at our piglets' wagging tails.' ■

www.wur.eu/familypig