BETTER PENS MEAN ‘BETTER’ PIGS

Pigs that grow up in an enriched environment – a bigger pen with straw and sawdust, for example – grow faster, have better immunity, and can cope with disappointments better, concludes PhD researcher Lu Luo.

Luo’s study is the first to compare the long-term effects of an enriched pen with those of a standard bare pen. Luo assessed not only the pigs’ behaviour but also their growth, their immune systems and their emotional state. Luo discovered that pigs from enriched pens had different levels of natural antibodies than pigs from conventional pens, which probably makes them respond more effectively to infections. Her discovery ties in with earlier research findings by Ingrid van Dixhoorn, who found that pigs from enriched housing had better resistance to the PRRS virus.

Another significant benefit is that the pigs from enriched environments coped better with being weaned. After weaning they ate better and grew faster than pigs in a bare environment. What is more, they displayed fewer stress symptoms and could cope with disappointment better.

PLAYING
Luo did her research on the Wageningen campus with 32 groups of pigs. One quarter of the pigs were housed in either an enriched or a bare pen, one quarter were moved from a bare pen to an enriched one after seven weeks, and one quarter were moved in the opposite direction. The pigs that went from an enriched pen to a bare one seemed to become more stressed and began to display harmful behaviour such as tail- or ear-biting, which the pigs in the enriched environment hardly ever did. It also became apparent that pigs that moved from an enriched environment to a poor one were worse off than the pigs that stayed in a bare pen all the time. And the pigs that were ‘promoted’ from bare pens to enriched ones showed lasting signs of improved wellbeing, playing and exploring more. AS

HUNGER INCREASES WITHOUT SCHOOL MEALS

Now that schools are locked down in most developing countries due to the corona crisis, children have lost their access to school meals. According to Wageningen development experts, this is causing an increase in malnutrition in many countries.

The Wageningen research team interviewed colleagues in 18 developing countries in Asia, Africa and Latin America on how the corona crisis is impacting the food supply in their countries. The results show that the corona-mitigating measures do not directly impact food production. However, the emerging food crisis in the Horn of Africa caused by the locust plague is exacerbated by the corona crisis.

FRUIT
Many people’s access to food is under threat, the researchers note. The corona measures hamper the import of staple foodstuffs such as grain, rice, maize and potatoes, reducing the food security of many African countries dependent on food imports. Furthermore, the availability of fruit and vegetables in urban areas is diminished, leading to a less varied diet. Small and medium businesses are bearing the brunt of the corona crisis, as are informal markets in developing countries. Many jobs in the informal sector are disappearing, and many young men and women in urban areas are losing their jobs.

FOOD SUPPLY
The corona crisis could stimulate regional food production and lead to shorter food supply chains in developing countries, the researchers state. But, if the crisis persists, rural areas may also face the threat of reduced food production due to lack of access to seeds and fertilizers, as well as a shortage of labour. Several Asian countries are attempting to counter the problems by distributing food and money. But this form of support seldom reaches the most vulnerable groups. Support measures such as these are mostly absent in Africa, which is likely to cause a rapid and substantial increase in the number of people suffering from hunger in the slums, the researchers expect.

The study was conducted by development economists Els Lecoutere and Marrit van den Berg, nutrition expert Inge Brouwer, and professor of Impact Analysis of Food Systems Ruerd Ruben. They interviewed 31 experts in 18 developing countries. AS