



# What is driving the swine industry?

BAYER HEALTHCARE ANIMAL HEALTH

In a thought provoking presentation Dr Manfred Kern, head of business relations at Bayer CropScience reviewed the factors that will decide how the pig sector evolves in the coming decades when sustainable food and energy production will lead to greater globalisation.

Within 30 years the world's food requirements will double as a result of population growth, positive economic development and dramatic changes in consumption patterns.

Global output of livestock products will rise from 200 million tonnes in 1995 to 350 million tonnes in 2025 of which 150, 130 and 70 million tonnes will be pork, poultry and beef and veal respectively.

## Global developments

At the end of 1999 10% of food was transported globally and by 2025 this figure will have risen to some 30%. Forecasts for 2025 state that 20-30% of arable land will be used for biomass (fuel) production and this will have a big impact on the livestock sector.

Food safety will be paramount and complete transparency will be an essential facet of global food sourcing. Animal identification and movement systems, documentation of

safe feed and additives and the traceability of products will create value and open up markets for the livestock sector. Farmers and veterinarians will continue to be the primary source of health and production information.

Over the last 200-300 years a new or variant plague has occurred every two to three years in farmed livestock and this can be expected to continue. However, a market has zero tolerance of serious disease outbreaks and this will necessitate new vaccines and products to control microbes, toxins and parasites. Enhanced biosecurity will also play a vital role in the future of pig production.

By 2020 30 pigs per sow per year will be the average output in Denmark and breeding will be putting a much greater emphasis on disease resistance, removal of the stress gene, improving meat quality, increasing meat to bone ratio and the reduction of phosphorus in manure. Animal vaccines will be produced in feed grains.

Animal welfare is a key concern of consumers and optimising animal welfare and providing credible welfare information will be key factors in the marketplace.

The livestock sector will have to greatly minimise its production of greenhouse gases or eliminate them all together. High value

feedstuffs will be designed from specifically designed crops and inputs such as probiotics which create favourable gastrointestinal bacteria for more efficient feed conversion, reduced protein requirements and decreased environmental impact.

## The pig of the future

Reduction of anti-nutritional factors, grain moulds and mycotoxins will be important and specific nutritional management plans will be developed in order to improve a pig's growth and feed efficiency and to greatly minimise manure production.

The pig of the future will be an excellent recycler of many non-traditional or waste ingredients. Replacing ruminant meat with meat from monogastrics will greatly reduce methane production.

Factors impinging on feed prices such as regional droughts, low global food stocks, high oil prices, increased demand, increased biofuel production and the like will be a real challenge for the pig sector.

Factor FX: Future Farming, Food, Feed, Fitness, Fuel, Fibre, Freshwater, Fishery, Forestry, Flora, Fauna, Fun, Freedom are milestones on a roadmap for tackling the challenges of the 21st century. ■