



# ‘Let’s take the lead in sustainable agriculture’

**Europe, with the Netherlands in the vanguard, should play a leading role in making farming and the food sector much more sustainable, says the Wageningen innovation expert Frans Kampers. In the Mansholt lecture in September in Brussels, he explained to European policymakers how this could work. ‘They should be using our greenhouses in Spain, Kenya and China as well.’**

TEXT RENÉ DIDDE PHOTO HARMEN DE JONG

**F**arming has not got a good reputation when it comes to the environment, says Frans Kampers, innovation expert at Wageningen University & Research. 'In the past, we have been wasteful in our use of fossil fuels, not just for tractors and machinery but also for heating and lighting in greenhouses. They devour energy. Stocks of phosphates for fertilizers are also being depleted at a rapid rate,' says Kampers. And let's not forget the felling of rainforest for soya fields and palm oil plantations. This is still going on despite agreements to curb it. The possibility can also not be excluded that agricultural pesticides are a factor in the dramatic decline in the number of insects, as turned out to be the case this autumn. Kampers could list plenty more examples. 'We are still doing all of this even though we know that we have the planet on loan from our children.'

Things have to change, he says, especially given that we will have 10 billion mouths to feed by 2050 compared with 7.5 billion now. And because incomes are rising in China, India and African countries, those mouths will probably be on a diet with more animal protein. 'This means that Europe, with the Netherlands in the vanguard, urgently needs to introduce the world to a new food system in the period up to 2030,' argues Kampers. 'A food system that provides sustainable, healthy food based on energy-friendly and climate-neutral cultivation. That system must deal more efficiently with raw materials, reuse them more, be innovative, and stop the exodus of people from rural areas,' concluded Kampers in the Mansholt lecture this autumn in Brussels.

Together with the President of the Executive Board Louise Fresco, Kampers developed a diagram in which these European Union objectives are combined with various solution areas, such as an increase in marine cultivation and aquaculture, smart animal and plant farming systems, and the transition from animal protein to protein from plants or insects.

#### **Why do you see a leading role for Europe, and the Netherlands in particular?**

'Agriculture here has been perfected. We are setting an example for the rest of the world. Take greenhouse tomatoes. Everything is regulated and fine-tuned: the temperature, air humidity, nutrients, recycling the water, organic pest control, pollination. The most modern greenhouses no longer even consume energy, they produce energy. Spain should have those greenhouses, but so should Kenya and China. The Netherlands can help the world modernize farming systems. It is unbelievable what we achieve here in our tiny country with 17 million people and 8 million cars. We export more agricultural products in terms of value than any other country apart from the United States.'

**That performance is however the result of a huge footprint elsewhere in the world. Soya plantations in former rainforests for Dutch pig feed and ministers who go all out in Brussels to get an exemption for their manure surplus.**

'The Netherlands has a long way to go too. But our agriculture is the state of the art. There is nothing better. You could say we have done 10 percent of what is needed to achieve all the sustainability targets. Spain has done five percent and Eastern Europe barely one percent. To get a big increase in that percentage, we need precision farming where drones map out which plants in which sections of the plot need which pesticides and how much of them, and robots that carry out the work and pull up diseased plants and weeds while they're at it. Improved technology will also improve working conditions for the farmers and make the sector more attractive to young people. That will give the local community a role and livelihood again, which will help prevent the exodus from rural areas.'

#### **Can technology solve everything? Shouldn't we rather be cutting back?**

'Sure. As Western consumers, we need to cut meat consumption, become "flexitarians" more, whereby I hope we will see tastier meat substitutes on the market that are better at imitating the structure of meat. Farmers will also have to feed their livestock waste products and grass from unviable land. The pampas in Argentinian could easily be used for grass. Both people and livestock need to eat more insects.' ■

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### **FRANS KAMPERS**

Frans Kampers (Helmond, 1957) graduated in Technical Physics at the Eindhoven University of Technology (1984) and also obtained his doctorate there (1988). He then joined the Technical and Physical Agriculture Department. Kampers currently works for Corporate Value Creation in Wageningen University & Research, on programmes aimed at innovation in areas where high-tech, agriculture and the food industry meet.