

The green agricultural revolution

For too long, agriculture and countryside development have been viewed as part of the climate problem, rather than as part of its solution. Therefore Gerda Verburg, Chair of the 17th session of the UN Commission for Sustainable Development, decided to put the agricultural industry right at the top of the CSD climate agenda.



MAARTJE SMEETS

Chaired by Verburg, 180 nations gathered this year during the 17th meeting of the UN Commission for Sustainable Development (CSD) in support of a call to place the development of agriculture at the centre of sustainability and the fight against climate change. UN Secretary General Ban Ki-moon expressed the hope that the meeting would contribute to the climate discussions to be held during COP 15 in Copenhagen. In Verburg's words: "Agriculture must no longer be seen as a problem, but a solution. We have to combine all the knowledge we have and use our powers of reasoning, locally and internationally, to ensure we shall be able to feed the world's population sustainably in three decades' time, with respect for humankind, animals and the environment."

One significant outcome of the UN meeting is the need to invest in sustainable agricultural development in Africa: the green agricultural revolution. According to Verburg, for decades, discussions of agriculture and food production throughout the world centred mainly on redistribution. "But you can only start with a satisfactory redistribution of food if agriculture is sufficiently developed: if the farmers don't just produce enough, but also have the facilities to process their products and market them. Production in developing countries can increase by 40 to 60 per cent per hectare – sustainably – if you use selective breeding and specialist biotechnology." To do that, Verburg believes we need a satisfactory agricultural policy and good infrastructure, besides new technology. "What use are ten cows to a farmer if the milk spoils because the nearest market is a three days' walk away? Making food production sustainable is also about upgrading products so valuable animal protein isn't wasted, for example. If you can make cheese from your milk your product is easier to transport and store."

Meat consumption doubles

Ecosystem pressure has led Verburg to push for a cut in animal protein in our diet. After buildings, the agricultural industry is the biggest emitter of CO₂. Research indicates that cattle ranching and meat production alone release 12 to 18 per cent of global CO₂ emissions (depending on whether or not one counts

The UN Commission for Sustainable Development

The Commission meets annually to discuss progress on Agenda-21, adopted in 1992, on The Environment and Development. The 17th session took place this year under the Chairmanship of Gerda Verburg, the Netherlands Minister for Agriculture, Nature and Food Quality.

Under her leadership, proposals were accepted to view agriculture as part of the solution to the climate problem and not just an aggravating factor. A clear signal was sent on agriculture's importance as part of the solution to a number of crises, the need for further investment in sus-

tainable agriculture, and a sustainable green revolution in Africa. The CSD occupies a special place in the UN system thanks to the involvement of NGOs, representing peasants and farmers, youth, trades unions, native populations and women.



On the fertile lands around Kenya's longest river a battle rages between conservationists, pastoralists and investors keen to turn the rich soils into swathes of commercial farmlands and which will displace 22,000 people and dry up the soil.

Keeping cattle and producing animal protein is valuable in every way

the production of animal feed). One kilogram of meat costs 16 times as much water (16,000 litres) as the production of a kilogram of grain. Besides that, meat production takes up 80 per cent of agricultural land, while it contributes 15 per cent to total food consumption. The UN's agricultural organization, FAO, expects meat consumption to double by 2050 to 450 billion kilograms per annum.

According to Verburg, it is mainly the people in the developed countries who increasingly want to see such values as animal welfare and social conditions reflected in the food they eat. "There's a public demand for it, so we have to offer people the choice. That's why I set up the Platform for Sustainable Food, so that suppliers like supermarkets and mass caterers can commit to making their wares more sustainable. They can do that, for example, by offering more meat replacements, products based on algae, insects, possibly even artificial meat." Verburg wants to see a European top group set up, composed of countries that share similar ambitions for a sustainable global food supply. If the Chair of the UN Commission for Sustainable Development gets her way, countries like Germany, the United Kingdom and the Scandinavian nations could combine to take up the global challenge of food production and consumption.

Complete ban

A complete ban on the consumption of meat and animal products isn't the answer, in Verburg's view. She emphasises the role cattle herding plays in the utilization of otherwise useless agricultural land, landscape management, and such animal products as high-grade sources of protein. In Verburg's view, a sustainable system of agriculture comprises both an animal and a vegetable component. "Keeping cattle and producing animal protein is valuable in every way. So we have to investigate how we can make animal protein production sustainable. For example, we have to close the feedback cycles: process manure to give biogas, or extract valuable minerals like phosphate. That's the way to create a win-win situation."

New technologies, like biological crop protection and production, precision sowing using a GPS, and re-use of animal manure allow farmers to increase production while reducing the adverse effects on the climate.

Sharing knowledge is vital, here. Verburg is ambitious here, too: "There's a vast amount of knowledge available right now, but what we for example haven't succeeded in is linking new technologies to local, on-the-spot knowledge in Africa. We have to make our knowledge available by offering training in our leading institutions to people from developing countries, or send our own experts into the field to arrive at the best solutions in cooperation with the local population."

Sustainable food supply

Verburg says the key word is synergy if agriculture is genuinely to contribute to resolving the climate problem. "That's my mission: creating synergy between knowledge centres, market parties and the farmer or market gardener. I want to stress that in a big way in Copenhagen too. In recent years we've been working too much along monorails; none of us knew what the others were doing about innovation and adaptation to changing conditions. We shall have to stop that if we want to innovate towards a sustainable food supply. Let's not sell ourselves short: we need to deploy all the means at our disposal and combine them as needed."

Verburg is not worried that she's marching too far ahead of the band. According to the Minister, the agricultural and the meat industries – neither of them particularly renowned for their idealism in the past – are now ready to accept their share of the responsibility for the climate problem. "What a lot of people don't know is that the arable farmers and the market gardeners have already done a lot. Many of the greenhouses in Holland are now energy neutral, for instance; some of them even generate energy. They use biological crop protection and some new housing estates are being heated with energy released by composting manure. So my motto is: If you do what you did, you get what you got. We can't just carry on talking about a sustainable food supply; we have to take concrete steps, practical and scientific ones, to realise our ambitions."