



MAP SHOWS PROSPECT FOR A GREEN FUTURE

The Netherlands will be a lot greener in the future than it is now. That is the first thing that strikes you in WUR's map of the Netherlands in 2120, which it presented last week.

That green character of the Netherlands of the future is no coincidence. The project, which was for the Dutch government, is called 'A more natural future for the Netherlands in 2120'. This future in which nature is prior-

'This Netherlands of the future is not utopian'

itized was worked out by a team of Wageningen ecologists and landscape architects. 'That detailing was badly needed,' says the ecologist Martin Baptist. 'We have to start using our natural resources in a different way and this map gives pointers for that.'

GREEN FUTURE

In this 'new narrative' for the Netherlands, there is plenty of room for nature. The area covered by forest is doubled, agricultural land is halved and livestock production is cut by two thirds. What is more, (nature-inclusive) agriculture is concentrated in places with suitable soil in Zeeland, Groningen and the Flevo polder. Some food production (seafood, seaweed) will shift to floating islands at sea. Cities will become greener, with urban woodland and food forests. New homes will mainly be built in the east and south of the Netherlands. Baptist: 'We are not only taking greenery to the cities but also taking cities to the greenery, to the higher lying parts of the Netherlands in Brabant and along the edge of the Veluwe.' The population will be over 20 million by 2120.

In this future Netherlands, rivers meander through the landscape as broad green ribbons. The River IJssel will be twice as wide so that it can take excess water from the Rhine. The strip of dunes will also become twice as wide to protect the Netherlands from the rising sea levels. The North Sea will be used intensively not just for food production but also for generating solar power and wind energy.

DIRECTION

How realistic is this future Netherlands? Baptist says it is definitely not utopian. 'We deliberately chose not to perform a scenario study with extremes within which everything is possible. We have presented one prospect that we need to work towards. That prospect is even pretty conservative in some respects. It shows what direction we should be moving in.' **✉ RK**

You can find out more about the map of the Netherlands in 2120 and the underlying principles in the report 'Een natuurlijker toekomst voor Nederland in 2120' (in Dutch only), which can be downloaded from the WUR site.



▲ The Netherlands now.

◀ The Netherlands in 2120.

VISION

Nature-based climate solutions



The climate conference in Madrid failed to reach an agreement. Yet a growing coalition of countries, NGOs and companies are now supporting what are termed 'nature-based solutions', says GIS professor Martin Herold, who attended the climate summit.

'The main negotiation issue in Madrid was carbon trading, or how to create market conditions that help lower global CO₂ emissions. There was no final agreement on this. But alongside the primary goal of reducing the use of fossil fuels, there is a growing understanding that we need "negative emissions". The only solution that has been proven to work so far for carbon sequestration on a large scale is nature itself. Nature already gives us "ecosystem services" by compensating for the increase in greenhouse gas emissions and tempering climate extremes.'

'The only proven solution for large-scale carbon sequestration so far is nature itself'

What are nature-based solutions?

'Nature-based solutions encompass a wide range of efforts to protect and restore ecosystems in order to store CO₂, retain biodiversity and mitigate climate-change impacts. Many countries are starting to make plans for reforestation, less deforestation and landscape restoration. The Dutch government also wants to store more CO₂ in agricultural land as part of its circular agriculture policies. Raising water levels in peat wetlands in order to reduce CO₂ emissions from the soil is another interesting measure. These solutions are not necessarily new, but they exploit natural processes in order to combat climate change.'

Do companies also want to invest in nature-based solutions?

'We noticed increasing interest from the private sector in Madrid. Timber companies are reforesting large areas and oil companies also want to invest in this kind of thing. These developments point to the evolving interest from many actors, but they also raise questions and criticisms. Some environmental NGOs, for example, say that the new forests are monocultures with limited biodiversity and resilience. The NGOs are also concerned that the oil companies are using the nature-based solutions debate to distract attention from the foremost climate-change solution: rapid reductions in carbon emissions from fossil fuels.' **✉ AS**