



Footing the nature bill

Everyone benefits from nature. With the Dutch government making budget cuts, other parties may have to help foot the bill for the Netherlands' nature areas. But can nature do without government support? TEXT ARNO VAN 'T HOOG ILLUSTRATION DEBORAH VAN DER SCHAAF PHOTOGRAPHY JACQUELINE DE HAAS

The Dutch Secretary of State for Nature, Henk Bleker, wants to cut the budget for nature policy by 60 percent, which comes to about 300 million euros per year. If his plan is approved by parliament, Dutch nature areas will be in trouble. Yet both the general public and the business sector benefit from nature through the 'ecosystem services' it provides. So maybe they should pay for these services.

'Although I think nature conservation is the government's job, I hope that the current funding climate will contribute to getting people to think in terms of ecosystem services', says Dolf de Groot of the Environmental Systems Analysis chair group at Wageningen University, part of Wageningen UR. At the beginning of October, together with Leon Braat of Alterra, another part of Wageningen UR, De Groot organized the fourth International Conference on Ecosystem Services. These services include production services (e.g. food and wood), regulatory services (e.g. water and air purification, climate adaptation), social services (leisure and health) and support services (recycling, biodiversity). And the first three kinds of service on this list depend on the last one.

'You can show with hard economic data what the return is

on investments in nature, and what the loss of nature costs', says De Groot. A classic example is New York's drinking water supply. In the early nineteen nineties, the city faced a need to expand its water purification plants massively to cope with river pollution. Instead, large tracts of land on river banks were bought up and turned into nature areas. Farmers were subsidized to process manure. According to the bookkeepers, these measures saved New York billions of dollars. Investing in purification techniques would have cost four times as much as the investments made in ecosystem services.

PAYING FOR LOSS

De Groot hopes that the Netherlands will really start treating the use of nature as part of the economy. 'Now we all pay for the loss of ecosystem services through our taxes, due to the costs of dealing with soil and water pollution, erosion or nature degradation. It would be much better to spend that money on nature conservation and sustainable enterprise: that creates big savings and it makes the world a good deal more beautiful and more sustainable.'

If the general public and private companies benefit from ecosystem services, does that mean that nature can >

thrive without government support? De Groot: 'It is good for stakeholders to help cover the costs, but it should not go so far that the government withdraws completely. Maintaining many ecosystem services – air, water and biodiversity – is a job for the government, just like street lights. Other sectors, such as leisure or fisheries, could be drawn in more; it is fair enough for them to help fund their source of income.'

De Groot conducted a pilot study for the Dutch branch of the Worldwide Fund for Nature on the future of the Haringvliet dam, which will celebrate its 50th anniversary in 2020. 'Removing the dam could give the Dutch economy half a billion euros a year, through improved fishing catches, better water and air quality and a shipping channel.' The costs of raising dikes and dealing with salinization and changes in agriculture could easily be covered in the long term, says De Groot.

According to Fred Tonnejck, senior consultant at Triple E knowledge centre, studies have shown both the strengths and the weaknesses of analysing ecosystem services.

'Much research still has nothing to do with the real econ-

omy. Because just indicating that something is of value doesn't give you the whole economic picture. What researchers say is: the Ecological Main Structure delivers 6 billion in benefits. Okay, but that bit of arithmetic doesn't solve Bleker's budgeting problems because out of all those billions, not a single euro comes his way. We still haven't found a way of closing the cycle when it comes to the flow of money around nature. You have to find ways of linking the costs of nature with the benefits.'

CATERING BRANCH BENEFITS

But this makes the question whether nature can do without government support rather an academic one. 'You can work towards less government support, but the government itself is a beneficiary of ecosystem services and should therefore reinvest some of its profits in nature.' So some government money will always go to nature, for example through tax revenues which cover benefits from ecosystem services. 'We know that the turnover of catering outlets in nature areas is 30 percent higher on average. Houses in green areas are worth more. So is it



DOLF DE GROOT,
Associate professor, Environmental
Systems Analysis, Wageningen University

'The leisure sector could certainly help fund its source of income'



FRED TONNEIJCK,
Senior advisor
Triple E

'That bit of arithmetic doesn't solve Bleker's budgeting problems'



WILLEM FERWERDA,
Executive director
IUCN Netherlands

'You should talk to companies about their dependence on nature'

such a crazy idea to syphon some of those earnings back into nature, through VAT or property tax, for example?

According to Tonneijck, there are some real examples of success in making some money from ecosystem services. Rotterdam municipal council has opted for rooftops planted with vegetation, which can absorb peak rainfall. The water board and the council are the beneficiaries, so they help pay for the roofs.

To Frank Berendse, professor of Nature Management and Plant Ecology at Wageningen University, the idea of nature managing without government support is the product of 'a strange perspective'. 'My answer to that suggestion is a resounding 'no'. Nature conservation, just like health care provision, is a responsibility of the state. It is the government's primary task to make sure that the plant and animal species in the Netherlands are still there in future.' Biodiversity, clean air and clean water are public goods, says Berendse. 'They are core values in our civilization; it's comparable to the way the state combats child labour and poverty.'

According to Berendse, the government has a moral ob-

ligation to create a sustainable future. 'Justifying nature conservation by putting a price on ecosystem services is no substitute for that ethical motivation.'

Funding for nature should be raised through taxes, whether general or specific, says Berendse. He has nothing against introducing new taxes through which private individuals and companies help pay for the nature they benefit from. 'But arrangements with companies must not just be casual 'green deals'. Someone should continuously monitor the effects of use. You can certainly get leisure-seekers to pay something for their use of nature, but if that use causes damage, you must intervene.'

LOOKS GOOD ON PAPER

But Tia Hermans sees real potential for less government interference. 'Nature cannot manage without subsidies on the short term, but in the long term we could get a long way.' Hermans is senior researcher at Alterra, and does a lot of work for the ministry of Economic Affairs, Agriculture and Innovation on projects in the field of >



TIA HERMANS,
Head of Spatial
Dynamics group, Alterra

'We've got to be much more creative and approach other parties more'



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nature, landscape and rural development. Like Tonneijck, she mentions the problem that much research on ecosystem services to date looks good on paper but does not get the money rolling. According to Hermans, researchers should also seek far more collaboration with the business world so as to learn to think outside their agriculture, biodiversity and landscape boxes. ‘If fashion and design are important in a region, then you could link up with the creative sector to look at the production of sustainable fibres and fabrics, then at landscape use and the cultivation of a crop such as hemp, or the production of sheep’s wool.’ These days, researchers working on nature and agriculture are expected to have skills that go way beyond just analysing and writing reports, says Hermans. ‘We’ve got to become a lot more creative and approach other parties to think along with us. That also means that you no longer have to come up with the really innovative solutions all by yourself.’

Willem Ferwerda, director of the Dutch branch of the IUCN, agrees that a lot of ideas could be generated in consultation with the business world. ‘Scientists and NGOs should stop saying that we cannot develop any tools for charging people for ecosystem services. We’ve heard enough of that. We’ve got the big picture now, and we know the figures.’

CORAL REEF SERVICES

The economic value of ecosystems is quite easy to calculate in most cases, in Ferwerda’s view. ‘One hectare of coral reef, for example, delivers 100,000 euros a year in various services, including fish and protection from coastal erosion. If you count tourism you can add a million euros to that amount.’ The figures are also known for the loss of ecosystem services due to loss of biodiversity – an important gauge. The first TEEB study (The Economics of Ecosystems and Biodiversity), led by TEEB chair Pavan Sukhdev, calculated that global loss of biodi-

versity and ecosystems caused damage to the tune of 3,000 billion euros per year, says Ferwerda.

‘The question is: how do you put that on the balance sheet? It means talking to companies. About their impact on the environment, and also about their dependence on nature. Of course it is easier to make that clear for an agricultural business than it is for a high-tech enterprise that manufactures telephones. But it is possible in both cases.’

Only if you see government support purely in terms of subsidies might it be possible for nature to do without it, thinks Ferwerda. ‘But I think the government should do a lot more to ensure we have a robust green infrastructure, just as it does for the hard infrastructure of roads and harbours. Because the two are utterly dependent on each other.’

The suggestion that if the government drops out, citizens should save nature through donations to nature organizations, does not do justice to the seriousness of the problem, says Ferwerda. ‘It has been clear for a long time that standing up for nature and biodiversity is no longer the task of nature conservation organizations alone. Making a donation to a seal nursery is a nice form of charity, but keeping ecosystems going is essential for our survival.’

De Groot, from the Environmental System Analysis chair group, thinks governments should provide laws and regulations that stimulate an appreciation of ecosystem services. In this regard, he points to a grave lack of economic thinking. For example, spending on nature is persistently seen as costs, while spending on roads is called investments. De Groot: ‘That is why a short-sighted government imposes heavy cuts on spending on nature conservation. If you are honest about all the benefits of the Ecological Main Structure, they outweigh the costs. Nature conservation should be seen as an investment too. The mindset with which the government looks at nature must change.’ ■