

# Resource

NOVEMBER 2020 VOLUME 15

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## FOREWORD

### Covid kilos

'Covid kilos' is one of those coronavirus-inspired additions to the language. University-educated people and people with overweight in particular are eating less healthily, according to a WUR study (page 24). That might be the effect of working from home. But it's a double-edged sword: nearly as many people are eating *more* healthily. I for one now have more time to prepare healthy meals. For example, using the Nepalese spices I found at the back of a cupboard. Really spicy! But why *do* people like hot food? Because pain is also pleasure (page 8).

Stress undoubtedly plays a role with the Covid kilos. Being outside helps. Heathland in particular makes you happy (page 7). I like to go jogging in the Utrechtse Heuvelrug, which has plenty of heathland. It's still partly work in progress, with rather sad-looking felled trees. Humans creating nature. Liesbeth Bakker says we should let nature itself do that job (page 18). But some man-made structures have a positive impact: old drilling platforms are an ecological paradise (page 9).

Finally, dating in the age of Covid is as much of a challenge as dieting. A new Instagram account will help you track down your WUR crush online (page 5). Another reason to get out of the house, because you have to spot them in the wild.

**Tessa Louwerens**  
science editor







## BOOZING STUDYING

Before the coronavirus outbreak, members of student societies would go to the club house precisely to have a break from studying, but the Covid measures have put a stop to the parties. Some club houses are still open though, such as the SSR-W building. But instead of boozing, now the members are... studying.

‘There was a big discussion last year about facilities for studying at the club house,’ says chair Bram Duurland. ‘Back then, a lot of people said: “You come here to relax, not to study.” But now our club house is mainly being used as a place to study.’ LZ

Photo Sven Menschel



## Sticker book history

Just for a change, get some education from stickers instead of on Teams. The local supermarket Jumbo and Wageningen's Local History Association are publishing a history album in the form of a sticker book. A great way for WUR students and staff to learn the history of both the university and the town. You'll discover, for instance, that the small settlement of Wageningen was granted town privileges by Count Otto van Gelre in 1263. Wageningen once had a city wall, moat and castle, but only fragments of these remain. Before the Agricultural College was founded in 1918, Wageningen's population was largely made up of labourers working in brick factories, the tobacco industry and a shipyard. Along with the Agricultural College, several agricultural institutes and testing facilities came to Wageningen at the end of the 19th century. The album contains photographs from that period of the Aula, Duivendaal experimental farm, and De Dreijen arboretum.

### Spoiler

In a separate chapter, entitled 'From Underdog to World Player', there are also recent photos of the university on the new campus. The sticker book covers the Second World War extensively, including the evacuations of Wageningen, the bombardments and the capitulation in Hotel De Wereld in 1945. The book contains 256 pictures and is free with your groceries. Another spoiler: there's an LP in it too. AS

## Little support for study on integrity in science

Many employees at universities recently received an email from Lex Bouter (professor of Methodology and Integrity at VU University Amsterdam) asking them to complete the National Survey on Research Integrity. Science funding organization ZonMW commissioned this study on standards and values in science, and how researchers interpret them. But a number of universities, including WUR, are not actively participating in the survey. 'There seems to be a lack

of collective commitment to look at the problem together,' says ZonMW researcher Gowri Gopalakrishna. WUR spokesperson Annet Blanken confirms that WUR is not taking action to support the survey. She refers to the upcoming evaluation of the new Code of Conduct for Scientific Integrity adopted in 2018, which WUR is actively committed to. She adds that individual scientists are, of course, free to complete the questionnaire. RK

## Sonja Isken wins Silver Hourglass

**Sonja Isken, Biotechnology programme director at Wageningen, has won the Silver Hourglass.**

With this annual prize, consisting of an artwork and 2500 euros, the Dutch Association of Biotechnology acknowledges innovations in education and research in the field of biotechnology. Isken got the award for designing and promoting the Wageningen Biotechnology programme. She has coordinated Biotechnology for the past 20 years, developing a curric-

ulum that links all the basic component disciplines such as microbiology, biochemistry, molecular biology and process engineering in a design-focused programme. Early this year, for example, Biotechnology students were assigned the task of developing a technology platform for the production of Covid-19 vaccines. This approach fosters collaboration and integral thinking amongst students, according to the jury.

### Contagious

A number of students have chosen this degree programme after being inspired by Isken's contagious enthusiasm for her subject at the Wageningen information days, says Professor René Wijffels, who nominated Isken for the award.

Previous Wageningen winners of the Silver Hourglass were researcher Colin Ingham and the team that developed travelling DNA labs for secondary schools. AS





# Seen any eye candy (m/f/x)?

The Instagram account Gespot | WageningenUR is there to help you find your WUR crush.

An attractive fellow student catches your eye on your way to campus. The encounter lingers in your memory. Who was it? The Instagram account Gespot | WageningenUR is keen to help you find out. The concept is simple: you send in a description of the person you are looking for, they share it on Instagram and the Wageningen community helps you look. Found the person? Pluck up courage and send a message. 'We came up with the idea over a few drinks,' say the makers of the account, two students who prefer to remain

anonymous. 'It's not a unique idea of course, but to our astonishment there was nothing like it in Wageningen yet.' The account was created in April 2019

## 'Covid-19 makes it hard to meet people'

but has only been really active for a couple of weeks. 'Covid-19 makes it hard to meet people. So this was the right moment to give this account more attention.'

The idea proved a great success and the number of followers rapidly grew to around 2000. Have many new love affairs blossomed already? 'We haven't been doing it for long and there haven't been many matches yet. We found the person in question within a day in five cases.' The makers are planning to follow matches up after a few weeks. 'We are very curious ourselves whether new relationships come out of it.' cJ

[www.instagram.com/gespotwageningenur](https://www.instagram.com/gespotwageningenur)

## Typical old Dutch Mondrian mentality



Illustration: Henk van Ruitenbeek

'I'm having three birthday parties' a friend sighed wearily. 'One for family and a few close friends that know the family, one for the neighbours, and one for my tennis club friends. For my colleagues I'll bring cakes in for the coffee break, of course'. I was a bit surprised. Why not throw one big party for everyone? Wouldn't your tennis buddies enjoy meeting your colleagues, your family like

the different birthday customs involved, I was intrigued by my friend's apparent wish to keep the different groups in her life apart. This turned out to be quite a theme in Dutch culture. I couldn't put my finger on it at first. Then another expat suggested the Dutch liked to organize their lives like a Mondriaan painting: clear-cut compartments separated by thick lines. It's not just about friendship

to get to know your neighbours? And if you're so tired at the thought of organizing all this, give yourself a real birthday treat and just take your best friend to the cinema instead. Life's not that simple if you're Dutch. Besides

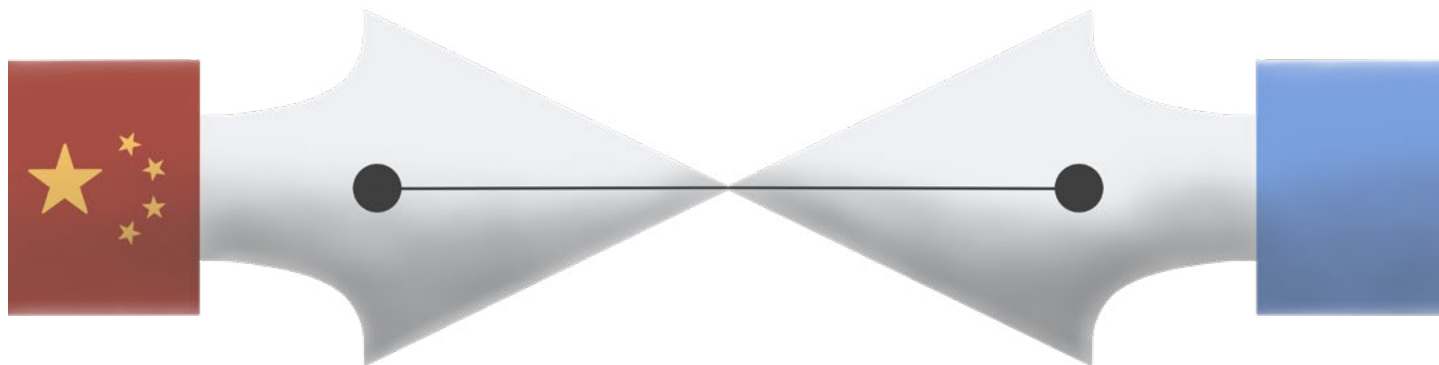
**'The Dutch like to organize their lives like a Mondriaan painting'**

groups. It was a principle that used to order Dutch society: *verzuijing* or 'pillarization', an embodi-

ment of the idea that good fences make good neighbours. Nowadays, luckily, the church you belong to no longer determines which milkman you patronize. It used to though, and it may still affect which school you or your kids go to. But the world is changing, and the Netherlands too. Just look at our international WUR. Mondriaan meets Kandinsky?

Do you have a nice anecdote about your experience of going Dutch? Send it in! Describe an encounter with Dutch culture in detail and comment on it briefly, 300 words max. Send it to [Resource@wur.nl](mailto:Resource@wur.nl) and earn 25 euros and Dutch candy.

**Clare McGregor**, translator with *Resource*. This Typical (old) Dutch was first published on 19 November 2009



# Are we naive?

The article 'China and Wageningen are getting on fine' in *Resource* on 5 November was read closely by many readers. Several of them sent in further elaborations and criticisms.

In the article, Wageningen scientists say they disagree with the studies that conclude that the long arm of China has Dutch research in its grip. They do concur that China keeps an eye on its students here.

**The Wageningen PhD student** Yongran Ji says there is no surveillance of most Chinese students and researchers in Wageningen by the Chinese embassy. The embassy only registers those with a grant and monitors what they achieve in exchange for their grant. Yongran, like most of the Chinese at Wageningen, pays his own way. He has been in Wageningen for eight years and has never reported anything to the Chinese embassy, he says. Lingtong Gai, who works for Wageningen Academy, states that the embassy's so-called 'surveillance' is misinterpreted in the article: it is normal for an embassy to have a list of its citizens in higher education and research, and to organize events for them. Dutch embassies do the same.

**But Rien Bor**, formerly WUR's international student recruiter, did notice that the Chinese embassy put pressure on

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'The Chinese embassy put pressure on Chinese students and WUR'

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Chinese students and WUR. For example, the embassy repeatedly objected to the Taiwanese presentation at Global Village Day, at which all the student nationalities in Wageningen present themselves. The embassy pressurized Chinese students to protest against this.

**Phytopathologist Francie Govers** had just finished reading the article about WUR and China when she came across a form of political influencing of an academic article. She was reviewing a publication by Chinese researchers about the potato disease *Phytophthora*. The article included a map of China to show where the researchers had collected their *Phytophthora* strains. In the first version they used the standard international map, but in the latest version they use the controversial 'nine-dash map' on

which the islands in the South China Sea claimed by China are shown as Chinese.

**The other reviewer**, who noticed this change, suspects the researchers had to change their map due to instructions 'from above'. The reviewer sees this as politics getting mixed up with science, since the map with the disputed islands has nothing whatsoever to do with *Phytophthora*.

**And to Melanie Peters**, director of the Rathenau Institute, the attitude of the Wageningen scientists quoted is naive. There is a technology war going on between the US, China and Europe, and in that context China is building large data centres for genetic research on humans, animals, plants and viruses so as to become a kind of Google for DNA, she says. Dutch universities need to watch out that that data is not misused by authoritarian states and multinationals. We'll talk to Melanie Peters about this again in *Resource #7*, which comes out on 3 December. AS

# New approach to tackling malaria

**The Wageningen company In2Care used special ventilation shafts in houses in villages in the Ivory Coast to attract and kill malaria mosquitoes. This method reduces the number of malaria cases by about 40 per cent.**

This finding comes from a field experiment in the Ivory Coast funded by the Bill and Melinda Gates Foundation.

In half of the 40 villages in the study, In2Care placed multiple ventilation shafts (known as EaveTubes) high up in the walls of a large number of homes. The EaveTubes contain static gauze that an insecticide powder sticks to. If the mosquitoes land on the gauze, they are 'attacked' by the insecticide and die.

## 'This method also kills resistant malaria mosquitoes'

'One advantage of these EaveTubes,' says Tim Möhlmann of In2Care, 'is that the gauze with the insecticide is high up out of the reach of children. What is more, you only need small amounts of insecticide and the method even kills resistant malaria mosquitoes.' The EaveTubes are more effective than mosquito nets, says Möhlmann. 'Even the best nets only cut the number of malaria cases by 12 per cent.'

The Wageningen company (half of whom studied at WUR) wants to sell the EaveTubes in Africa but has run up against a problem. It needs to carry out a second similar test in order to get the tubes certified by the World Health Organization (WHO). 'So now we are looking for new sources of funding.' AS



Photo Pixabay

## A bit happier outdoors

On average, people are a bit happier outdoors than indoors. Heathland and unbuilt coast areas in particular put people in a good mood.

These are the results of the HappyHier project. HappyHier is the app that environmental psychologist Sjerp de Vries and his colleagues launched four years ago. The app links how happy users feel (on a scale of 0 to 10) to where they are at that moment. Over 4000 people took part in the experiment. That resulted in more than 83,000 usable happiness scores. A quarter of those happiness measurements

**We are happiest on the coast**

took place in nature. The first conclusion is that we are happier outdoors than indoors. But the differences in the scores are small. On average, the participants gave a score 0.3 points higher for outdoors compared to inside. The second conclusion is that it matters what the outdoor

setting is. Farmland does not boost our mood as much as forest, which increases the score by 0.6 points. But we are happiest on the coast, even when indoors with beach and dunes nearby.

### Chicken and egg

But there is still the chicken and egg question. Do we go outdoors because we are feeling happy, or is it being outdoors itself that makes us happy? 'We correct for factors such as activity (work, leisure), the people you are with and the weather,' says De Vries. 'But you can never fully resolve that issue in this kind of research.' De Vries says the importance of the study lies primarily in the differences they found in happiness between the different types of environment. RK



## A Little Wiser

# Why do we eat hot peppers?

Why do we sometimes love to bring ourselves out in a sweat from eating hot peppers?

And does it destroy your taste buds?

*Resource* discusses this burning question with Kees de Graaf, professor of Sensory Science and Eating Behaviour.

The heat of peppers is caused by capsaicinoids, compounds given off by pepper plants to defend them against being devoured. De Graaf: 'The pain and heat you experience when you eat peppers are registered by the nerve endings of the *nervus trigeminus*, some of which are located on the tongue and lips.' Those nerve endings give off certain substances that cause local inflammation, possibly causing your lips to swell up, your mouth to water and tears to stream from your eyes. 'The taste buds have nothing to do with these sensations,' says De Graaf. Why would anyone in their right mind expose themselves to this ordeal? 'We often quite enjoy a bit of pain,' says De Graaf. 'Pain and pleasure take some of the same pathways through our nervous system and can coexist.' When the brain registers pain it produces endorphins and dopamines. Dopamines are pleasure chemicals that stimulate the 'hedonistic hotspot' – the G-spot

of your brain, if you like. This creates a feeling of euphoria and contributes to addiction too. But there are plenty of people who don't enjoy hot dishes. 'It's possible that genes play a role in this,' says De Graaf. 'But the most important factor is habituation. Very few babies like peppers. The chemical reaction to hot food is the same in everyone, but people find that after a couple of weeks of eating spicy good, they can tolerate hot dishes better.'

Conclusion: Your taste buds don't do much with peppers. And to deal with their fire: practice makes perfect. Who knows, you might even start enjoying them. TL



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## 'Pain and pleasure take the same pathways in our nervous system'

Kees de Graaf,  
Professor of Sensory  
Science and Eating  
Behaviour.

Every day we are bombarded with sometimes contradictory information. So what are the facts of the matter? In this feature, a WUR scientist answers a reader's burning question.

Asking questions is the way to gain wisdom. Do you dare to ask yours? Email us at [redactie@resource.nl](mailto:redactie@resource.nl)



# Gas platforms enrich nature

Removing obsolete gas platforms causes a loss of biodiversity, says a WUR study.

There are numerous gas platforms and wind turbines in the North Sea, and many more to come. International agreements demand that obsolete structures are removed, but special dispensation may be granted in certain circumstances. If the negative impact on nature is too severe, for example. This may apply to the remains of the Halfweg gas platform off the coast of Den Helder. There, 26 kilometres offshore at a depth of 25 metres, lies a gigantic slab of concrete on the seabed. It is the base of a platform where gas was extracted from 1995 to 2016. The platform itself was decommissioned last year, and all that remains is the foot and the surrounding bed of rocks. Owner Petrogas commissioned a WUR study to find out how removing it would affect nature.



Part of the overgrown base of the disused Halfweg gas platform. Photo Udo van Dongen, Bureau Waardenburg

## Sea anemone

From a biodiversity perspective, the impact would be considerable, suggests the data collected by lead investigator Joop Coolen (Wageningen Marine Research). He and his team counted 65 species among the samples they collected from the remains of the platform. They estimate the true number to be 83 species, a few of which have not been sighted on reefs elsewhere in the North Sea. If only the concrete slab is removed, 44 of the 65 species counted will be left on the rock bedding. Coolen says most of these species are not rare. 'These are not endangered species. They are found on hard surfaces elsewhere in the North Sea too.

**'Without these kinds of artificial hard substrates, the bottom of the North Sea would be much more barren'**

The *Sabellaria spinulosa*, a honeycomb worm, is unusual, however. It is a reef-forming species that the EU requires us to protect.' In terms of numbers, the frilled sea anemones stand out, accounting for approximately 94 per cent of the biomass.

## Oyster reef

Is all this sufficient reason to leave the platform where it is? Coolen believes so. 'I see it as a valuable addition to the ecosystem. Without these kinds of

artificial hard substrates, the floor of the North Sea would be a much more barren system. And let's not forget: 200 years ago, before industrial fishing, there were enormous oyster reefs here. The communities of species then were probably roughly the same as what we find now.' It is not yet known whether Petrogas will apply for an exemption from removing the remains of the platform. Coolen says costs are not the decisive factor. 'At least, that is what the company says. Removing such a structure is costly, and companies like this are often accused of failing to do so for financial reasons. However, Petrogas has said they will donate possible savings to science or charity.' <sup>RK</sup>

# Biscuits for chickens and waste for pigs

In circular agriculture, chickens, pigs, cows and fish each have their own role to play in efficiently converting waste streams into milk, meat, fish and eggs, says PhD candidate Ollie van Hal.

Van Hal has further refined the sustainable food model developed by Imke de Boer, professor of Animal Production Systems.

In that model, vegetable products are only used for human consumption while animal feed is produced from vegetable and animal waste streams. Van Hal looked specifically at which waste streams could be used for which farm animals so as to maximize production of high-quality proteins.

Chickens are very efficient in converting feed into food but you do need high-grade feed for that, says Van Hal. The best options for feeding chickens are the waste streams from biscuits, bread, soya and other oil seeds. And you should focus on laying hens as eggs produce more protein than chicken meat.

## Leftovers

But those high-grade waste streams are also needed to improve the low-grade waste streams. They are necessary, for example, to upgrade our household waste so it can be used for pig feed. Pigs are excellent at processing low-quality vegetable waste, says Van Hal. 'They have a high feed uptake and they can cope with nutrient-poor fodder.' The only problem is that we are not allowed to feed household waste to animals for

**'We are not allowed to feed household waste to animals for food safety reasons'**



Photo Shutterstock.com

food safety reasons. But if we were to heat or ferment the vegetable waste, we could solve that problem and the pigs would be able to eat our leftovers. Cows eat grass but they also need concentrates, especially in the winter when the quality of the silage is poorer. The best option is to feed the cows by-products from grain cultivation such as brewer's grains, or potato peel, sugar beet pulp or oil seeds. 'In other words, waste products from the food industry. This is allowed and is already happening.'

## Fish feed

Van Hal also looked at using waste streams for fish farms. 'Fish is the only natural source of certain omega-3 fatty acids, so it's important for our diet. We can eat more fish if we stop turning fish into fish feed. But we also need

aquaculture to get enough fatty acids. Fish have very efficient feed conversion and — important in this context — we are allowed to use abattoir waste in fish feed. So if we want to valorize animal waste products, we need aquaculture.' Van Hal looked at salmon farming and proposes replacing the fish meal fed to salmon by pig fat and bone meal. New laws are needed for some things, but it is already possible to make far more use of waste streams in feeding livestock, concludes Van Hal. 'A third of the bread in supermarkets is thrown away every day. The supermarkets don't mind because it's allowed for in their profit margins. But that bread could be fed to chickens. We could require supermarkets to separate out waste streams for collection by the animal feed industry.'<sup>AS</sup>

# Ruined

I only realized how tremendous David Attenborough's reputation is when I came to Wageningen to do a degree in Biology. My fellow students knew his entire oeuvre, in class it rained references to his films, and the student association frequently photoshopped him on its posters. But I had only seen a couple of his series, so I decided to catch up. I was soon enchanted by all that footage of the most exotic nature. Yes, this was the biology I wanted to learn about!

**Attenborough's latest film** came out in September: *A Life on Our Planet*. Once again,

**'I recognize another myth: that of the ecological noble savage'**

too. So I activated my Netflix account for a month just for Attenborough.

**The film shows** the incredible loss of nature that has taken place during his lifetime. Attenborough also presents his vision for the future: letting the world become a wilderness again. He supports his message with fantastic footage of the Serengeti, which he proclaims an example of wild Afri-

everyone was talking about it, and once again, I thought I ought to see it



**Vincent Oostvogels**

ca. I would love to believe it all. But it just doesn't help that I have learned that the African savanna has a millennium of history of human use and that the idea of an unspoiled wilderness untouched by human activity is a carefully created myth.

**A few minutes later** we see some old footage of Attenborough with a tribe that had had no previous contact with the outside world. Hunter-gatherers, somewhere in the rainforest in New Guinea. Attenborough's message: people like these do still live in harmony with nature. I cover my eyes, because I recognize another myth: that of the 'ecological noble savage'. People who live close to nature are just as capable of exhausting natural resources.

**As I ponder** the picture Attenborough paints of the place of humans in relation to nature, I suddenly realize something. When I first came to Wageningen, ignorant as I was, I could still just enjoy Attenborough's films. Seven years later, that's been somewhat ruined and it's the debatable aspects of his message that jump out at me.

Vincent Oostvogels (25) is in the first year of a PhD on biodiversity recovery in dairy farming. His dream is to be able to keep a few cows of his own one day.



## Sandwich PhD

# Two locations, twice the work

A sandwich PhD is often the only opportunity candidates have to become researchers, but it comes at a cost: the pay is low, the contracts are not as favourable, and the time pressure is high. 'My graduate school could have helped me, had I known to ask.'

Photo Shutterstock.com

Currently 2200 PhD candidates are working on their theses at Wageningen University and Research, and around 20 per cent of them are sandwich PhD candidates. These are mostly people from developing countries, who come to Wageningen for the first and the last stretches of their PhD, conducting the main research in their home country. This kind of training gives institutes the chance to transfer knowledge and candidates a better education and job prospects. For some, it is the only opportunity to become a researcher, but it comes at a cost: the pay is lower, the contracts are not bound by collective labour agreements, and the time pressure is higher compared with standard PhD contracts.

Hiring sandwich PhDs was dubbed 'academic slavery' in a 2019 reader's view article in *Resource* written by Mark Zwart, a microbial researcher at the Netherlands Institute of Ecology (NIOO-KNAW). Zwart reported that sandwich PhDs often have MSc-level jobs in their home

country and are still employed at these institutions while they do their research. 'This often means more responsibilities, more work and less pay than before the PhD.' According to Zwart: 'Some talented researchers work under unacceptable conditions.'

### Better than nothing

Daniel Marjani (real name known to *Resource*) develops computational models for plant breeding in Ethiopia. He spent the first nine months of his PhD in Wageningen, working on his proposal and attending courses. Initially he wanted to do all his research in Wageningen but he did not get the job he hoped for. 'The professor offered me a sandwich PhD, however. And then I got to work with the guy who did get the job I had applied for, and with it the higher salary and the benefits of a collective labour agreement.' During his stay in Wageningen, Marjani spent a lot of



Text Katrin Heidemeyer

time writing his Training and Supervision Plan. All WUR PhD candidates must gain a total of 30 ECTS by attending courses and conferences. Marjani says: 'I found it difficult to understand my duties, and to find courses that I could attend during my stay in Wageningen. Only later did I find out that my graduate school could have helped me, had I known to ask.' Now back in Ethiopia, Marjani is not only doing his

research, but has many additional duties, putting him under pressure again. 'I still think it's a good programme and my supervisors are great. But the conditions should be better, and the schedule more flexible.'

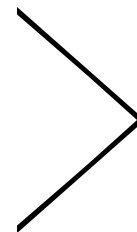
### Support

Mahsina Syeda Akter, a Bangladeshi sandwich PhD student in the field of Human Nutrition and Health, is positive about her sandwich PhD in Wageningen. Akter is a mother of two and spent the first six months of her PhD in Wageningen. By the time she came, she had already figured out her Training and Supervision Plan, thanks to the help of her supervisor. 'This gave me time to attend courses and write my proposal, also with excellent supervision.' For her, the biggest difficulty was being away from her children. 'That was a sacrifice I was willing to make, since I couldn't find funding for a full PhD.' Akter is pleased to have the opportunity and feels she received better training than she could have at other universities.



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'I would only recommend this programme to people who have no other chance to do research'



‘In general, the experience depends a lot on the contract PhD candidates sign,’ reports Fennie van Straalen, PhD Programme Manager for the Wageningen School of Social Sciences. Only a small number of sandwich PhDs have contracts with WUR, while most get stipends from external agencies, and the conditions can vary greatly. ‘The critical cases,’ according to Van Straalen, ‘are those where people have unhealthy conditions in their contracts and no direct supervisor outside WUR. These PhD students often feel lost in their work. They only have their WUR supervisors to contact while they are abroad, and not all these supervisors know much about the local conditions, so they can’t do much from a distance. I believe that WUR has a responsibility to create healthy conditions for sandwich PhD candidates,’ says Van Straalen. To ensure this, the Social Sciences department has created a liaisons office which helps future candidates to understand and negotiate the terms of their contract.

**Equal**

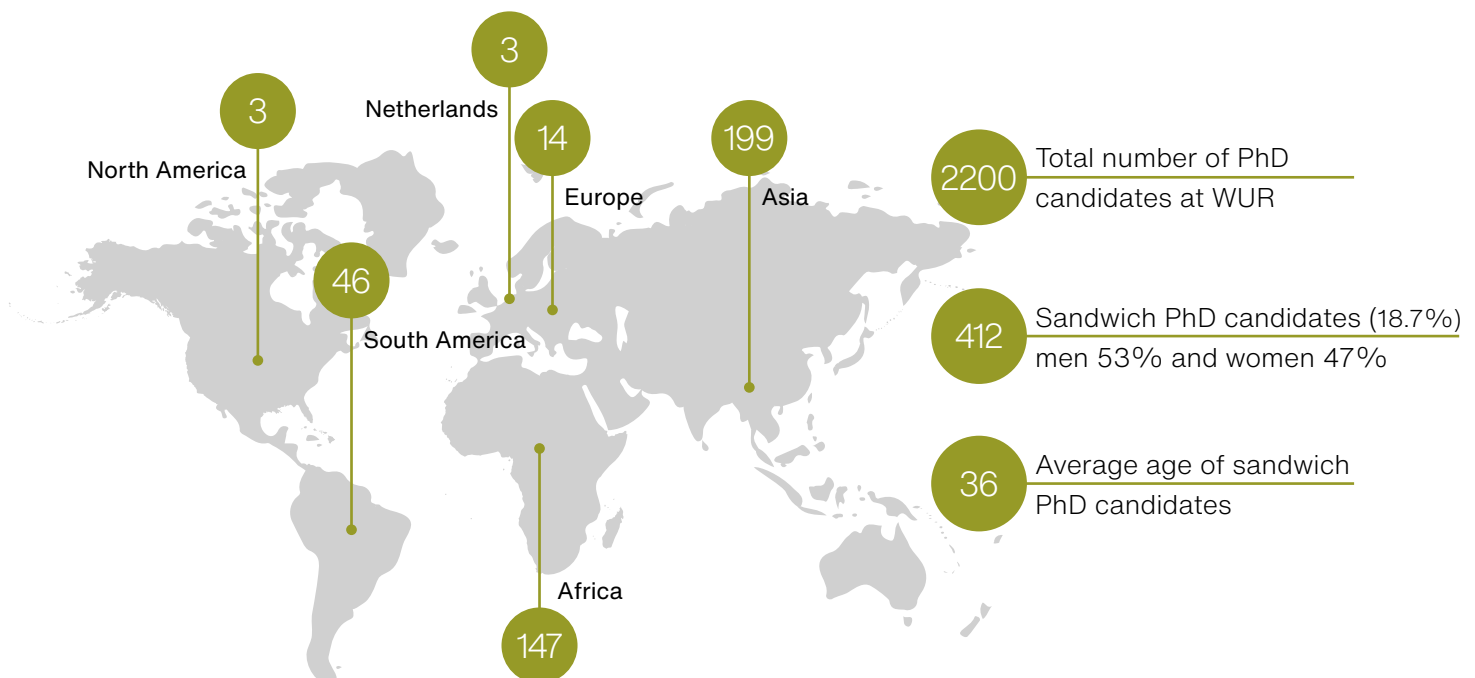
Another important factor is the ‘relationship between the supervisors at WUR and the other institution,’ says Claudius van de Vijver, head of the PhD Programme at the Graduate School Production Ecology and Resource Conservation. ‘Good collaboration often arises when supervisors have worked with each other before. This benefits the PhD candidate, as supervisors are more in line with what the PhD research should focus on and what can be expected. When supervisors do not know each other or do not communicate well, PhDs may have

‘The experience depends a lot on the contract PhD candidates sign’

‘I believe that WUR has a responsibility to create a healthy situation for sandwich PhD candidates’

to deal with contradictory tasks, conflicting interests, and too many duties,’ says Van de Vijver.

Marjani and Akter will come back to Wageningen to finish their data analysis and write their theses. They both hope that there will be more online courses for sandwich PhD candidates in the future, as there are now due to the coronavirus pandemic. ‘This would give me the same time for my training as standard PhD candidates have,’ says Marjani. ‘For us the programme is a great chance to receive good quality training and boost our career prospects,’ says Akter. ‘But the good supervision was a big help.’ Marjani would like ‘future sandwich PhD candidates to have the same compensation, support and recognition that regular WUR PhDs receive, for example in the form of a collective labour agreement.’ ■





## Second chance thanks to RSI

'I felt I had failed. Ever since primary school I'd had a compulsive need to prove myself, and I aimed for the highest and toughest level in everything I did. Even when I chose my secondary school exam subjects and my degree programme at WUR, I chose what was hardest, not what I liked best. I think that was because I was a late bloomer: I started reading late at primary school, and my parents taught me to read. I think that period influenced me.

**While I was studying** for my MSc at Wageningen I got RSI symptoms. I was taking a course in which you had to do a practical assignment in a group. For weeks I worked from nine to five sitting on all sorts of different chairs because there weren't any proper work stations available. It started to really bother me while I was writing my thesis, but because I couldn't get an

Turning points: sometimes you recognize them straightaway, sometimes only in retrospect. In this series, WUR folk talk about a moment they will never forget. This time, Master's student of Molecular Nutrition and Toxicology Emma Mouthaan (25), who decided to change tack after a year of RSI.

appointment with the student dean or doctor straightaway, I just carried on. At some point, the pain in my wrists and arms was so bad that I couldn't even drink a cup of tea or read a book. In the end I couldn't do a thing. When I saw the student doctor, he said it would be over in a month. Three months later I still couldn't do anything with my hands. That doesn't leave much that you can do: go for a walk, listen to an audiobook, or meet friends. Sometimes I felt so helpless I could cry. It took a whole year in the end before I could study fulltime again.

**'I aimed for the highest level in everything I did'**

**I gave a lot** of thought to what I wanted to do with my life. I have always enjoyed writing. I have my own blog about finances and I write for student

magazines. The only reason I didn't do a degree in writing was my compulsion to prove myself. I was so focused on being a high achiever and to me that meant the science side. But that's not true. In the end I chose what I like best and started the Master's in Writing at VU University Amsterdam. That still sometimes feels like a failure, and it was hard for me to tell my parents and my friends. But I'm enjoying it and it seems as though the last bit of RSI has gone, thanks to my choice. I am still registered at Wageningen for extra courses and I might still finish my thesis.' [WA](#)



PICTURE



## TULIPS

Julia van Oord and Dafydd Timmerman of Unifarm are planting over 10,000 tulip bulbs in a trial field next to the campus. The bulbs are of 800 tulip varieties that WUR is helping to keep going through vegetative propagation. WUR is also testing the tulips for resistance: the researchers want to cross-breed and select tulips that are resistant to the tulip breaking virus and the *Fusarium* fungus. Tulip bulbs need a cold period before they come out in March and April the next year. AS

Photo Guy Ackermans







‘Rewilding: an action plan for making the landscape more natural’

# ‘Nature is quite capable of taking care of itself’

‘Our current nature management is too focussed on maintaining the status quo: moorland on the left, woods on the right, and it must never change. But nature is dynamic.’ Liesbeth Bakker was appointed Special Professor of Rewilding Ecology at Wageningen in February. A conversation about horses, heathland, pristine nature and the role of humans in nature management.

Text Rik Nijland

**‘R**ewilding aims at making room for natural processes, including abiotic ones, such as flooding, water level changes or drift sand. Then there is also the biotic side, which brings back important missing links in the food web. Sometimes that means predators, but in the Netherlands it often means large grazers. Since indigenous wild cattle and horses are extinct, this role is taken by Scottish Highland cattle, Galloway cattle, Heck cattle, aurochs, Konik horses and nowadays the European bison too.’

## So as to bring back pristine nature?

‘What we set in motion will definitely not be pristine nature. The fact is that the starting point in the delta is a landscape featuring dykes and dams, so it is dominated by humans. Nature should be given free rein wherever possible under those conditions, rewilders believe. Whereas Dutch nature policy has historically been dominated by the idea that humans are essential as managers if biodiversity is to be maintained.’

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**‘Most of the literature about rewilding consists of opinion papers’**

## Doesn't nature need us too, though? Heathland has to be kept clear, pools have to be deepened for amphibians, etc.

‘Of course, we can maintain fantastic vegetation and keep animals happy, but those species had a place in the landscape before we started uprooting trees or deepening pools. Our current nature management is too focussed on maintaining the status quo: moorland on the left, woods on the right, and it must never change. That’s not how nature works; nature is dynamic. In times of climate change especially, nature should be given the chance to adapt. Nature can still take care of itself very well. Even in a densely populated country like the Netherlands, opportunities frequently arise to give natural processes a chance.’

## For example?

‘When we create the planned new climate forests in open spaces, we decide which tree species we think suitable for the location and we go ahead and plant them. That makes me think: Keep off it, let it go, leave it to nature. It might take a little longer before you’ve got the forest you want, but you will get all kinds of interesting intermediate phases, with habitats that many species like to make use of. This is a golden opportunity to make the Netherlands a little bit more natural. And that really doesn’t always have to be mean large grazers.’

‘At the moment, the Markermeer lake is actually just a

'The planting of climate forests is a golden opportunity to make the Netherlands a little bit more natural.' Photo Harmen de Jong

bathtub surrounded by dykes. Fishers complain that the fish stocks have collapsed. Our research on and around the Markermeer clearly shows how incredibly important shallows and wet zones along the shore are for birds and for breeding and young fish. Bringing back natural land-water transition zones such as marshy banks and inundated grasslands is crucial to how well the lake functions. I see that as rewilding too. How to put that into practice and what conditions apply will be one of the main topics of my research.'

### **Do more natural processes improve biodiversity too?**

'Everyone knows about the return of iconic species like the sea eagle, but it is hard to give a simple answer. There are also places where large grazers have wreaked havoc with the habitat of a rare plant. But then other species take their place. I'd like to do more research on that.'

'Most of the literature about rewilding consists of opinion papers, and there are very few solid studies that delve into the results: what happens if I do this or that? And the Dutch contribution to the literature is negligible, even though we are pioneers of rewilding. There's lots of monitoring data and results from the Ruimte voor de Rivier project to reduce river flooding, for example. It's time to show people, at home and abroad, what we have achieved in the Netherlands.'

'To be clear, rewilding doesn't rule out other forms of nature management. I'm not suggesting putting a herd of Scottish Highland cattle in grassland that is a little floral gem amidst farmland, but there are plenty of areas of the Netherlands that are not little gems, and a lot can be done there.'

I see rewilding as a different approach to making our degraded landscape more beautiful.'

### **Is that popular? The Oostvaardersplassen have been controversial for years.**

'To me, the Oostvaardersplassen are not the best example of rewilding. Other approaches are possible.'

'Rewilding is an action plan for making the landscape wilder and more natural. The question should always be: what steps can I take, given the physical and social context? If there is no popular support for letting the large grazers starve before our eyes, that's where the line is drawn now.' ■

Liesbeth Bakker (47) studied Biology at Groningen University and got her PhD in 2003 in Wageningen on the impact of grazing animals on the vegetation of the Junner Koeland nature area. She is currently working as lead researcher in the Aquatic Ecology department at the Netherlands Institute for Ecology (NIOO-KNAW). She leads a joint research project by several universities on the developing food web on and around the new artificial islands called the Marker Wadden. Bakker was appointed Special Professor of Rewilding Ecology at Wageningen in February. This chair is funded by the NIOO and Rewilding Europe, an organization that targets large-scale nature development in Europe.





## Academics help rethink performance evaluation process

# Fewer scores and more discussion

Wageningen academics want a more varied evaluation policy, but what should that look like? A committee held in-depth interviews and studied five issues. Main conclusion: fewer scores and more discussion.



Text Albert Sikkema

All the Dutch universities are currently reassessing how they want to acknowledge and evaluate their academic staff.

This is in response to developments in the field of Open Science and criticism of Tenure Track (TT), the career trajectory at the universities that prioritizes research productivity. Critics argue for a broader approach to evaluation that also rewards things like teaching quality, academic services, articles in popular magazines and leadership. The WUR Executive Board appointed a committee in March this year, tasked with coming up with proposals. How is it going?

‘We want to hear from the academic staff, including postdocs, which points in the assessment policy they consider important,’ says Hannah van Zanten, a member of the advisory committee. ‘So we are creating a survey, but then what questions should we ask? That’s why we are starting with in-depth inter-

views focussing on five themes that are relevant nationwide. We are now using those interviews to formulate questions for the survey.’

## Did the coronavirus crisis obstruct the work of the committee?

‘The coronavirus outbreak made the work of the committee more difficult, because scientists suddenly had to work in entirely new ways. But it clarified and sharpened the questions already facing us – like work pressure, for instance. You could say: what we want is an HR policy that is Covid-proof.’

## What do you want to keep from the existing assessment system?

‘What has struck us so far is that our scientists are happy with the clear structure of Tenure Track. Some of them would like to make some changes

to the details, but not to the structure. They also want us to keep up the high research output and the good score for educational quality. And they are happy that interdisciplinary research is appreciated by WUR, and that education is included in Tenure Track. They are positive, too, about the short communication lines within WUR, and they applaud the independence of the Broad Assessment Committees (BACs).’

## When will the survey be published?

‘By the end of the year, I hope. We are going to ask an agency to formulate the questions, and we hope that everyone will fill in the survey.’





WUR is going to conduct a survey among the academic staff on five themes that are coming in for a lot of attention nationwide. A WUR committee started by holding in-depth interviews to find out how the five themes are relevant to Wageningen scientists. Committee member Hannah van Zanten explains.

## 1 Job descriptions and career paths

'Scientists have different kinds of jobs, and how do you deal with that? In Tenure Track, for example, you mainly get points for academic articles. Don't committees, presentations to farmers, or writing a column count as well? A Tenure Tracker might see that differently to the way a postdoc sees it, because not all the essential tasks of a chair group are done by a Tenure Tracker. The other question is: are we flexible about that in the evaluation policy? Are those other tasks valued by the chair-holding professor? We need an answer to that. The stricter the criteria are within TT, the less scope there is in a chair group for widening the career path.'

## 2 Individual-group balance

'Tenure Track assesses our scientists primarily on their qualities as individuals, but we want good research teams as well. How do you create such a team, how do you ensure that the tasks are fairly distributed, and how can you make the best use of your resources as a chair-holder? We are thinking about criteria for teams as well: what makes a team excellent? You need to have the tools to excel, and research groups should reserve time to talk about that. What comes out of the discussions is that the chair-holding professors put their stamp on the formation of the team. We need bottom-up processes here too: staff who can free up time and budget to support the team.'

## 3 More focus on quality and creativity

'In the assessment process we want to pay more attention to quality and creativity, but how do you do that? Now the focus lies on numbers and impact factors, and the BAC assesses whether you meet the criteria and should get the points: it's a one-way street. What we are hearing is: that should be a conversation, it has to come from both sides. A scientist has several different tasks. We weigh them up and in the assessment we emphasize one of the tasks, getting people from outside the BAC to evaluate whether the person has made a significant or unique contribution. This lends more substance to the discussion, which includes the question of how I can go on learning as a scientist.'

## 4 Open Science

'We have decided that we will share as much data and as many articles as possible with other people, but that costs time and money. On the other hand, we also want to respect privacy so we sometimes have to keep data and sources anonymous. We need to find the right balance in that. And how can we involve the general public more in our research? Citizen science should be given a place in our day-to-day work, and that is another task that deserves to be valued.'

## 5 Academic leadership

'Leadership doesn't only play a role at the full professor level. And yet it isn't always included in staff evaluations. The permanent staff usually supervise the PhD students, the PhD students often supervise Master's students, and we should actually evaluate that supervision properly, whereas it tends to be raised as a bit of an afterthought. This is partly about how much supervision, and what sort of supervision, does a PhD student want, and how can supervisors deliver it? Do they have too many PhD students, or are their PhD students so independent that you can supervise them all properly? We must get clarity on that in a conversation about academic leadership.' ■

# LONG LIVE THE LONGITUDINAL DAM

A series of breakwaters is an outdated way of controlling water flow. The Dutch rivers are better off with longitudinal dams, shows a study by Timo de Ruijscher. And nature benefits enormously from them too.



Text Roelof Kleis

**T**he major Dutch rivers that flow slowly through its lowlands are lined with breakwaters sticking out from their banks at regular intervals. That could change, though.

Researcher Timo de Ruijscher graduated with a PhD two weeks ago for a study on the effects of longitudinal dams along the Waal River. Three such dams line a stretch of 10 kilometres on the inside of the bends in the river between Wamel and Ophemert.

Longitudinal dams are made of basalt pebbles and run parallel with the flow of the river. So they are the opposite of breakwaters, which stick out from the riverbank, at right angles to the direction of the current. Longitudinal dams divide the river into a main channel and a side channel. This is clearly visible from the air on Google Maps. The longitudinal dams along the Waal were completed in 2015, the year in which De Ruijscher started his doctoral research.

Longitudinal dams have a dual function: carrying off water faster at high water, and concentrating it in the shipping channel at low water. It is no surprise that longitudinal dams are good for keeping up the water discharge. Breakwaters cut across the current, creating resistance, while longitudinal dams steer the water. At low water, the dams narrow the river and the water is

concentrated in the shipping channel, which therefore stays navigable for longer.

De Ruijscher focussed his attention on the currents at the inlet to the side channel at Ophemert. Roughly one tenth of the Waal's water flows through the side channel at that point. To give an impression of the volume involved: the size of the channel is comparable to the IJssel river. Even a casual observer can see that a lot goes on in the water in this channel: the fast-flowing water swirls around as it flows in, forms zones where it looks more placid and gradually calms down as it flows along the side channel. But what happens in the process?

## From swirling currents...

To find that out, De Ruijscher and the Directorate-General of Public Works took a lot of measurements of the currents in both the main and the side channels. A form of echolocation was used as well to analyse the soil profile in the shipping channel. De Ruijscher also built a scale model of the river and the longitudinal dam in the sedimentation lab on campus. The pilot in the Waal is a static system. To get a full picture of how such a system works, a scientist needs variation. 'In theory, the system has a range of options to go for. For example, you can raise or lower the "sill" threshold of the inlet, you can place it diagonally in relation to the current, and you can make it tail off. You can make it as exotic as you like. We studied these things in the lab.'

'The overall picture is positive,' says De Ruijscher when summing up the conclusions. The longitudinal dam does not cause significant changes to the soil profile of the river. 'A longitudinal dam could theoretically cause more dune formation in the main channel, which could

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**'A HUGE INCREASE IN INDIGENOUS SPECIES WAS ALREADY VISIBLE IN THE FIRST YEAR'**



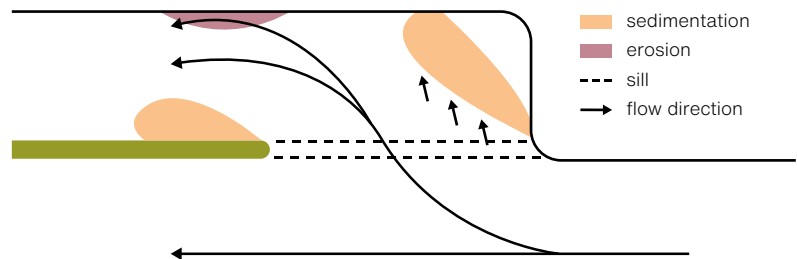


Researcher Timo de Ruijsscher, with the side channel of the Waal at Ophemert in the background. Photo Guy Ackermans

lead to shallows forming. But that is not the case. We see things reorganizing themselves: sand banks shift, but that doesn't make much difference to shipping.' In the side channel, sediment piles up in some places, especially at low water. That could pose problems for leisure craft. 'But strong currents in the winter wash most of this sediment away again (see figure). It is a very dynamic system, but overall not much changes. By adjusting the sill, you can regulate the volume of water and sediment that flow into the side channel very well.'

### ...to a calm flow

But there is a far-reaching effect on the ecology, as the Nijmegen ecologist Frank Collas has shown. 'The system using breakwaters is very crude,' says De Ruijsscher in his study. 'Between the breakwaters, the water swirls in all directions. Every time a ship passes, the water is sucked back and then it smashes into the groyne. That is a very rough dynamic environment in which to survive. A longitudinal dam creates a more stable environment. There are no waves, the water flows calmly and the dam softens the noise of shipping. What is more,



Longitudinal dams are made of basalt pebbles and run parallel with the river, dividing it into a main channel and a side channel.

variation appears in the soil life in the side channel. A huge increase in indigenous species was already seen in the first year.'

So is that the end of the breakwaters? The Public Works directorate is now considering making more use of longitudinal dams, says De Ruijsscher (who now works there). 'For lowland rivers with sandy soils, it works well. But upstream in the Waal, towards Germany, the river beds are stonier. And downstream there is the effect of the tides to contend with. We don't know what kind of effect a longitudinal dam would have there.' ■



## Risk of 'Covid kilos'

# Diets during lockdown

Some people's diets became unhealthier during the spring lockdown. And that included the highly educated. Why was that?

Photo Shutterstock.com



Text Tessa Louwerens

**P**eople with degrees and those who are overweight were particularly prone to eating unhealthy food during the lockdown, shows a study by Maartje Poelman of the Consumption and Healthy Lifestyles chair group. Poelman and her colleagues base these conclusions on an in-depth analysis of data from the Nutrition Centre, in a study in which 1030 people were asked about their eating and shopping habits during the lockdown in April. The findings have been published in the international scientific journal *Appetite*.

## Routine

The majority of the respondents (83.3 per cent) continued to eat the same things. But Poelman was especially interested in the people whose eating habits did change. 9.6 per cent said they began to eat more healthily, while 7.1 per cent ate less healthy food.

More people with degrees than with lower qualifications reported having adopted less healthy eating habits and buying more sweets and alcohol. 'Remarkable, because in general it is people with lower educational qualifications who have less healthy eating habits,' says Poelman. She does have a possible explanation. 'Before the lockdown, 9 per cent of the respondents occasionally worked at home. During the lockdown, that went up to 14 per cent of those without degrees as opposed to 56 per cent of those with degrees. Home-working changes people's routine, they don't eat at set times and they get up at different times. We didn't ask about that specifically in our study, but people said themselves that they began to eat less healthily because there are more temptations at home, they had more free time and they got more bored.'

Poelman also noticed that people with obesity or overweight found it harder to make healthy choices during the lockdown. Their diets more often became less healthy as they bought more unhealthy products such as crisps, snacks and soft drinks than people with a healthy weight. 'We have seen similar results in other countries. It is possible that stress plays a role in this. It is known that the pandemic leads to stress, and we know that stress affects food consumption and people's weight.'

According to Poelman, the study shows that external factors like a lockdown influence some people more than others. 'It makes vulnerable people even more vulnerable.'

Overweight is a major health problem in the Netherlands, and a risk factor for chronic diseases such as cardiovascular diseases. Poelman: 'This global health



## ‘EVEN IN TIMES OF CRISIS, MOST PEOPLE ARE CREATURES OF HABIT’

problem is not new. It is not as acute as Covid-19, but unhealthy diets and their consequences are the number one cause of death worldwide.’

But some of the respondents said they had gone over to a healthier diet during the lockdown. One third of them did this to give their immune systems a boost. And people also said there were fewer temptations such as parties, birthday

cakes or vending machines. And being at home more meant more time to cook healthy meals.

### **Creatures of habit**

According to Poelman, it is hard to predict what the long-term effects of the lockdown will be on lifestyles and public health, but it is important that the government keeps the subject high on the agenda, for example through the existing

Prevention Agreement, with its ‘joined-up approach’. ‘That is essential,’ says Poelman. ‘You can’t leave the responsibility for a healthy lifestyle with the individual. We know that that doesn’t work, however much we’d like to believe that we are in control of our lives. Don’t forget that the majority of the respondents said their diet didn’t change. That shows how hard it is to change eating habits: even in times of crisis, most people remain creatures of habit, whether their diets are healthy or unhealthy.’ ■

### **Urgency**

‘The urgency of a healthy lifestyle is greater than ever because of the coronavirus pandemic,’ says Emely de Vet, Professor of Consumption and Healthy Lifestyles. ‘There is more to it than keeping the healthcare system running and developing vaccines.’ According to the professor, the pressure on healthcare is set to increase further in future because of lifestyle-related diseases. ‘Lifestyles are influenced by a complex set of factors, with a big role for the social background. We are afraid that the coronavirus will further widen the gap between rich and poor. At the start of the lockdown, a lot of people started hoarding and the food banks had much less to offer, which made access to healthy food harder for vulnerable people. And people on low incomes are more likely to do jobs they can’t do at home, which makes physical distancing rules harder to stick to. That might put them at greater risk of infection. They also do the jobs that are more likely to be affected by loss of income, and a lower income often goes hand in hand with worse health.’

It is not easy to change behaviour, says De Vet. ‘Information campaigns don’t necessarily help. People with less healthy lifestyles caused by stress and debt benefit more from debt counselling than from information campaigns about a healthier diet and lifestyle. We need to think hard about how to bring lifestyle interventions to the people who need them the most.’

## Master's student starts company selling cacao juice

# A WASTE PRODUCT WITH IMPACT

As well as being a Master's student, Linda Klunder (25) is the co-founder of Kumasi Drinks, a start-up that makes juice out of cacao fruit pulp. 'The fruit pulp is a waste product, and we make juice out of it. So farmers can earn more and food waste is reduced.'

**K**lunder did her first degree at Groningen University, where she studied International Relations. 'During my internship at the Dutch Embassy in Saudi Arabia, I realized that development work was more up my street. After getting my degree I went to Egypt for an internship with Masterpeace: an organization whose mission is spreading peace. There I helped people all around the world to set up grassroots community projects.' After her internship, she was offered a job with the organization. 'Nice work, but there was something missing for me. I really wanted to see what the impact of the projects was. It was all very qualitative, whereas quantifying impact is important too. I looked into which were the best Master's programmes for learning to do that. It was quite difficult: I wanted to switch to the econometrics side of things without having the right background for it, *and* I wanted to go on working for Masterpeace alongside my studies. Nearly all the universities were hesitant about that, if they even responded at all. "A degree is fulltime", I was told.'

### Cacao world

Klunder was given a chance at Wageningen. 'Study supervisor Sietse Sterrenburg from Management, Economics and Consumer Studies said: "Combining your studies with a job is a strength, actually, because you'll have hands-on experience in the sector your degree is about." The support I felt I got from WUR was the decisive factor.' Klunder moved from Cairo to Utrecht



Text Luuk Zegers

to start work at the Dutch office of Masterpeace. For her studies, she commuted to Wageningen. 'I hadn't expected ever to study in Wageningen,' she says. 'It always felt like the middle of nowhere. But without my Master's I wouldn't have ended up in the cacao world.' She got to know that world through the Academic Consultancy Training (ACT) course. 'The Netherlands is the biggest global importer of cacao. So how come so many cacao farmers are still living in poverty, and what is the role of the Netherlands in that? My ACT group tackled that question for Africa in Motion, an organization that looks at how the African diaspora in the Netherlands can help improve the position of African businesses. That project got me thinking about the cacao industry: who makes my chocolate, and what do those people earn? I am a great chocolate lover. Fairtrade is not a real solution – cacao farmers are still living in poverty.'

### Fairer than Fairtrade

Together with Africa in Motion director Max Koffi, Klunder set up the Cacao Coalition, a platform for inspiring stakeholders in the cacao industry to make the supply chain fairer. 'That way I could continue working in the cacao world and talking to experts, organizations and activist consumers about it. I got in touch with Lars Gierveld, who had just made a documentary about Nestlé's supply chain. In that documentary, he tasted



the fruit pulp of a cacao fruit. He was completely blown away by the sweet taste of something that is usually thrown away. Lars saw an opportunity: if you make juice with the fruit pulp, you don't have to throw it out, and you can pay farmers for a product they already have and that no one buys off them'

Klunder and Gierveld got on like a house on fire from the start. 'I kept on challenging him in our talks together: how are you going to tackle this? How are you going to have an impact? Then he said: "You've got that impact knowledge, I can tell the story. Do you want to start Kumasi Drinks with me?"' Klunder resigned from Masterpeace and started as Head of Impact with the start-up in February 2020. Meanwhile, she continues with her Master's studies, focussing on impact. 'For my thesis, I am researching the impact of giving money to Rwandan women on women's empowerment. How can you collect data, and what can you use them for? What do you want to measure, and what are the possible negative effects of interventions? I bring what I learn to Kumasi.'

### Fast-tracked in Covid times

Soon after Kumasi Drinks got started, the coronavirus crisis broke out. 'And where do you want to sell juice? To restaurants. But during the crisis, we were approached by KOA, a Ghanaian company with a machine with which they can produce very stable juice. By leaving

## 'THE SUPPORT I FELT I GOT FROM WUR WAS DECISIVE'

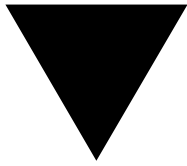
## 'I'M A GREAT CHOCOLATE LOVER MYSELF'

the production to them, we could focus on "business to consumer". That saved us two years. We organized tasting evenings and we chose two products: Gassi and Sappi – i.e. with or without fizz.'

Kumasi (named after the capital of the Ashanti region of Ghana, where a lot of cacao is grown) is now for sale in about 15 specialist chocolate shops in the Netherlands. 'And it is available online through [Kumasi-drinks.nl](http://Kumasi-drinks.nl),' says Klunder. 'At the beginning of 2021, we want to scale up to bigger shops and in 2022 we want to get into the supermarkets. Scaling up is important if you really want to have an impact.' ■



WUR student Linda Klunders in the juice factory. Photo Kumasi Drinks.



## Key people: Marco Groeneveld

They are indispensable on campus: cleaners, caretakers, catering staff, gardeners, receptionists – the list is long. Resource seeks out these key people. This time, meet Marco Groeneveld (41), an EcoSmart waste collector in the Forum. Text Milou van der Horst Photo Guy Ackermans

‘The most unpleasant part of my work is when the waste really stinks. The kind of stench that knocks you over. In the lab they sometimes throw out the remains of dead animals. If they do that on a Friday and I come to empty the bins on Monday morning... You don’t get used to that. But I no longer mind collecting rubbish to sort it more, although I had to get used to that to begin with. Before I did this work, I ran a warehouse, and I’ve been a gardener. The warehouse went bankrupt and there wasn’t enough work in gardening. I ended up with EcoSmart through an agency. We’ve got things well organized here with a closable waste disposal area outside and our own room in the Forum. After each of my rounds through the building, about four times a day, I come here with the cart to weigh the waste, sort it more and throw it out. You’ve got to be strong for this job. I

easily walk 10 kilometres a day, but I’m training for the marathon, so this is just a cooling-down. And you have to lift very heavy sacks out of the 140-litre containers and put them in your cart. In a normal week, I handle about 1500 kilos of rubbish. People do their best to sort the waste, but there is always room for improvement. The first-years especially need a bit more drilling. They sometimes give you funny looks, but they do listen. I am appreciated for the work I do, but there are always some people who look down on you. Making work sociable is a priority for me. So I always have the radio on, the

**‘In the lab they sometimes throw out the remains of dead animals. You don’t get used to that smell’**

door open, and our room looking nice. Getting along with people is what I like best, especially with the lads from facilities and the catering department. It’s not nice, having less work now because of the coronavirus. To pass the time, I run up and down between different buildings. The regional manager is leaving next year, and I would like to work my way up to that job. It would be nice to do something a bit different after 12 years. I hope there won’t be any unrecyclable waste eventually. Everyone wants a better environment, and sorting waste does improve it.’





## Campus ♦ companies

### Scope Biosciences

Four Biotechnology students founded Scope Biosciences in early 2019. Now they have nearly finished developing a fast Covid-19 test. The Wageningen students had just finished competing in the international iGEM competition for biotechnology students. 'That's where we got to know each other better and learned a lot about diagnostics and entrepreneurship,' says founder Niek Savelkoul.

Now the Wageningen spin-off has developed a fast Covid-19 test based on CRISPR-Cas. 'CRISPR is based on an immune system that recognizes and cuts up viruses very precisely,' Savelkoul says. 'We have developed a sub-

**'This CRISPR technique uses fluorescence to indicate whether a virus or bacterium is present'**

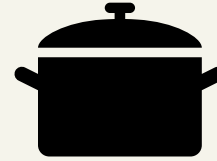
type that uses fluorescence to indicate whether a virus or bacterium is present.' As well as coronaviruses, the test can be used to identify

other health threats such as *Campylobacter* bacteria in chicken. Scope Biosciences is currently doing validation tests and Savelkoul hopes to be able to apply the technique in six months' time.

Wageningen's 'Mr CRISPR-Cas', John van der Oost, is advising the company, which is currently doing all its laboratory work at Van der Oost's Microbiology chair group. Co-founder Jurre Steens is completing a microbiology PhD on the characteristics of Scope's CRISPR-Cas system. The spin-off's offices are in the Plus Ultra II StartHub. AS

There are about 100 companies on campus. We'll be introducing one of them to you in each issue of *Resource*. This time: Scope Biosciences in the Plus Ultra II StartHub.

All the flavours of the world can be found in the WUR community. Bachelor's student of Environmental Sciences Laura Sólveig Lefort Scheefer (21) takes us to her home country, Iceland.



Flavours of WUR

## Grjónagrautur

**'Grjónagrautur is a traditional Icelandic rice pudding made from rice mixed with water, milk, cinnamon and raisins. It is usually served with cold slátur, a type of Icelandic liver sausage. The dish is popular in wintertime and around Christmas.'**

- 1 Heat a little oil in a pan.
- 2 Add the rice and then the water.
- 3 Boil and keep stirring (it burns easily) until it looks like thick rice pudding.
- 4 Add the milk and let it go on simmering.
- 5 Add the raisins once you can see the rice well through the milk.
- 6 Continue stirring until most of the liquid is gone and it looks like pudding.
- 7 Turn the heat off and let it stand for a few minutes.
- 8 Prepare the topping by mixing the two ingredients in a bowl.

- Optional: for a healthier version, skip the sugar and go for the cinnamon!
- Also optional: pour some fresh milk over the pudding

### Ingredients (for two servings):

- 1 cup of rice (risotto rice, short-grain white rice)
- A little cooking oil
- 2 cups of water
- 1/2 teaspoon of salt
- 2 cups of milk (normally full fat milk but I personally love it with oat milk - any kind of milk you like works!)
- 2 handfuls of raisins (optional but highly recommended)
- 4 tablespoons of sugar
- 1 tablespoon of cinnamon



**Laura Sólveig Lefort Scheefer (21)**  
BSc student of Environmental Sciences

Which dish reminds you of home?  
Email the recipe to [resource@wur.nl](mailto:resource@wur.nl)



## In other news science with a wink

### ◆ CHILLY

We are cooling down. Our normal body temperature is no longer 37°C but lower, say researchers at the University of California. In some parts of the world, the difference is almost one degree. The scientists are groping in the dark for the reason behind this. Does it have anything to do with global warming? The hotter it gets, the less hard the body has to work. Or doesn't it work like that?

### ◆ HUNTING

Men hunted and women gathered – that's the conventional take on prehistorical times. But it's wrong, say archaeologists from the University of California. A study of

prehistoric graves in Central and South America shows that women were buried with hunting tools. The archaeologists conclude that 30-50 per cent of the hunters were women. Possibly. Well, you can still see those hunting instincts at work in shopping malls.

### ◆ EYE CONTACT

Is Earth visible from space? Yes, as a dot against the background of the sun. If you extend the circle the Earth travels around the sun into space, within 300 light years you'll come across about 1100 suns like ours, which might have planets too. So say astronomers from Cornell University. Most of those stars are visible to the naked eye.

So theoretically, we can be seen from those planets – as the world was 300 'light years' ago: in 1720. The year of Baron Münchhausen's birth. What would aliens have thought of him?

### ◆ THE COLOURS OF SMELLS

Researchers at Tel Aviv University have designed an instrument that converts light on the infrared spectrum into visible light. In theory, the gadget can be attached to a standard camera, making it possible to photograph pollutants that emit infrared light. Are you also curious what colour bad breath is, or a fart? RK

## Feed the world, burn the planet

**I watched David Attenborough's new, autobiographical, documentary *A Life on Our Planet* and I recognized a very familiar argument. 'Based on current projections, there will be 11 billion people on Earth by 2100'.**

I think I've heard similar claims in maybe 50 per cent of the courses I have followed here. It is the go-to phrase for any uninspired farm technologist trying to write an introduction for their paper, now suddenly confronted with the question why they made a robot that almost recognizes bell peppers after 14 years of research funded by some multinational. It gives a sense of urgency, an excuse, for technologies like GMOs, pesticides, and other developments of questionable long- and short-term impact, to say the very least. The great thing about this argument, for the European scientists among us, is that it very clearly shifts the blame

to 'those underdeveloped countries' that pop out babies like there is no tomorrow. Attenborough proposes we develop 'them' out of their desire to have children. So they can be like us. Developed people don't have children, stupid.

What Attenborough and friends usually conveniently forget to mention is that those 'developed' model nations like our own are extremely CO<sub>2</sub> intensive. Oxfam released a report that the top 1 per cent of the world population is responsible for more than twice as much CO<sub>2</sub> pollution as the bottom 50 per cent combined. Guess who the top 1 per cent are? David omits the fact that we, unlike leopards, wildebeests and manatees, have wildly different ecological footprints within the species. Attenborough praises Japan and the Netherlands for their shrinking populations; not a word of praise for Burundi's impressively low 0.05 tones of CO<sub>2</sub> per capita.



**Luuk Slegers**  
Master's student of  
Sociology, majoring  
in International  
Development.

These kinds of arguments just let us, the global north, get away with pumping more and more CO<sub>2</sub> into the atmosphere under the pretext of 'solving problems in Africa'. Even though, more often than not, we are the problem in Africa, with our climate change being a close second.

As for a closing point: the richest 26 individuals of our species own as much wealth as the bottom 3.8 billion. So, as to how we are going to 'feed the world' by 2050, I think I know where to start.

Blog

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## Colophon

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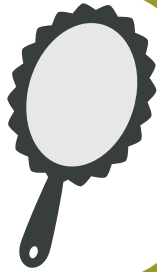
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**'As a teacher I'm worried about forgetting certain students because I'm too busy, focused and tired to see that students are becoming isolated or notice that they are having mental health issues. How can I make sure that I "see" my students?'**

Teacher in the chat during an online teachers' meeting on 8 October.



## Appointments

Last summer, I sometimes arranged appointments in the garden to chat to students at a safe distance from one another. That was much more personal than all those video conversations and less tiring too. It was great to be outdoors in the sun with tea and biscuits, or even a beer at the end of a day. You inevitably get to hear more that way. That's no longer possible so I'm back to video chats, preferably short and frequent. How students are doing is sometimes half the conversation. In one project, we also created a Teams group so students and supervisors interact in between times too.

Patrick Jansen, associate professor of Wildlife Ecology and Conservation

## Be there

If you are in charge of a large group of students, it's impossible to keep an eye on all of them. So make sure the students on the course can see you! Make sure you have regular contact with your students via various channels (email, Brightspace) and that you are visible in all online activities, even when other teachers are lecturing. Of course it's nice if you can manage some live contact moments as well.

Ute Sass-Klaassen, assistant professor of Forest Ecology and Forest Management

## Approachable

Make sure from the start that you are approachable if students want to discuss their problems. Let it be known that they don't need to be ashamed of this and teachers are struggling too with these challenges. If relevant, you could give a personal example. You could also incorporate brief practical assignments, polls or update sessions that let you see who might be having trouble keeping up.

Lysanne Snijders, assistant professor of Behavioural Ecology

## Go crazy

Make your lectures interactive! That will make it worthwhile for the students to be there for the live version. Don't just discuss the course material; use the time as well to encourage the students to connect to one another, have a good laugh with them or go crazy. Ask where the students are sitting right now, what the weather is like and so on. That will make us feel more involved and 'seen' and we're also more likely to speak up. It's fine too for teachers to point out that the workload has increased immensely and it's difficult for them to see how students are doing.

Bob Ter Haar, Organic Agriculture Master's student

## Hybrid

Teaching under the Covid restrictions means both teachers and students have less feeling with the material and the group. It would help hugely if a course could be given in a hybrid form: the difference between zero live contacts on campus and one live contact is immense. I also advise teachers to take time to explicitly discuss with students how things are going, whether in the virtual classroom sessions or outside them. It will still be a question of muddling along, but you should at least discuss everyone's experiences and expectations. Things that are self-evident offline often need explicit attention online.

Geert van Zandbrink, Economics and Policy student

## NEXT WURRY

**I have a question I'd like to ask anonymously. The person who lives in the room above apparently has their bed next to the radiator. Given that radiator pipes conduct sound very well, I am sometimes kept awake at night by the 'rhythmic clunking' of the bed against the radiator. How can I raise this issue with my upstairs neighbour without being too direct?**

Student S. (name known to the editors)

*If you have advice or tips for this Wurrer, send an email (max. 100 words) before 24 November to [resource@wur.nl](mailto:resource@wur.nl) with subject 'noWURries #7'. If you need advice yourself, email your problem (max. 100 words) to [resource@wur.nl](mailto:resource@wur.nl) with subject 'noWURries'.*