

A woman wearing a blue apron and a headscarf is carrying a large crate filled with green leafy vegetables on her head. She is standing in a rural field with tall green plants, possibly corn, and trees in the background. The sky is overcast with grey clouds. The text 'From aid to trade in Kenya' is overlaid in large white font on the lower half of the image.

# From aid to trade in Kenya

The Netherlands is phasing out its development aid to Kenya and wants to stimulate trade and investments. The assumption is that small farmers will benefit from that too. But research suggests that this cannot be taken for granted, partly because small farmers find it difficult to produce vegetables of the required quality. The 3R Kenya project revealed bottlenecks and instigated improvements.

TEXT JORIS TIELENS PHOTO BOEZIE/GETTY IMAGES



**K**enya's economy has been growing at a rate of about six per cent for years now, though this year will see a dip because of the coronavirus. With a booming private sector, the country has become a hub for agricultural trade. Exports to the Netherlands of flowers, vegetables, fruit and large quantities of tea and coffee come to almost half a billion euros annually.

In Kenya itself, a growing middle class has more money to spend and is choosing to buy healthier food. That is creating opportunities, including for Dutch companies that want to invest in technology for food processing, seeds and greenhouses. As of 2014, the World Bank no longer classifies Kenya as a developing country. For the Dutch government, Kenya's development was reason to review its relationship with the country. The Netherlands is phasing out development aid and wants to stimulate trade and investment in Kenya by Dutch companies – the transition from aid to trade.

### COMMERCIALIZATION

'This is based on the assumption that you can promote growth and development through trade and business investments, and that poor farmers and small businesses benefit from that as well,' says Catherine Kilelu of the African Centre for Technology Studies (ACTS). Kilelu coordinated the 3R

Kenya project from Nairobi. The project was tasked with drawing lessons from the development programmes funded by the Dutch embassy that aimed to improve food security and commercialize horticulture, dairy and aquaculture in Kenya.

'Researchers from Kenya and Wageningen did action research on the bottlenecks, together with stakeholders in the sector,' says Kilelu. 'The unusual thing about 3R is that it didn't stop at research. It was a sector development project too. We gained evidence from the research about which solutions work. We could use that to start a dialogue with companies, the government and others and persuade them to get to work.'

Kilelu led the project together with Simone van Vugt of Wageningen Centre for Development Innovation, and Ingrid Coninx of Wageningen Environmental Research. Also collaborating in the project were researchers from Egerton University, Jomo Kenyatta University of Agriculture

and Technology, and the consultancy firm TradeCare Africa, along with several other researchers at Wageningen University & Research.

### PESTICIDES

One of the sticking points for commercializing food production is food safety. 'The vegetables sold in the shops and on the streets here contain far too high levels of pesticides, heavy metals and microbial contamination due to poor hygiene and polluted water,' says consultant and businesswoman Joyce Gema. Gema has a consultancy in Nairobi and did research on horticulture within 3R, together with Wageningen.

Farmers who grow beans, sugar snap peas or mangetout for export to Europe have to conform to strict norms about residues of pesticides. But those rules do not apply to tomatoes or cabbage for the local market. 'That is a public health risk. And anyway,

'Like a lot of Kenyans,  
I don't believe in aid'

### CLIMATE ATLAS HELPS WITH ADAPTATION

Climate change has serious implications for agriculture in Kenya. Temperatures are rising and it is becoming too hot to grow tomatoes or maize in some districts. You can postpone planting until the weather is cooler but then it is too dry. In one of the studies within 3R, John Wesonga of Jomo Kenyatta University of Agriculture and Technology worked with Hasse Goosen of Wageningen Environmental Research to create a climate atlas. The online atlas provides local policymakers with useful information on the precise consequences of climate change. And it gives options for supporting the farmers in adapting to it. By adjusting farming methods, for instance, or by subsidizing irrigation.

<http://www.climate-atlas.ke/>

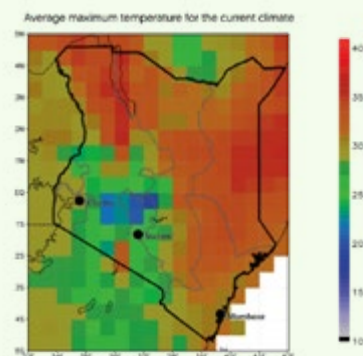




PHOTO: SIMON MAINA/AFP/ANP

Small-scale farmers in Kenya feed their cows whatever is to hand.

if food is not good enough for export, why is it considered good enough for consumers here in Kenya?’ asks Gema. She says farmers who grow food for the home market can learn from production for export. ‘3R research has shown that farmers who had training on export agriculture use that knowledge in the production of local vegetables as well.’

### SAFE VEGETABLES

‘There is rising demand for healthy, safe vegetables that people are willing to pay more for, as our research shows. Now is the time for farmers to seize that opportunity.’ The action research also showed what it takes to grow those safe vegetables. It requires not just better farming techniques but also a well-organized production chain in which products are traceable. Farmers should use clean water for irrigation and cleaning products, and clean packaging materials. Gema: ‘The government should

regulate the home market just as it does the export market.’

Armed with the research results, Gema and her 3R colleagues entered into discussions with representatives of the sector and the government. ‘Food safety is now on the government’s agenda for the first time.’ Personally, she has more faith in a local label for safe food. One component of 3R was a trial project in which hotels and restaurants in Nairobi bought vegetables with a ‘Mazao Safi’ label. ‘Mazao Safi’ means safe produce in Swahili. The label motivates farmers to focus more on the wishes of consumers. The label has not been rolled out on a large scale yet. Gema would like to do that and is looking for an investor. The Mazao Safi label is an example of local innovation, says project leader Catherine Kilelu, who got a PhD at Wageningen in the Knowledge, Technology and Innovation chair group. Farmers cannot always meet the requirements of international labels >





PHOTO SOPA / GETTY IMAGES

## UNDERSIZED FISH FOR KIBERA SLUM

Fish farmers in Nyeri, 150 kilometres north of Nairobi, have difficulty raising their fish to an adequate size. Some of the fish remain stunted because the fish farmers use poor quality fish feed. The soya and fishmeal used to make the feed has to be imported and is expensive. Fish farmers are therefore left with the undersized fish on their hands, as there is no demand for these in Nyeri. This problem was discussed in the stakeholder platform for fish farmers, community leaders, traders and

researchers that was set up by 3R. The solution that emerged from these consultations, explains researcher Benson Obwanga of Laikipia University, was not to improve the methods of the fish farmers or to buy more fish feed. Instead, a market was found for the undersized fish in the Nairobi slum, Kibera. 'We killed two birds with one stone: a new market for the fish farmers, and an improved diet thanks to cheap protein for the people in Kibera.' Together with researchers

from Wageningen Economic Research and Wageningen Marine Research, Obwanga figured out how the new production chain from Nyeri to Kibera would work. The plan was implemented by the chair of the cooperation of fish farmers and by women who sell fish in Kibera. Now one ton of fish goes from Nyeri to Kibera every week. The women who dry, fry and sell the fish in the slum now have a new source of income, and thousands of slum residents have a healthier diet.

such as the Rainforest Alliance or Fair Trade. 'Their requirements are too complicated. But the farmers can make a few simple changes so they qualify for the Mazao Safi label. Not too complicated, but still producing safe food.'

The 3R project concluded with an analysis of the food system in Kenya by Wageningen and Kenyan researchers, making recommendations for the sector and the government, explains Simone van Vugt of Wageningen Centre for Development Innovation. One of the recommendations is to pay more attention to local innovation. 'That makes it possible to lower the production costs, which is necessary to make the sector more

competitive.' Another recommendation is that farmers and processing companies should be far more focused on what the consumer wants – safe food, for example. 'Consumers are asking for that, and increasingly, they are being heard.' And it is advisable to involve farmers and companies more in regulating the sector and in policymaking, says Van Vugt, by increasing the collaboration between the sector, the government and consumers.

### A HIGHER PRICE FOR BETTER MILK

This kind of collaboration seems to be working in the Kenyan dairy sector, says professor of Livestock Systems Bockline

Omedo Bebe, of Egerton University in Kenya, who obtained his Master's and, in 2003, his PhD in Wageningen. Together with researchers at Wageningen Livestock Research, Bebe conducted studies within 3R on different ways of improving milk quality. He explains that dairy farming is a major sector in Kenya, accounting for four per cent of the GDP. 'Kenyans love dairy products, they put milk in their tea and it is part of every meal. The demand is high in our neighbouring countries too. But to make yoghurt and other dairy products that keep for longer, the milk factories need better quality milk from the farmers.' Some farmers have just one or two cows,

which only produce five litres of milk each. It is not easy for these farmers to deliver the required quality. Bebe: ‘Farmers feed the cows on whatever they have, like rotten maize waste, for instance.’ This can lead to infections or aflatoxins in the milk, which is a big risk for public health. ‘One of our studies showed that it helps if livestock feed is produced by specialized companies. They can produce it on a larger scale and therefore more cheaply.’ After working with dairy processors, consumer organizations, farmers and researchers, the government has drawn up

not stop at drawing up good legislation, in Kilelu’s view, but should also support the sector. She gives the example of agricultural extension by companies. This may reach somewhat richer farmers, according to one 3R study, but not the poor farmers in remote areas. ‘There lies a task for the government. And possibly also for countries wanting to give development support.’

Joyce Gema shares the view that a longer transition period is needed in which aid and trade go hand in hand, before development aid can be ended altogether. ‘Just like many other Kenyans, I don’t believe in

since this has to compete with similar technology from elsewhere where it’s more affordable, such as from Asia. So it depends what Dutch companies have to offer us, and whether their technology is affordable and appropriate for the local situation.’ According to Makenzi, there won’t be a vacuum if Dutch aid diminishes in the near future. ‘There will be aid from other countries and NGOs, and overall aid to Kenya is not expected to dry up all at once. Yet it is all the more important that all those efforts are coordinated and that we learn from experience. The report with recommendations from 3R has been distributed. But the point is, we need to talk about it. We need a strategic discussion with the sector and the government about issues like food safety. And how to deal with climate change.’ So next year the embassy intends to organize a platform to initiate dialogue based on the findings and conclusions of 3R. ‘Because the point is not to convince us as an embassy. The point is for the government and the companies in the sector to get to work.’

Action research combined with dialogue, as was done in 3R, could be of interest to other countries as well, concludes Ingrid Coninx. The Dutch government wants to stop providing aid to countries such as Ghana and Rwanda too, and to focus more on trade and investments. ‘You can see our approach as a way to shape the exit strategy for development cooperation.’ And agriculture in Kenya is also having to reckon with the impact of the coronavirus, plagues of locusts and climate change. ‘Resilience is more crucial than ever.’ ■

[www.wur.eu/3r-kenya](http://www.wur.eu/3r-kenya)

## ‘Farmers can’t always meet the requirements of international labels’

a stricter policy on the quality of milk. If farmers supply better milk, they can charge more for it too. Experiments were conducted in one study by 3R in which farmers received a higher price for better quality milk. ‘That model is still under development, but it is promising,’ says Bebe. Here too, the search is on for a system that suits the Kenyan context. The quality of the milk that farmers supply must be measured, but measuring too many parameters makes it too expensive and unworkable.

### INVESTING IN PEOPLE

So what is the conclusion about the transition from aid to trade in Kenya? ‘We cannot assume that investments by the business world are the solution to all the problems we still face,’ says Catherine Kilelu. ‘Of course, agribusiness is growing fast in Kenya. But the vast majority of the farmers still have small farms of one hectare of land or less.’ The government of Kenya should

aid. I don’t like the word “aid”. The point is to invest in people. We must give people the chance to stand on their own two feet.’ There is a lot of entrepreneurship and a young and innovative professional population in Kenya, says Gema. ‘But government regulation is needed on key issues such as food safety.’

### IMPORTING TECHNOLOGY

‘We funded this research to identify the lessons for us as an embassy,’ says Rose Makenzi, policy officer for food security and water at the Dutch embassy in Nairobi. ‘But also very much with the aim of bringing people in the sector together. And of involving the Kenyan government in that.’ Makenzi is quite clear about the trade relationship: ‘Kenya’s export of high value crops and flowers to the Netherlands is flourishing. The real question is whether this can be the same for the export of technology from the Netherlands. Especially

### COURSES

WCDI runs a range of courses on sustainable food systems, food safety and food security.  
[www.wur.eu/wcdi](http://www.wur.eu/wcdi)