

Cocoa farmers are still dirt-poor

Chocolate is a popular product and yet few cocoa farmers earn enough for a decent standard of living. Basic knowledge of farming methods is lacking and agricultural extension services are failing. And the labels intended to support the cocoa farmer have had little effect. 'Twenty years ago, 16 per cent of the price of a bar of chocolate went to the farmer, now it is barely eight per cent.'

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NIELS ANTEN, professor of Crop and Weed Ecology in Wageningen

'Agricultural extension services are inadequate'

In the West, we've been eating more and more chocolate, and consumption shot up during the Covid pandemic. Meanwhile, in Africa, the producers of the raw cocoa are not benefitting from the rising sales. The approximately three million mostly small farmers have been struggling for decades. Especially in the West African countries Ghana and Ivory Coast, where 70 per cent of the cocoa comes from, three quarters of the cocoa farmers earn less than a living income. 'Their meagre income goes on primary needs such as food, medicine and school fees. There is little left over to invest in the much-needed improvements to farming methods,' notes economist Yuca Waarts of Wageningen Economic Research.

So the cocoa farmers go on farming with old cocoa trees, which they should really replace after 20 years. The soil also becomes exhausted because they have no money for fertilizer. They often take new land into production by cutting down a piece of rainforest. Since 1970, according to estimates by the Dutch Ministry of Foreign Affairs, 80 per cent of the land of the world's largest cocoa producing country, Ivory Coast, has been cleared of tropical forest for cocoa farming. In addition, rising temperatures and changing precipitation patterns due to climate change could have a negative impact on cocoa cultivation. Longer periods of drought are particularly disastrous for cocoa trees, which thrive best in the humid climate of the tropical rainforest.

TWO-THIRDS CERTIFIED

Quality labels such as Fairtrade and Rainforest Alliance were created with a view to improving the positions of small cocoa farmers. The Dutch cocoa sector agreed back in 2010 that all chocolate in the Netherlands had to carry one of these labels by 2025. According to Statistics Netherlands, 66 per cent of the chocolate was certified in 2018.

Consumers also seem willing to pay for ethically sound chocolate. The Tony's Chocolonely brand was developed in 2012 by the Dutch consumer television programme Keuringsdienst van Waarde with the aim of improving the position of cocoa farmers. The distinctive bars are not only selling well in supermarkets but have also become trendy corporate gifts. In 2020 the brand accounted for 16 per cent of the Dutch market of chocolate bars. It is expected that large, fast-growing economies such as China and India will increase the world demand for cocoa from four to five million tons per year. According to the laws of economics, this should lead to a price increase, but Yuca Waarts concludes that this is not the case. 'In fact, there seems to be an oversupply of cocoa, because more small farmers are producing cocoa. We have been talking about a decent income for farmers for years.' She is not seeing that reflected in hard figures, however.

How do you explain how a globally soughtafter product like cocoa remains at a low ebb both agriculturally and economically? 'The cocoa price fluctuates constantly and shows a downward trend. Yet in spite of falling prices, farmers still plant a few trees if they can. Cocoa farming is a tradition that at least offers some security. And anyway, there are hardly any alternatives,' explains Waarts. In her November 2021 report Balancing the Living Income Challenge, she calculated that even if we paid twice as much for chocolate, the income of all the smallholders in Ghana and Ivory Coast would increase, but that many farmers would still not earn a living income. This is because about 70 per cent of the farmers produce only 30 per cent of the cocoa. 'It would only increase the income per farmer a little bit. The price increase mainly goes to the larger-scale farmers, who grow bigger volumes of cocoa. And the higher prices can also lead to overproduction.'

PRUNING DOESN'T HAPPEN

Larger-scale farmers work more professionally and can more often make the leap to better propagation material and soil preparation. 'They can also spend time and money on pruning the cocoa trees and they can buy artificial fertilizer,' says Niels Anten, professor of Crop and Weed Ecology in Wageningen. Anten has done a lot of research on cocoa cultivation and has been involved in field experiments in West Africa for years.

According to him, the small cocoa farmers are difficult to reach. 'A farmer thinks: I am not going to prune, because those branches will bear my cocoa beans next season, so I am not going to remove them.' Anten sees a parallel with the way the Netherlands worked immediately after the Second World War. 'Fruit growers then had enormous apple trees, which took up more and more space and produced fewer and fewer apples. Pruning cocoa trees back to a smaller size makes a higher density and a higher yield possible. The agricultural extension services



A labourer harvests cocoa beans on an organic plantation in lvory Coast.

are failing to get this message across.' Anten also notes a remarkable lack of basic knowledge. At the research stations of the Cocoa Research Institute in Ghana, he saw cocoa yields easily increase fivefold from 550 kilos to 3000 kilos per hectare. 'In reality, though, the yield on the larger farms was only 1200 kilos. That is less than in the trials, but it's still more than double the national average. Mould and plant density are among the issues in farming practice.' The researchers do not yet have a clear picture of the precise factors determining success and failure. 'Together with the research institutes, we still have to answer some fundamental questions, such as which fertilizers make a difference for which type of soil,' says Anten.

SMALL FARMS

A few doors down the corridor in Wageningen, Ken Giller, professor of Plant Production Systems, has made the problems of small farmers in Africa his life's work. 'We can see the poverty trap at work among nearly all farmers in Africa, including those growing coffee or maize. It is the poverty of a growing population, 90

per cent of whom work in agriculture and on ever smaller farms,' says Giller. This is a consequence of the African inheritance system in which four children might each inherit a quarter of the land. In addition to the inadequate agricultural extension services, Giller points out that governments invest too little in knowledge and the development of infrastructure. 'There are subsidies and price guarantees for cocoa, but fertilizer, for example, is 10 times more expensive in Africa than in Asia, because it isn't subsidized.' He also blames the poverty on the neo-liberal trend in the world food economy. 'Twenty years ago, 16 per cent of the price of a bar of chocolate went to the farmer, but now it is barely eight per cent. Nearly half the profits go to traders, the chocolate manufacturers and the supermarkets.'

Giller agrees with Niels Anten that it doesn't help that cocoa farming is not easy. 'The lifespan of a cocoa tree is 20 years, so you get results from improving varieties much more slowly than you do with annual crops. And we have only recently learned that potassium is a much more important element in cocoa fertilizers than nitrogen and phosphorus. The research has virtually been at a standstill since the 1970s.' According to the agricultural researchers, this is mainly because until a decade ago, cocoa processing companies in Europe focused primarily on shareholder **>**

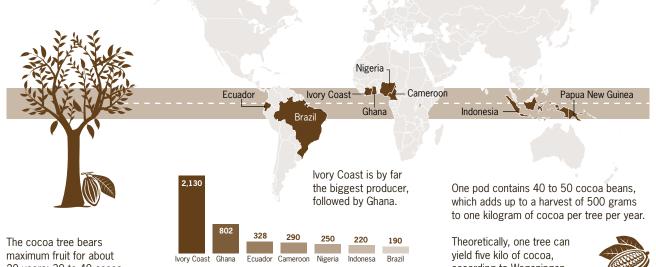


YUCA WAARTS, economist at Wageningen Economic Research

'Cocoa farming is a tradition and there are hardly any alternatives'

COCOA PRODUCTION WORLDWIDE

Cocoa is produced in a narrow zone between 10 degrees north and 10 degrees south of the equator.



20 years; 30 to 40 cacao pods per year.

Cocoa production in 2019 (x1000 tons)

according to Wageningen research.



returns. 'It's slowly changing now, under the influence of sustainable investment,' says Anten.

But Ken Giller is not pessimistic. There are opportunities for farmers, he says. 'In Ghana and Ivory Coast, there is increasing diversification in the cocoa sector and



KEN GILLER. professor of Plant Production Systems at Wageningen

'Much more of the processing of cocoa beans could be done in Ivory Coast and Ghana'

agriculture is being combined with forestry - agroforestry, in the jargon.' This could mean planting cocoa trees in amongst the giant trees of the tropical forest. 'The cocoa trees benefit from the shade of the tropical trees. And the leaves that fall from the trees provide compost that benefits the soil after one season,' explains Giller. A PhD student is investigating the possibility of composting the husks from the harvested cocoa beans together with the leaves from the taller trees. Agroforestry may also offer opportunities for combatting climate change, planting new trees in the tropical rainforest, and restoring biodiversity. 'I think agroforestry in combination with cocoa farming on well-chosen locations can create ecological corridors between nature reserves,' says Giller. Yet some have doubts about this form of agroforestry since, although the tropical trees keep the cocoa trees cool, they also compete with them for scarce water in times of drought. Another option is to plant banana trees when planting young cocoa plants and new tropical trees. 'With their enormous leaves, the bananas provide enough shade during the cocoa trees' vulnerable first few years. Later, the tropical trees take over the provision of shade,' says Giller. 'And the

bananas give the farmers an interesting second crop.' A further source of additional income could come from paying farmers for nature conservation and 'carbon credits' for the storage of CO₂ by trees, suggest the researchers.

A RAFT OF MEASURES

Tackling this issue calls for a raft of measures, according to IDH, the Sustainable Trade Initiative. This NGO's operational field includes the cocoa sector, and it helps to form new partnerships and co-finances sustainability projects. 'Intensifying farming methods, raising the price of cocoa or certifying chocolate will not work on their own if the aim is for the majority of cocoa farmers to earn a living income,' says acting director for the cocoa markets and Wageningen alumnus Frank Joosten. 'To improve the position of cocoa farmers, we need to move quickly towards a more segmented approach in which farmers and their options are central. Decisive factors are the size of the farm - whether one to four hectares or more, the region - whether it's getting drier, or still gets enough rain, and the presence of labour, infrastructure and sales markets for other products,' says Joosten.

AGRICULTURAL ECONOMICS



FRANK JOOSTEN, interim director of Cocoa Markets at IDH

'Intensification, price increases or certification don't work on their own'

The problem is that governments, credit providers and multinationals are still not working together enough. 'We've got to get away from all working on our own little islands,' says Joosten. 'For example, micro-credit organizations and banks in Ivory Coast lend to cocoa cooperatives and their members, but often do not coordinate this with the government extension services or the multinationals' sustainability programmes.'

SPEED UP

According to Niels Anten, it's time to speed things up. 'Cocoa consumption is going to go on increasing. If production remains at the same level, it will be at the expense of rainforest, or of agricultural land where essential food crops are currently grown.' Ken Giller can see one improvement that is already under way. 'There is more added value if the harvested cocoa beans are processed in the country where they are grown.'

Every year, between 750,000 and 800,000 tons of cocoa go to the world's largest cocoa-importing port, Amsterdam, where the cocoa beans are stored and then shipped on. Without the country producing a single bean, this transit makes the Netherlands the world's second largest cocoa exporter after Ivory Coast. Some of the cocoa is processed in the Netherlands into cocoa mass, cocoa butter and cocoa powder. 'Much more of this processing could be done in Ivory Coast and Ghana,' thinks Giller. 'For chocolate exports to China, at any rate, this could boost economic development in the country, which the small cocoa farmers could benefit from.'

Economist Yuca Waarts sees the diversification of cocoa farming as more promising. 'Besides cocoa beans, farmers can also earn an income from cashew nuts, coffee and palm oil trees. Subsidies from the government and corporations could also help ensure a living income,' she says. According to Frank Joosten of IDH, a plan announced in January by the Swiss multinational Nestlé may be able to reverse the trend. The company pays farmers a sum of money if they grow other crops besides cocoa or keep livestock. 'They also get money if they prune their cocoa trees, plant other trees than cocoa trees and send their children to school. If they implement all the measures, they get about 475 euros per family per year for two years, and half that sum after that. It's a substantial addition to their income.'

www.wur.eu/cocoa



CHILD LABOUR

Despite all the efforts over the years, 1.6 million children in Ghana and Ivory Coast still work on their parents' farms. About 55 per cent of Ghanaian farmers and 40 per cent of Ivory Coast cocoa farmers employ their children.

We look at these figures through a Western lens, says Anna Laven, a political scientist at the Dutch Royal Tropical Institute. 'Many children do certain tasks on the farm, such as helping with the harvest. But this mainly happens after school and in the holidays. Cocoa is not the problem with child labour. In fact, the sale of the beans pays the school fees,' says Laven.

Yet some children will undoubtedly do dangerous or excessively heavy work, using machetes without protective clothing. 'Even at the household level, children often do heavy work, such as gathering firewood in the forest or carrying water from the well,' says the researcher. 'What would help to prevent child labour is for these countries to invest in rural development and employment opportunities for the young.'