

## CLIMATE

# Eastern Amazon forest emits CO<sub>2</sub>

The eastern part of the Amazon rainforest emits more CO<sub>2</sub> than it absorbs. This finding is based on years of measurements by an international team of scientists. The researchers were surprised by the results.



PHOTO SHUTTERSTOCK

Over the past nine years, the researchers took nearly 1000 samples of the air above the rainforest from small planes. The repeated measurements of carbon dioxide show that the eastern Amazon forest emits more CO<sub>2</sub> than it absorbs, while the western Amazon still has a small net uptake of CO<sub>2</sub>. The team, which included Wageningen professor of Meteorology and Air Quality Wouter Peters, published their findings in July in *Nature*.

According to the study, the difference can be explained by deforestation. Brazil has a lot

of forest fires, which are used to clear land for agriculture. Deforestation is making eastern areas more susceptible to periods of drought, which lead to more trees dying off. The result is increasing deterioration in the ecosystem. The researchers suspect that this is contributing to the further loss of rainforest and yet more drought. The western part of the Amazon is more unspoiled and experiences a less intensive dry period. The researchers also found an unexpectedly large change in the climate in the east, with temperatures rising by four times

as much as the global average in the past 40 years. Rainfall fell by almost a third in the area most severely affected by deforestation, with a particularly strong effect in the hot, dry period from August to October. 'The peak in warming and drought and the reduced carbon uptake in the eastern Amazon are worrying,' says Peters. 'The associated decline in rainfall suggests a change in the tropical water cycle. We urgently need to protect the Amazon rainforest better.'

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## WAGENINGEN ACADEMY

## 5th Executive MBA in Food & Agribusiness

A new and diverse group of professionals started on the Executive MBA in Food & Agribusiness in November. This programme for mid-career professionals in Food & Agribusiness is run by Wageningen and TIAS Business School. Seven nationalities are represented in the new cohort, the proportion of men to women is 60-40, and they come from multinationals, family businesses and startups. One third of the participants are Wageningen alumni

with eight to 20 years of relevant work experience.

Looking back on the past five years of this programme, we can see that EMBA graduates have matured into highly competent leaders. The EMBA prepared them to take important steps and tackle new challenges in their professional lives, whether that meant founding a private company or becoming a sustainability consultant. More information about the MBA programme: [www.wur.eu/mba](http://www.wur.eu/mba)