

INTEL

JULY 6, 2017 / 12:05 AM / A YEAR AGO

## Climate change may turn Africa's arid Sahel green: researchers

Alex Whiting

LONDON (Thomson Reuters Foundation) - One of Africa's driest regions - the Sahel could turn greener if the planet warms more than 2 degrees Celsius and triggers more frequent heavy rainfall, scientists said on Wednesday.

A dried up river filled with sand winds its way across the desert near Gos Beida in eastern Chad June 5, 2008. REUTERS/Finbarr O'Reilly

The Sahel stretches coast to coast from Mauritania and Mali in the west to Sudan and Eritrea in the east, and skirts the southern edge of the Sahara desert. It is home to more than 100 million people.

The region has seen worsening extreme weather - including more frequent droughts - in recent years.

But if greenhouse gas emissions continue unabated, the resulting global warming - of more than 2 degrees Celsius above pre-industrial levels - could change major weather patterns in the Sahel, and in many different parts of the world, scientists say.

Some weather models predict a small increase in rainfall for the Sahel, but there is a risk that the entire weather pattern will change by the end of the century, researchers at the Potsdam Institute for Climate Impact Research (PIK) said.

"The sheer size of the possible change is mindboggling - this is one of the very few elements in the Earth system that we might witness tipping soon," said co-author Anders Levermann from PIK and the Lamont-Doherty Earth Observatory of New York's Columbia University.

If the Sahel becomes much rainier, it will mean more water for agriculture, industry and domestic use. But in the first few years of the transition, people are likely to experience very erratic weather - extreme droughts followed by destructive floods, the researchers said.

This level of unpredictability makes it very hard for people to plan for coming changes, they said.

"The enormous change that we might see would clearly pose a huge adaptation challenge to the Sahel," said Levermann.

"More than 100 million people are potentially affected that already now are confronted with a (multitude) of instabilities, including war," he said.

The region faces a range of conflicts, including some driven by groups such as Boko Haram and al Qaeda in the Islamic Maghreb.

The researchers studied rainfall patterns in the months of July, August and September when the region receives most of its annual rain.

"There's a range of possible outcomes for societies in the Sahel which depend on the climate that eventually (develops)... and whether they are prepared for fluctuations," lead author Jacob Schewe, from PIK, told the Thomson Reuters Foundation.

Climate change from burning fossil fuels "really has the power to shake things up", he said.

"It is driving risks for crop yields in many regions and generally increases dangerous weather extremes around the globe," he added.

The study was published on Wednesday in Earth System Dynamics, a journal of the European Geosciences Union.

Reporting by Alex Whiting @Alexwhi, Editing by Laurie Goering.; Please credit the Thomson Reuters Foundation, the charitable arm of Thomson Reuters, that covers humanitarian news, climate change, resilience, women's rights, trafficking and property rights. Visit news.trust.org/climate

Our Standards: The Thomson Reuters Trust Principles.

## **ENVIRONMENT**

DECEMBER 17, 2018 / 3:17 PM / UPDATED 6 HOURS AGO

## Dry winds threaten Ivory Coast cocoa bean development



ABIDJAN (Reuters) - Dry winds and below-average rainfall in most of Ivory Coast's cocoa growing regions last week could jeopardize the development of the last stage of the October-to-March main crop, farmers said on Monday.

FILE PHOTO: A farmer opens a cocoa pod at a farm in Toumodi, Ivory Coast October 13, 2018. REUTERS/Thierry Gouegnon

Ivory Coast, the world's top cocoa producer, is in the dry season, which runs from November to late February. Dry, dusty Harmattan winds sweep in sand from the Sahara, which can ravage cocoa pods and sap soil moisture, leading to smaller beans.

Farmers in cocoa regions said they were in the process of drying plenty of big-sized pods they have cut since the beginning of December. They added that harvesting would fall from next week, however significant volumes of beans will be harvested until February.

In the western region of Soubre, farmers said an abundant rainfall would be needed before the arrival of the Harmattan.

"We're waiting to see what the Harmattan will be like. With a big rainfall, we would have less damage even if the Harmattan is strong," Koffi Kouame, who farms near Soubre, said.

Data collected by Reuters showed that rainfall in Soubre, which includes the towns of Sassandra and San Pedro, was 7 mm last week, 3 mm below the five-year average.

But in the center-western region of Daloa, which produces a quarter of the national output, farmers said they were happy they had received abundant rains that would boost the outlook.

"Weather conditions are good for the small pods left on the trees," Albert N'Zue, who farms near Daloa, said. "If it rains enough in the next two weeks we won't have any problem."

Rainfall in the region of Daloa, which includes the town of Bouafle, was 27.2 millimeters (mm) last week, 23.4 mm above the five-year average.

In the western region of Man, rainfall was at 25.2 mm last week, 21.8 mm above average.

Rains were below average in the southern regions of Agboville and Divo, in the central regions of Bongouanou and Yamoussoukro, and in the eastern region of Abengourou.

Average temperatures in the cocoa growing regions ranged from 25.81 to 28.25 degrees Celsius.

Reporting by Loucoumane Coulibaly; Editing by Juliette Jabkhiro and Alexander Smith

Our Standards: The Thomson Reuters Trust Principles.

Apps Newsletters Advertise with Us Advertising Guidelines Cookies Terms of Use Privacy



All quotes delayed a minimum of 15 minutes. See here for a complete list of exchanges and delays.

© 2018 Reuters. All Rights Reserved.