

Sinkholes spread fear in Turkey's parched breadbasket

July 2 2024, by Fulya OZERKAN



Farmer Yigit Aksel stares into a sinkhole in fields near Karapinar in central Turkey.

Every time Turkish farmer Fatih Sik drives his tractor across his cornfields he knows the earth could open up and swallow him at any



moment.

Two giant sinkholes have already appeared on his land in Konya, a vast agricultural province known as Turkey's breadbasket.

"Anywhere could sink, I keep thinking. And I know I'd be dead at the bottom," the 45-year-old farmer from Karapinar told AFP.

"But I have to work otherwise my family will starve."

This part of central Anatolia has had sinkholes for centuries. But their numbers have risen in recent years as increasing droughts has led to the overuse of wells for irrigation, experts say.

Many are dizzyingly deep—plunging up to 50 meters (165 feet). Invisible from a distance, you can suddenly come upon them in the large fields of corn, beetroot, wheat and clover that dot the Konya plain.

"One of the major factors with sinkholes is <u>climate change</u>," says Arif Delikan, an associate professor of Konya Technical University, who has counted 640 sinkholes in Konya—with more than 600 of them in Karapinar alone.

"Around 20 holes have emerged over the past year in Karapinar," he said, using a hammer to test the ground around the edge of one.





The Inoba Obruk sinkhole that opened up overnight near homes in central Turkey.

He and the government's AFAD disaster agency has identified more than 2,700 surface deformations and non-seismic fractures which indicate a <u>sinkhole</u> risk and need to be investigated.

Sinkholes occur where water dissolves the bedrock below the surface, causing it to cave in. They can form naturally or through "anthropogenic" causes, due to the direct or indirect action of people.

They can appear slowly, or collapse very suddenly with little warning.

They featured in the 2022 film "Burning Days" by Turkish director



Emin Alper who used them as a metaphor for cracks within Turkish society.

'Really scary'

Last year, Adem Ekmekci witnessed a large hole opening up which swallowed up several apricot and mulberry trees while walking through his fields.

"My foot suddenly slipped... I looked down and saw cracks in the ground," said the 57-year-old farmer, who has two sinkholes on his 24-acre (10-hectare) farm, each around 50 meters (164 feet) wide.



One sinkhole is next to an 800-year-old Seljuk caravanserai in Karapinar in the



central Turkey.

"When I came back, the soil had collapsed and several trees had fallen in. It was really scary."

One sinkhole opened up just 10 meters from his home.

Cracks first appeared in 2018 so he went to the <u>local council</u> which sent workers to cover the area with rocks. Two years later, the ground collapsed.

"It sank 20 meters," he told AFP, saying he was too terrified to sleep at home that night. But with nowhere else to go, he has learned to live with it.

So far, nobody has been hurt or killed in the region, but everyone is aware of the danger.

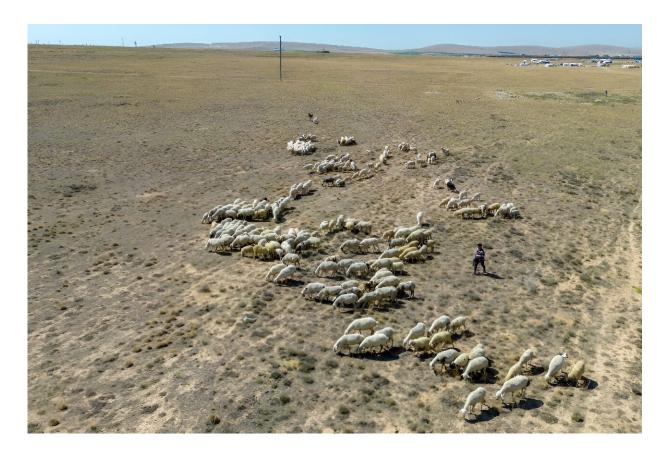
Grazing his sheep, a 27-year-old Afghan shepherd "Omer" said he feared the sinkholes could swallow his flocks.

"God forbid, if one falls in, the others will follow," he told AFP.

Illegal wells

Over the winter, rainfall was 40 percent below average in Konya, putting even more pressure on farmers in a region that produces 36 percent of Turkey's wheat and 35 percent of its beetroot.





Fearful: Afghan shepherd Omer with his flock in Karapinar, Turkey.

Some have tried to solve their <u>water problems</u> by drilling illegal wells, weakening the bedrock.

"There are tough days ahead," admitted farmer Yigit Aksel who knows drilling and irrigation is partly to blame as they cultivate thirsty crops like corn and beetroot in this drought-stricken region.

Delikan said the region had been losing <u>surface water</u> due to drought over the past 20 years, with farmers turning to groundwater deep below for irrigation.



He said the water level in Karapinar was dropping "by 10 to 20 meters per year".

At Lake Meke, a volcanic crater lake in Karapinar, the water has disappeared over the past decade, its dried-up lakebed covered with salt.

But even a badly-needed rain could be harmful, putting extra pressure on the bedrock and accelerating its collapse, experts say.



Farmer Yigit Aksel looks into a large sinkhole near his home in Karapinar in central Turkey.





Cem Kinay has opened a luxury 13-room hotel in an ancient inn close to one sinkhole.

Sinkhole tourism

Some entrepreneurs have turned the sinkhole crisis into an opportunity.

Last week, Cem Kinay opened a luxury 13-room hotel inside an 800-year-old Seljuk caravanserai—an ancient roadside inn—that sits on the brink of Turkey's oldest and most famous sinkhole.

Half-filled with water, it looks like a lake.

"We need to turn these fears into something positive," Kinay, 66, told



AFP.

Gazing at the sinkhole, South Korean tourist Seongmo Kim was mesmerized.

"It's the first time I have seen this, it's impressive."

Local villager Gumus Uzun recalled her grandfather telling stories about using the sinkhole to water their sheep and wash clothes about 60 years ago.

Back then, the water level was much higher, she said.

"Today it keeps shrinking."

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