
Turkey: Drought Raises Concern re Possible Environmental Catastrophe

By Nicholas Birch
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A shepherd since childhood, 60-year-old Kamil Gurel reckoned he knew the terrain on the southern edge of Turkey's vast Konya Plain as well as anyone. Until one moonless night recently when, walking his flock back home, he fell about 40 meters down a hole that hadn't been there the week before.

Miraculously, Gurel survived with no more than a broken arm and four broken ribs. But it took rescue parties four days to find him and haul him out. "That wait was torture", Gurel says. "God save anybody from dying of starvation and thirst."

After the hottest and driest summer in living memory, thirst is weighing heavily on the minds of a many of Turks these days.

When the water level in the reservoirs serving the capital Ankara dipped down to 3 percent of capacity recently, the capital's mayor, Melih Gokcek, called on city residents to "go on holiday." Parched city dwellers paraded in front of police water cannon with placards reading "turn it on, mate." Meanwhile, a poor harvest has caused food prices to climb.

But it is on the Konya Plain - an area more than double the size of New Jersey that stretches south from Ankara almost all the way to the Mediterranean Sea - that water is the biggest issue. Like the dozens of other sink-holes to have formed in recent decades, the chasm Gurel fell into is "a warning sign of an impending catastrophe", according to Tahir Nalbantcilar.

Head of the Chamber of Geological Engineers in the regional capital of Konya, Nalbantcilar, describes the situation as a matter of simple arithmetic. Devoid of rivers, hemmed in by mountains on all sides, the plain has no source of water other than groundwater. For the past 40 years, farmers have sucked it up faster than it can be replenished by rain.

As a result, the water table is sinking fast. "We used to pull water by hand out of wells five meter deep", says Tahsin Ata, a farmer in the small village of Cirali, up the road from Gurel's sinkhole. "Now you have to go 80 meters down."

The drop in water table levels - averaging 27 meter across the plateau in the last 25 years - is already taking a severe environmental toll. Dozens of lakes have disappeared, and others, including the 1,500 square kilometer salt lake that lies in the centre of the plain, are shrinking fast. Sinkholes like the one Gurel fell into form when the underground strata of limestone, sucked dry of water, collapses under the weight of the rock above.

"If things go on as they are now," Nalbantcilar says, "the whole plain will be a desert within 30 years."

Part of the problem is global warming. Always low, rainfall over the plateau now appears to be decreasing. A recent United Nations report described the region as acutely sensitive to climate change.

But the real source of the depletion is connected with a shift in agricultural practices. All along the road connecting Konya to Gurel's home

district of Karapinar the change is readily evident: field after field of sugar beets and maize glisten with water under a burning sun.

This area used to be known as Turkey's granary. But with subsidies on wheat whittled down to nothing, local farmers have increasingly turned their attention to thirstier crops to earn a living. Sugar beet needs five times more water than wheat, and its spread has sparked well-digging across the plateau. According to some estimates, there are now 60,000 wells in the region, roughly half of them illegal.

Many local farmers are aware that what they are doing isn't sustainable. "We're using future generations' water", says Recep Kargin, whose fields nestle in hills to the west of the salt lake. "But we have no choice: it's either this or pack your bags and go."

For Cagri Deniz Eryilmaz, an Ankara-based expert with WWF, formerly known as the World Wildlife Fund, the solution lies in an integrated water and agricultural policy covering the entire plain. For two years, WWF has been negotiating with government agencies and local farmers to introduce more sustainable agricultural practice.

Nalbantcilar, meanwhile, believes the unwieldy bureaucracy is a major source of trouble. "There are 15 different agencies dealing with water, all of them jealous of their prerogatives", he says. Talking to Prime Minister Recep Tayyip Erdogan earlier this year, he urged the creation of a Ministry of Water.

Both Eryilmaz and Nalbantcilar are optimistic that the desertification of the Konya Plain can be prevented. But their struggle is likely to be made more difficult by the widespread perception among Turks that theirs is a water-rich country.

It isn't. Indeed, with 1,500 cubic meters of water available per person per year, it only just avoids international definitions of water poverty. The figures give the lie to the new Minister of Environment's comment earlier this month that "Turkey has 10 times as much water as it needs."

"We have had a drought this year", Veysel Eroglu said. "But once we get through this year, the problem will be gone."

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