

Farming soaks up 90% of Iran's precious water supply: *Experts*

DEBATE

In a segment of IRNA's *Talaaghi* (translation from Persian: *Convergence*) program, experts zeroed in on Iran's water crisis — particularly whether it has truly sunk in for everyone and whether the gravity of the situation has led to sound policies. The central question: "Why, in the midst of this crisis, do flawed and much-criticized water policies still drag on?"

To get to the bottom of this, the guests of the panel — with extensive experience and research to back them up — offered incisive and thought-provoking answers. Ghasem Taghizadeh Khamesi, former Iranian deputy minister of water and wastewater, ex-deputy mayor for urban development in Tehran, and previous general manager of water affairs in Tehran, attended the debate alongside Mohammad Fazeli, renowned Iranian sociologist who's carried out numerous studies across fields — and who brings hands-on experience from the Ministry of Energy's Socio-Cultural Water and Energy Center. The text of the first part of the debate follows:

In your opinion and given the current circumstances, has the water crisis in Iran truly hit home, and have our policies been adjusted accordingly? Or do we still fan the flames of this crisis in relevant sectors?

TAGHIZADEH KHAMESI: You've kicked off the discussion from exactly the right spot. The idea that "there is no water" or "there's very little water" simply hasn't taken root in our society. Why? The media bears some of the blame. If you keep an eye on state TV, a few drops of rain somewhere get splashed across the headlines as if the whole country's hit by floods — yet when there are six years of drought, barely a peep, or it's largely glossed over.

Governments have followed suit. I've worked with nearly every administration, except the current one, mainly in areas related to water, cities, these kinds of issues. Governments aren't keen on coming clean publicly that we have a water shortage. The only administration I've seen step up on this has been Dr. Pezeshkian's, which actually admits "there's no water." That's a positive — even this level of candor is progress.

I recall that right when the late president Raisi's government had not fully taken office but he'd been elected, we had two meetings with him. I told him, "Sir, brand your government as the 'Water Government'. If you talk about water, you're talking about service, welfare, and development — the real issue for people is water. You can build power plants to get electricity, but what are you going to do about renewable water?" Over the past 50 years, temperatures have gone up by 10 degrees, and rainfall has tailed off just as much — so has the available water. In 1973, we had 130 billion cubic meters of renewable water; Now, it's dropped to 103 billion. And in the next 8 to 10 years, that number could slip down to 95 or 96, which is barely what we consume.

We haven't put the brakes on agriculture. No real change has happened there. The minute someone brings up regulating wells, there's an outcry. For example, in the 11th administration, president Rouhani traveled somewhere and declared he was personally in charge of the nation's water — then nothing. President Ahmadinejad also once said: "Anyone who wants a well, give it to them." In that period, 300,000 illegal wells popped up. We used to have around 100,000. No one used to bother getting a license. Later, a law came in that whitewashed these illegal wells. Now, they talk about land subsidence. It's spread out of specific regions to become a much broader threat — just come, have a look at District 18 in Tehran, and you'll see for yourself. I'm worried this could eat into the heart of the city — jeopardizing bridges and buildings.

You can see the water situation for yourself. I'll expand on this later as it's extremely important. In the past 50 years, maybe only one year



has been as dire as this year — and this year's outlook is particularly grim, especially in Tehran, which is bearing the brunt of the crisis.

As Mr. Taghizadeh noted, the core issue is water scarcity. If that's the case, why are water-intensive industries still set up in the country's arid central regions? Why is our agriculture still so water-intensive? Why is our consumption pattern still so chaotic? Why hasn't water recycling and reuse gotten off the ground? We know — or at least many experts know — the solutions, but none are implemented. So, is there a real understanding of the crisis, or not? Why are choices still being made that simply don't add up in a water-short country?

FAZELI: To get a grip on Iran's water crisis, there are two or three key concepts and processes — if we lose sight of them, we fail to see the full picture. One is that water processes are slow to unfold; For example, it takes years for aquifers to drain, or for erosion and subsidence to really show up. Similarly, Iran's rainfall hasn't fallen off a cliff overnight; It's a gradual drop from 130 billion to about 100 billion cubic meters. Climate change often takes 30 to 40 years to work its way through so snow turns into rain — a shift that has drastic effects on the water system.

The quality of governance is tested by its capacity to grapple with these slowly evolving processes. In Iran, the system has largely failed to keep pace — be it water, earthquake risks in Tehran, air pollution, or soil erosion: They all follow this pattern.

Another big sticking point is water's cross-sectoral nature. Water is, perhaps, the most cross-sectoral problem the government faces. Effective management requires attention to drinking and sanitation water (sometimes split into separate systems), water for industry, agriculture, and the environment — the four main sectors.

Then, there's the split between surface and groundwater, each with quantity and quality dimensions. On top of that, there's unconventional water — recycled or reclaimed water — which also needs to feed into agriculture, industry, and urban systems. Multiple ministries are tangled up in this: Industry, Roads, Agriculture, Commerce, and so on. One of our system's biggest failings is that these agencies can't pull together. As a result, water management has been stuck in a rut over the past five to six decades — especially in the last three. Iran has gone from a low-water-use lifestyle (shaped by our historical and climatic wisdom) to water-heavy living. I once heard an old qanat digger from Yazd say something that really hit home; He

said, "I can't understand which fool changed our water unit from drop to billion cubic meters? That's fine for the Amazon, China, Europe, and Russia. In the Iranian plateau, our measurement should be the drop." That's where our understanding must take off — at least figuratively. Only then can we acknowledge our struggle to comprehend slow processes and the move from low to high water demand.

When I was at the Ministry of Energy, I came across a booklet from the early days of Tehran's urban water system. I still have a scanned version of it. It detailed how to talk people into using tap water instead of qanats and springs. They'd even listed water consumption standards by city. For instance, it showed exactly how much water a citizen of Shiraz, Tehran, or Mazandaran was supposed to consume each year. These numbers, tailored by region, varied; Shiraz was instructed to use less than Tehran, and Isfahan even less than Shiraz. People back then genuinely took stock of where they lived and the water scarcity they faced. Yet now, average water use has nearly doubled compared to those old figures — even though the national per capita water supply has fallen off. This shift is a dead giveaway that we've moved away from a low-water lifestyle to one fueled by heavy water use.

You may ask why agriculture or

industry isn't being reformed. After 50 or 60 years, our entire way of life — agriculture, industry, cities — has been built around resource-heavy consumption. It's simply not feasible to pull up stakes and move these industries from the country's center to the coast. Even countries with much stronger governance struggle with such changes because of conflicting interests; Millions of lives and livelihoods revolve around these entrenched structures. For instance, you can't just up and move the Esfahan Steel Complex to the seaside. These aren't just factories; They're economic and social chains holding communities together.

A crucial point, in my view, is that our system of governance has yet to face up to the slow-moving nature of water processes, or address the cross-sectoral nature of the crisis — again, because of conflicting interests. Water governance in Iran has a soft spot for flashy, high-cost, and largely ineffective solutions, most of them geared toward contractors.

From my two decades wrestling with water issues, I've found that any solution rooted in understanding slow processes, reducing consumption, adapting to climate, and resolving cross-sectoral hurdles simply doesn't get anywhere in the contractor-driven bureaucracy. Instead, off-base solutions, bloated and grandiose, that line the pockets of select groups, get pushed through and implemented.

So, you're saying Iran's water governance is "siloed" — not cross-sectoral?

FAZELI: Absolutely, it's fragmented. If the Iranian government were to admit that it has one glaring weakness — theoretically and practically — it would be on "cross-sectoral issues". So, water would be the most short-changed since it's among the most cross-sectoral issues out there.

TAGHIZADEH KHAMESI: Mr. Fazeli made an important point about the contractor-centric approach. I'd add two current, live



Ghasem Taghizadeh Khamesi (R), former Iranian deputy minister of water and wastewater, and Mohammad Fazeli (L), renowned Iranian sociologist, debate the current water crisis in Iran on July 14, 2025.

● IRNA



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The photo shows the alarmingly low water levels behind Latyan Dam, Tehran Province, Iran. It is one of the main sources of water for the Tehran metropolitan region.

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