# Lake Urmia's water area quadrupled in a year

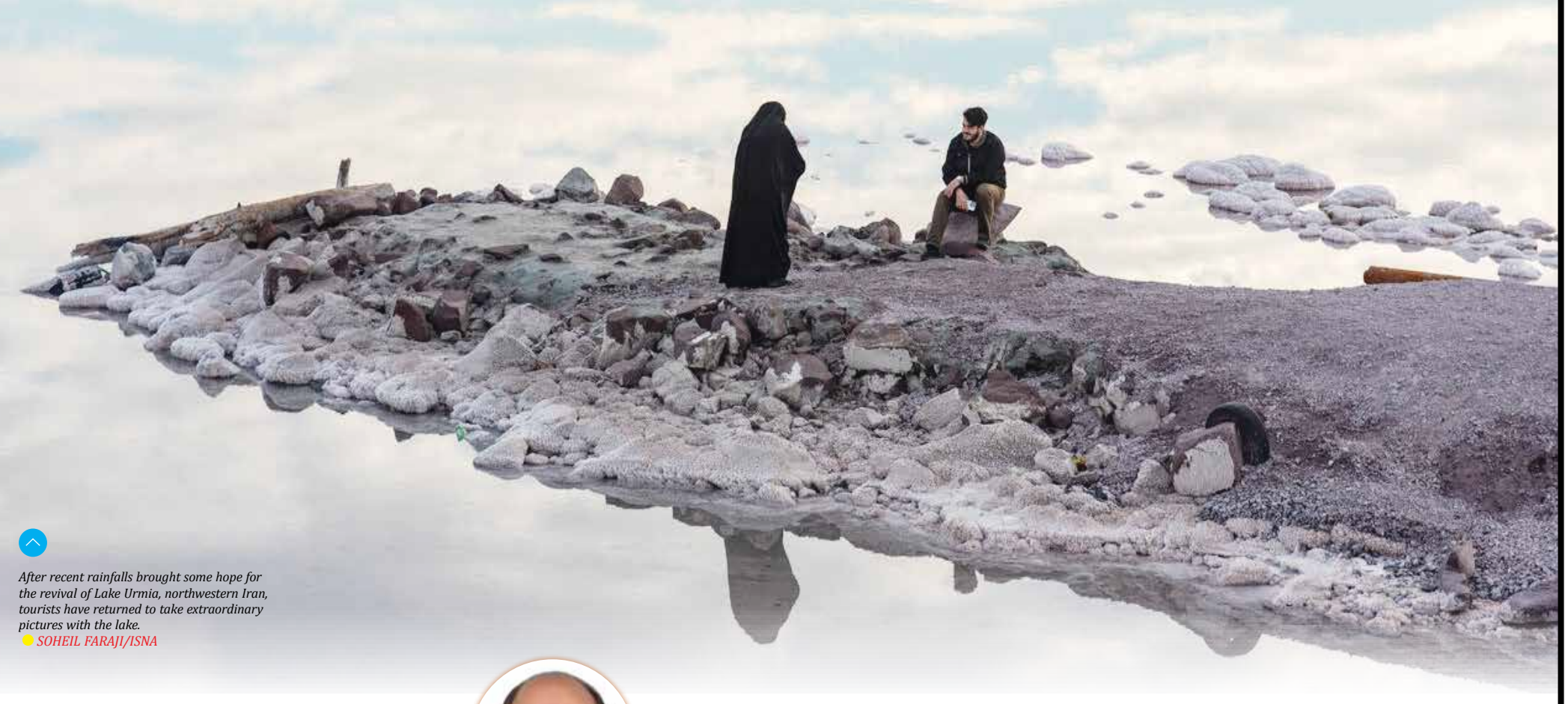
## Let's not forfeit opportunity for revitalization



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INTERVIEW

***After several years of drought and a worrying reduction in the water level of Lake Urmia, substantial precipitations in recent weeks and, in particular, the precipitations of the past several days have once again vivified hopes for the return of life to the largest endorheic lake of Iran. Reports suggest a significant increase in the water expanse of the lake; so much so that its water expanse, per the declaration of Urmia University's Lake Urmia Research Institute, has attained approximately 2 thousand square kilometers from around 460 square kilometers at the analogous juncture of the previous year.***
***In the estimation of experts, this conspicuous alteration, albeit an auspicious indication of the natural capacity of the lake for the return of water, does not signify its revival. The continuation of periodic droughts, elevated evaporation, excessive extraction from water resources, and the development of agricultural lands still are reckoned among the most significant threats to this ecosystem. In their conviction, the recent precipitations must be accounted a precious opportunity for the rectification of the consumption pattern and the management of water resources, an opportunity that, if not accompanied by planning and practical measures, may be forfeited with the return of the arid period.***
***In this context, Iran Daily has conducted an exclusive interview with Kamran Zeinalzadeh, head of the Lake Urmia Research Institute, concerning the latest condition of this lake, the impact of the recent precipitations, the prospect of the coming months, and the requisites of its sustainable revitalization. You can read the detailed text of this dialogue in the following:***



*After recent rainfalls brought some hope for the revival of Lake Urmia, northwestern Iran, tourists have returned to take extraordinary pictures with the lake.*
*SOHEIL FARAJI/ISNA*

**IRAN DAILY: The recent significant rainfalls, particularly in the past several days, have brought auspicious tidings concerning the condition of Lake Urmia. There is even discourse of a multifold rise in the volume and expanse of the water of the lake. In your estimation, what changes have these precipitations made in the condition of the lake?**

**ZEINALZADEH:** At present, we're dealing with the El Niño phenomenon, which has been accompanied by exceedingly favorable rains in the country. El Niño is formed when the waters of portions of the equatorial Pacific Ocean become warmer than the norm and alter the atmospheric patterns of the world. El Niño is formed thousands of kilometers away from Iran and in the Pacific Ocean, but in Iran, El Niño sometimes raises the probability of greater precipitation in autumn and winter.

In the current water year, which starts from September 25, in comparison with the analogous period of the previous water year, we have had a substantial increase in the quantity of precipitations. Even in comparison with the long-term average, the quantity of precipitations evinces an augmentation of around 35%.



Kamran Zeinalzadeh

This condition is a golden opportunity that nature, by the grace of God, has placed at our disposal. We, after a severe period of drought, have encountered exceedingly favorable rainfall in the previous year and the current year, which are even beyond the normal.

If we wish to compare the condition of the lake with the analogous period of the previous year, at that time, the water expanse of the lake had attained less than 500 square kilometers and around 460 square kilometers, but now, this expanse has grown to approximately 2 thousand square kilometers. In other words, the water expanse of the lake has become about four times greater, which is an exceedingly auspicious occurrence and demonstrates that Lake Urmia possesses the capacity for return and revitalization.

Of course, we must also consider an important point. During the past 15 to 20 years, by reason of the sedimentation of salts and the evaporation of the hypersaline water of the lake, alterations have occurred in its bed. The salts have settled, and consequently, the bed of the lake has acquired a more planar configuration. This tray-like surface assists the dispersion of water. Therefore, although we now confront a water expanse of approximately 2 thousand square kilometers, we must not think that the lake has returned to its former condition and depth. In reality, we observe a substantial portion of this alteration in the apparent expanse of the water and not necessarily in its depth. From the perspective of water volume as well, the estimations advanced in this context indicate that there are now two to two and a half billion cubic meters of water in the lake; of course, the quantity of water may be less than this volume, but the current quantity is exceedingly better in comparison with the previous year since at the analogous juncture of the previous year, this quantity had attained around 300 to 400 million cubic meters.

**In your previous interview and those of other experts, the condition of the lake was described as exceedingly disquieting, and even some were of the conviction that it could no longer be designated a permanent lake. May the recent precipitations be accounted a miracle and a divine blessing that has once again vivified hope for the revitalization of the lake?**

Precisely so. These precipitations are a divine blessing and an opportunity that nature has placed at our disposal. Of course, we do not know until when this process will continue. We reside in a semi-arid region and naturally may again experience successive periods of drought.

Therefore, I must emphasize that the lake has not yet been revitalized and one cannot even state that it has completely entered the path of revitalization. Nevertheless, the recent rainfalls have demonstrated to us the power of nature and have proven that if we also possess prudence and manage water resources correctly, we can, with the assistance of nature, supply at least the water requisite for the preservation of the ecosystemic function of the lake.

At present, there exist more than 800 thousand hectares of cultivated and orchard lands in the catchment area of Lake Urmia, a substantial portion of which is under irrigated cultivation. This figure is exceedingly thought-provoking. However much precipitation we may have, if we cannot control water consumption, we will still confront a negative balance of water resources in the catchment area.

The major portion of the water that we now observe in the lake is under the influence of direct rain upon its surface. Of course, we must not neglect positive measures such as the dredging of rivers and the control of sluices and water conveyance paths; measures that have assisted water to be conducted more readily toward the lake. Nevertheless, we are still at a great distance from the favorable condition. We must be able to diminish approximately one to one and a half billion cubic meters of agricultural water consumption annually at the catchment area.

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**It appears that, notwithstanding all warnings, the development of agriculture and the expansion of the cultivated area in the region still continue. Why, despite the water scarcity crisis, has this process not ceased?**

I have always emphasized this matter that in previous years, in particular in the Persian calendar years of 1400 to 1403 (circa. 2021–2025), conditions forced us to practically depart from environmental priorities, and the supply of agricultural water surprisingly became one of the principal concerns.

You, who are present in Tehran, recall well that at various times, the water behind the principal dams of Tehran attained a minimum, and what difficult and stressful days we experienced for the supply of potable water.