

## Assessment the Impact of Changes in Cultivation Pattern from Grape to Apple on Drying up of Urmia Lake

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**Abstract :** The Urmia grapes have been famous for centuries and have been among the most desirable in the production of wine. Interestingly, evidence shows that the Urmia region was the first place in the world where wine was produced and consumed. In fact, the grapes known as “Shiraz” and made popular by “Shiraz Wine” are the grapes cultivated as a local species especially in the West Azerbaijan watershed basin and exported to Europe. But after the Islamic Revolution, because the production, usage, and sale of wine were unlawful (under Islamic rule), they decided to cultivate apples instead of grapes. Before Islamic revolution, about 50 percent of the gardens were producing grapes, but the apple groves took up less than 1.5 percent (100 hectares). Three years after the revolution, in 1982, people were swept up in the revolutionary excitement and grape cultivation decreased, using less than 10 percent of the garden area. Important is the fact that an apple tree needs 12 times more water than a grapevine, it should be noted that in terms of water usage in the area, the agricultural area has not been increased by 2 or 4 times but rather by 12 times. Evaluation of this study showed that contrary to official reports, climate change isn't major cause of drying up Urmia Lake and 65 percent of this environmental crisis happened due to spreading unsustainable agriculture in basin of this lake.

**Keywords :** cultivation pattern, unsustainable agriculture, urmia lake drying, water management

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