

Tightening water security through rainwater harvesting

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Water security is likely to be one of the most critical challenges facing humanity in the coming years. As such rainwater harvesting where it is possible is one possible solution in some contexts. Research published in

the *International Journal of Hydrology Science and Technology*, has reviewed the state of the art for rainwater harvesting in urban areas of developed nations as the technology has changed and evolved from 1980 onwards.

Alvaro-Francisco Morote of the University of Valencia, María Hernández of the University of Alicante, both in Spain, and Saeid Eslamian of Isfahan University of Technology, in Isfahan, Iran, explain that rainwater is paradoxically seen as a risk factor rather than a valuable resource in many developed places. A change in paradigm might involve 'integrated water resources management' and 'demand management' approaches and as such could ultimately address the problem of water security even in such places.

There is growing recognition, that [rainwater harvesting](#) could help in terms of [water security](#) but could also be useful in reducing the problems of flooding and polluted water problems if the management and technology are put in place in a timely manner. The team reiterates predictions from the International Panel on Climate Change (IPCC) that points to areas such as the countries of The Mediterranean where future [climate change](#) scenarios, forecast increasing periods of drought interspersed with intense and concentrated rainfall.

Rainwater harvesting can have a doubled-edged benefit in taking pressure of a scarce resource and at the same time putatively handling the problem of flooding at its source in many parts of the region.

More information: Alvaro Francisco Morote et al. Rainwater harvesting in urban areas of developed countries. The state of the art (1980-2017), *International Journal of Hydrology Science and Technology* (2020). [DOI: 10.1504/IJHST.2020.109952](https://doi.org/10.1504/IJHST.2020.109952)

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