

# Strategic Analysis Paper

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## Food and Water Security in Qatar: Part 2 – Water Resources

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### Key Points

- Scarce natural water resources, variable and low rates of evaporation, and high rates of water consumption have led to the over-extraction of groundwater.
- Desalinated water supplies at least 50 per cent of the country's water demand; groundwater (36%) and recycled wastewater (14%) compliment this supply.
- Qatar has one of the highest domestic water consumption rates in the world; Qatari households consume approximately 430 litres of water per day on average.
- High household water consumption remains a significant problem and Qatar will need to consider developing greater incentives to reduce domestic water usage.
- Significant potential exists for the expansion of treated wastewater reuse to improve Qatar's water security.

### Summary

Qatar experiences an extremely high level of water stress owing to its scarcity of natural renewable water resources and high rates of water consumption. The country's arid desert climate is characterised by unpredictable and erratic rainfall, averaging between 50 and 80 mm each year. High temperatures and high relative humidity are also common in the summer months. Variable and low rates of precipitation are not reliable enough to supplement irrigation and maintain agriculture. These factors and a lack of permanent rivers in Qatar have led to overdependence on groundwater resources, mainly groundwater aquifers, for agricultural irrigation.