**'Water mining' is now a prime culprit for raising sea levels**

By [Geoffrey Lean](http://www.telegraph.co.uk/earth/earthcomment/geoffrey-lean/) Published: 09 Oct 2010



Nowhere in the Maldives is more than 10 feet above sea level. Photo: ALAMY

Nowhere in the Maldives juts more than 10 feet above the Indian Ocean, making it extremely worried about sea level rise. Its president, Mohamed Nasheed, illustrated the point by holding a cabinet meeting under water in the run-up to last year's Copenhagen summit.

But a new study shows that global warming is not the only cause of swelling seas. Much comes from "water mining" – the pumping of vast amounts of groundwater from beneath the earth, mainly to irrigate crops. This inevitably ends up in the oceans after it evaporates from farmland and comes down as rain.

The study – to be published in a forthcoming issue of the journal *Geophysics Research Letters* – reckons that this accounts for about quarter of global sea-level rise, as much as the melting ice from all the glaciers outside Greenland and Antarctica.

More worryingly, increased pumping threatens food supplies. Underground reservoirs are shrinking by more than 280 cubic kilometres a year, well over twice as much as in 1960. Nature cannot replenish them as fast. The vast Ogallala aquifer – which underlies eight US states, helping to grow food on which 100 countries rely – is being drawn down by a three feet a year. How much of that is replenished by rainfall percolation? A mere inch.

Source: <http://www.telegraph.co.uk/earth/earthcomment/geoffrey-lean/8051922/Water-mining-is-now-a-prime-culprit-for-raising-sea-levels.html>