

# **FACTS AND FIGURES ABOUT WATER**



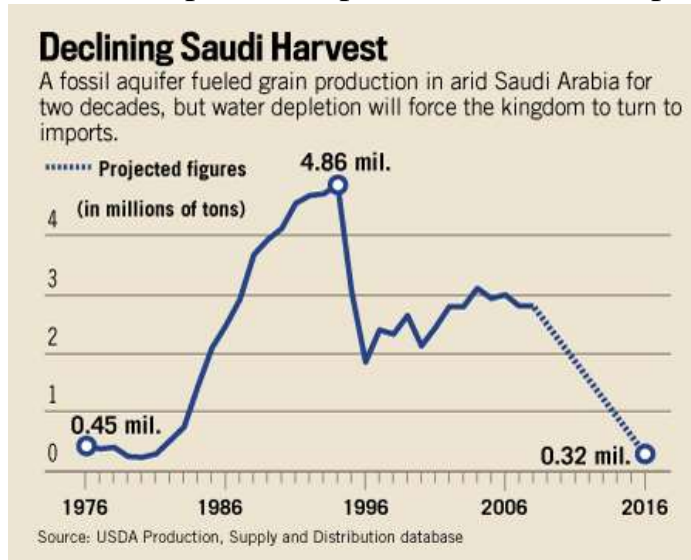
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**16BPL008**

1. Over **50,000 bacteriological tests** are performed at the filtration plants every year as are 20,000 bacteriological tests on water collected from the distribution system. Although the standards for chemical contaminants regulate the testing of at least 78 chemicals, the City of Toronto tests over 300.
2. China's worsening water shortage is exacerbated by increased pollution on a historic scale. More than **90 percent** of China's underground aquifers, which supply 70 percent of the country's drinking water, are polluted. More than half of China's population drinks water contaminated with organic waste. More than 75 percent of surface water flowing along China's rivers is unsafe for drinking or fishing, and 30 percent is unsuitable for agriculture and industry. By 2030, the Chinese government predicts the country's annual freshwater shortage will reach 200 billion cubic meters.
3. To prevent this global catastrophe, the World Bank estimates we need to spend **\$36 billion a year over the next 10 years** to meet the U.N. Millennium Development Goal of providing potable water to populations not currently served.
4. **Sixty percent of the world's 227 biggest rivers** have interrupted stream flows due to dams and other infrastructure.
5. In underdeveloped and developing countries, almost **1 billion women and children** travel almost 6 km daily to collect water for the family which takes untold amount of time which could be better utilised in an income generating job, caring for the family or attaining education.
6. Annually, **443 million school hours are lost** due to water borne diseases like diarrhoea, cholera, dysentery, typhoid etc.
7. The **Oslo II accords** is the latest agreement between Israel and Palestine concerning the environment. The Israeli-Palestinian Joint Water Committee is an example of still working cooperation. But it is not fulfilling its original purpose of a joint water governance institution. The Committee is now said to be an Israel dominated body that mainly rejects Palestinian requests. Current



disputes between Israel and Palestine are often addressing untreated waste water flow into opponent streams.

8. **Saudi Arabia has given up on growing wheat**, due to shortage of water and will be 100 percent dependent on wheat imports by the year 2016.



9. **Water wives:** Some Indian men are marrying multiple wives to help beat drought. Danganemal is a typical village in India's western Maharashtra state, where men marry multiple wives to fetch water for the family.
10. **From toilet to tap:** Getting a taste for drinking recycled waste water  
California's Orange County Water District (OCWD), has a plant that recycles used water and returns it to the drinking supply. It is expanding production to 100 million gallons per day, enough for 850,000 people.
11. When the Indian cricket team arrived in Cape Town before the beginning of 2018 for their series against South Africa, the Indian cricketers were in surprise when they were asked to take showers for not more than 2 mins. Considering Cape Town is facing its worst ever water shortage problem.
12. **Gujarat has 49.8% water of total capacity** and major sources are Narmada and Ukai dams. **Ahmedabad receives 1420MLD** which stands to be cut by 200 MLD. Meanwhile, Vadodara and Rajkot are also expected to witness a 50MLD, so will Surat as **south Gujarat stand at a 27% water deficit** compared to last year.

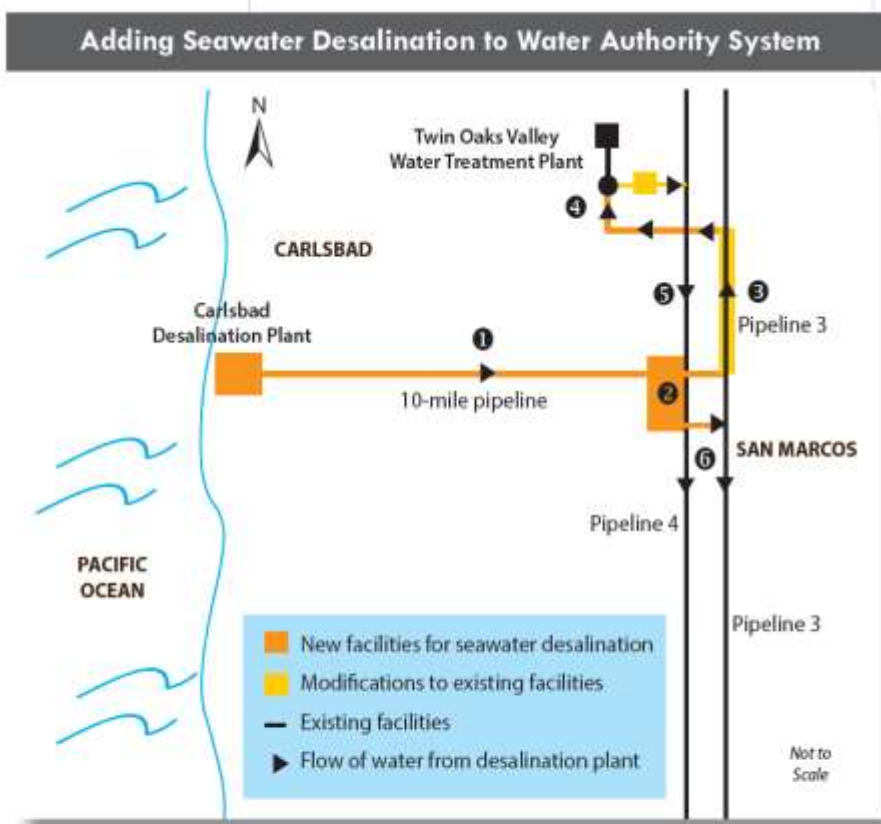
13. Among the venture capital firms that were analysed in the report, only **5 out of 15 had provided funding to firms operating in the drinking water sector.**
14. 70% of countries have specific plans to reach low-income communities with WASH<sup>1</sup>. However, only **25% of WASH aid was spent on basic systems**, which is a proxy for aid targeted to the unserved, particularly in rural areas.
15. The central government will launch six pilot projects for clean drinking water supply in villages under **‘Swajal Project’**; one each in Uttarakhand, UP, Rajasthan, Maharashtra, Bihar and Madhya Pradesh. The project will involve locals in civil work and maintenance of the system. Piloted as a “by the people, for the people, of the people” project, the drinking water and sanitation ministry will pay 90% of the cost and the panchayat concerned will bear the remaining 10%. It will be extended to all 115 backward districts identified by Niti Aayog. The first two pilots will start in Uttarakhand (this month) and in Rajasthan next month.
16. Engineering student from Hyderabad has designed a **3D-printed apparatus which can ‘create’ water from air**. The water apparatus produces pure drinkable water with the help of computerised sensor interface with UV filter. In an hour, the device can extract nearly 1.8 litres of water from air. Called **‘Dewdrop’**, this device uses the moisture in the air to create the water.
17. **Uranium in Ground water in Malwa region:** The uranium concentration in the shallow ground water from handpumps is found to be higher with a maximum up to 100 ppb.
18. **Water Rights in Alaska:** A water right is a legal right to use surface or groundwater under the Alaska Water Use Act (AS 46.15). A water right allows

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<sup>1</sup> Water, sanitation and hygiene

a specific amount of water from a specific water source to be diverted, impounded, or withdrawn for a specific use. In Alaska if the person doesn't have water right registered he/she could not access the fresh water resource.

19. **High levels of certain carcinogens were found in bottled drinking water samples in Mumbai**, according to a study conducted by the Bhabha Atomic Research Centre (BARC) at Trombay. A BARC team of four scientists checked 90 samples from 18 brands of bottled water sold by various manufacturers in the city. They found 27% samples contained higher than World Health Organisation-permitted limits of bromates, a salt containing bromide that is a by-product of the disinfection. The International Agency for Research on Cancer (IARC) classifies bromates as Group 2B carcinogens that could possibly cause cancer in humans. Some samples had bromate levels four times the WHO limit of 10 microgram per litre. (Jan 28, 2015)



20. The **Claude "Bud" Lewis Carlsbad Desalination Plant** produces approximately 50 million gallons per day of locally controlled water for San Diego County, helping to minimize the region's

vulnerability to state-wide drought conditions. Water from the plant will add about \$5 to the typical homeowner's monthly water bill.

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