

WATER RESEARCH REPORT



SPARKLING STARLIGHTS

FORMATION OF WATER

Not that long ago, it was believed that our planet formed dry some 4.6 billion years ago, with high-energy impacts creating a molten surface on the infant Earth.



According to this theory, water was brought to the world's oceans thanks to icy comets, trans-Neptunian objects or water-rich meteoroids (protoplanets) from the outer reaches of the main asteroid belt colliding with the Earth.



WATER ON EARTH

Water makes up about 71% of the Earth's surface, while the other 29% consists of continents and islands. To break the numbers down, 96.5% of all the Earth's water is contained within the oceans as salt water, while the remaining 3.5% is freshwater lakes and frozen water locked up in glaciers and the polar ice caps. Of that fresh water, almost all of it takes the form of ice: 69% of it, to be exact. If you could melt all that ice, and the Earth's surface was perfectly smooth, the sea levels would rise to an altitude of 2.7 km.

Total Water on Earth



3% Fresh Water

Icecaps and Glaciers	68.7%
Ground Water	30.1%
Other	0.9%
Surface Water	0.3%
87% Lakes	
11% Swamps	
2% Rivers	

WHAT
PERCENTAGE
OF EARTH'S
WATER IS...



drinkable?

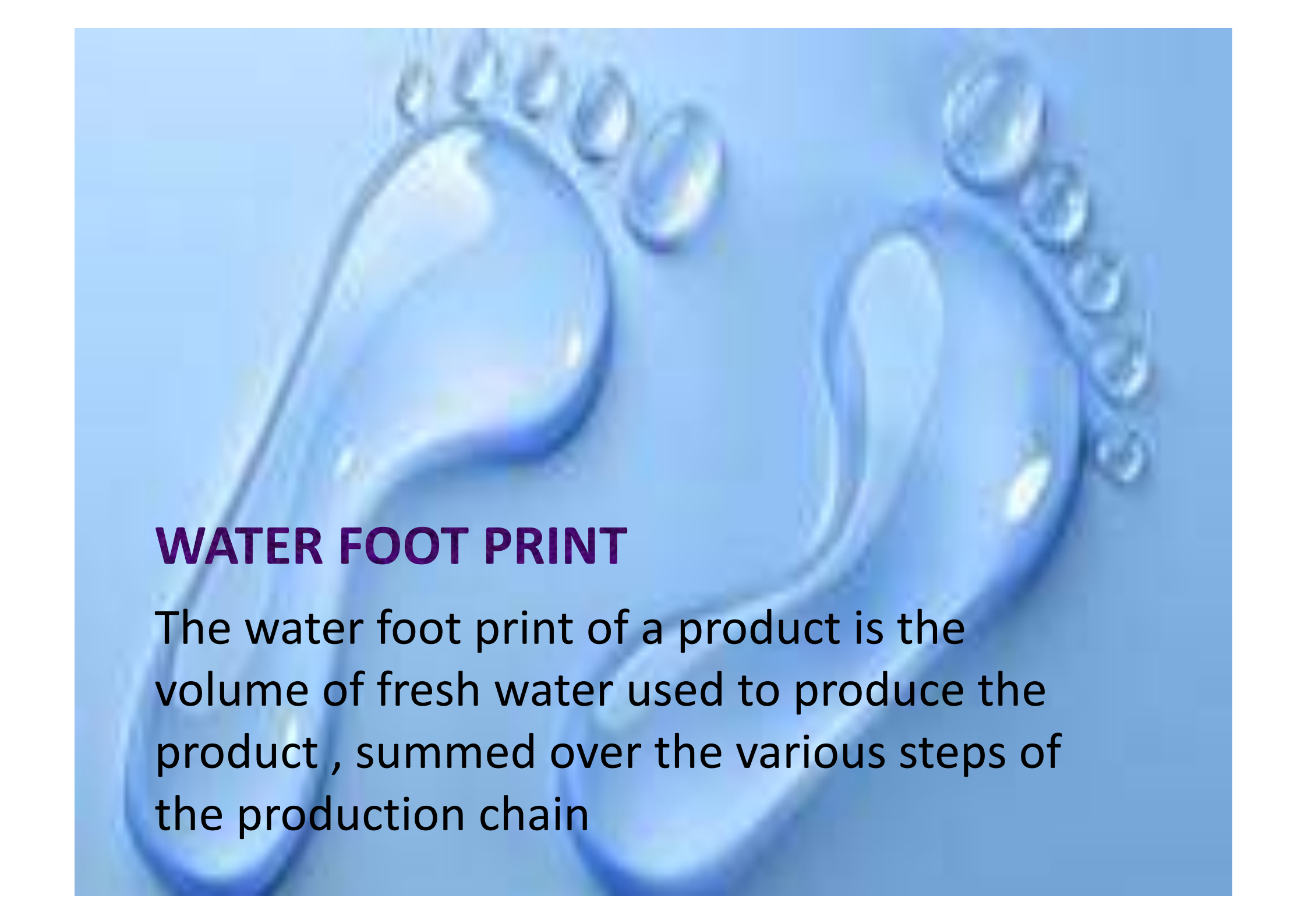
ANSWER

*1% OF
EARTH'S
WATER IS
DRINKABLE*

VIRTUAL WATER

The water that is used in the production process of agriculture or industrial goods.





WATER FOOT PRINT

The water foot print of a product is the volume of fresh water used to produce the product , summed over the various steps of the production chain

A water droplet is shown in the process of hitting a surface, creating a series of concentric ripples. On top of the droplet, there is a structure resembling a virus or a microorganism, with a central core and a surrounding shell of small, dark, spherical particles. The background is a solid blue color.

BIOLOGICAL WATER TREATMENT

IT INVOLVES THE USE OF NATURALLY OCCURRING MICRO ORGANISMS IN THE SURFACE WATER TO IMPROVE WATER QUALITY

PRIMARY TREATMENT

- REMOVAL OF LARGE OBJECTS FROM INFLUENT SEWAGE
- EX. BY PHYSICAL SEPARATION OF GRIT AND LARGE OBJECTS



SECONDARY TREATMENT

- UTILIZE BIOLOGICAL TREATMENT PROCESSES
- REMOVE DISSOLVED COLLOIDAL AND INORGANIC MATTER FROM WASTE WATER
- MICRO ORGANISMS CONVERT NON-SETTLEABLE SOLIDS TO SETTLEABLE SOLIDS.
- EX : BACTERIA AND PROTOZOA



TERTIARY TREATMENT

➤ **DESTRUCTION OF HARMFUL
MICROORGANISMS, I.E. DISEASE CAUSING
GERMS.**

WATER CRISIS IN INDIA

THE INCREASE IN POPULATION THAT COULD BE ANYWHERE BETWEEN 1.4 AND 1.65 BILLION IN 2050. FOOD GRAIN DEMAND COULD GO UP TO 450 MILLION TONNES PER ANNUM. THE PER CAPITA WATER DEMAND WILL INCREASE FOR INDUSTRIES AND CITIES ALMOST ON A DAILY BASIS

DROUGHTS, AND FLOODS MORE AND MORE DESTRUCTIVE, YET MORE AND MORE FREQUENT AND AT UNUSUAL PLACES AND TIMES. WATER SHORTAGES BOTH IN THE FORM OF STRESS AND SCARCITY ARE EMERGING VERY FAST AND INDIA IS EXPERIENCING SHORTAGES.

MEANWHILE, INDIA'S SUPPLY OF WATER IS RAPIDLY DWINDLING DUE PRIMARILY TO MISMANAGEMENT OF WATER RESOURCES, ALTHOUGH OVER-PUMPING AND POLLUTION ARE ALSO SIGNIFICANT CONTRIBUTOR

WHAT ARE THE SOLUTION FOR WATER CRISIS BY EXPERTS



PETER GLEICK



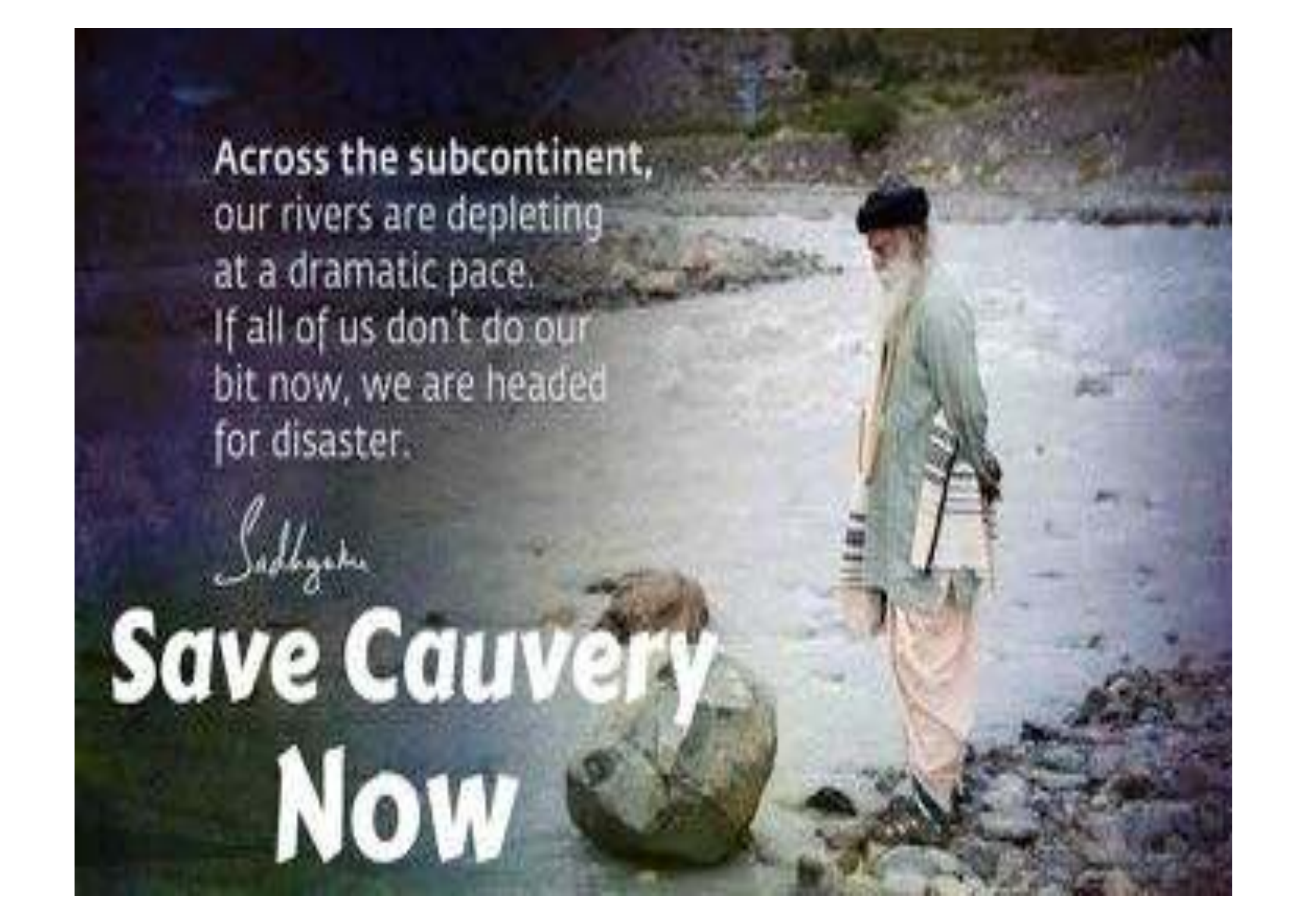
Tangled path to saving water

- Gleick's water research also looks *beyond California* to much bigger questions. Since the 1990s, he has studied international water security and conflicts around the world.
- From Syria to India to Ethiopia, control of water resources and systems have driven or influenced disputes, and sometimes wars.
- In 2010, Gleick also first proposed the influential concept of “peak water”—analogous to the specter of “peak oil”—which pointed to the limits of renewable and nonrenewable water source

JAGADISH VASUDEV

Cauvery Calling – A complete solution to India's Water Crisis. Sadhguru explains how Cauvery Calling is a complete plan that addresses water crisis holistically by benefiting the farmers and revitalizing the river. ... The most important thing we can give to the next generation is a land that is rich and rivers that flow.





Across the subcontinent,
our rivers are depleting
at a dramatic pace.
If all of us don't do our
bit now, we are headed
for disaster.

Sadhguru

**Save Cauvery
Now**

SAVE WATER

- DRIP IRRIGATION
- RAIN WATER HARVESTING
- REUSE THE WATER
- REDUCE THE USAGE OF WATER
- AVOID LEAKAGE OF WATER
- **POPULATION CONTROL**
- **LOW GROUNWATER USAGE**
- **PROTECTION OF WATER FROM POLLUTION**
- **RENOVATION OF WATER RESOURCES**
- **INCREASING FOREST COVER**
- **RAIN WATER SYRINGE**



By government

- **Water Recycling**
- **More Efficient Irrigation Equipment**
- **Weather Apps**
- **Soil Management**
- **Organic Farming Methods**

TOP 5 WAYS TO SAVE WATER AT HOME

A hand is shown holding a small, realistic-looking globe of the Earth. Water is splashing over the top of the globe, creating a dynamic and refreshing visual. The background is a soft, out-of-focus blue and white, suggesting a sky or water surface. The overall image conveys a message of environmental care and water conservation.

- BY USING TODAY'S TECHNOLOGIES
- REDUCE OUTDOOR WATERING. .
- FIX LEAKS IN ALL PLUMBING FIXTURES.
- INSTALL WATER-EFFICIENT DEVICES...
- SWAP OUT YOUR LAWN WITH LOW-WATER PLANTS.

Life is nonexistent
without this precious resource
Save Water



Thank
you