

UPSC

Candidate must adhere to the word limit specified in the question.
Any page or portion of the page left blank must be clearly struck off.

① In the context of water scarcity in India, there is compelling need to reuse the waste water for better water use efficiency. Analyse.

"When the well is empty, we know the worth of water" - Benjamin Franklin.

Water crisis in India

① India - close to 600 million people face acute water scarcity

② DRF says demand for water will be growing @ 2.8% CAGR from 2010-2030.

③ The supply gap of water to increase to 50% by 2030.

Effect water scarcity is about to impact agriculture, food processing industries, textile industry etc, serious dent in GDP by 2050.

Industrial scenario

⇒ EPB says Industries need 500^{bn} cu. meter fresh water every year

इस हाशिए में केवल प्रश्न संख्या लिखें।
Only write question number in this margin

Specimen Booklet

For Practice Purpose Only

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin.

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On the other hand, waste water discharge will pollute the water. (rivers, lakes etc.)

to Need:

wastewater treatment to meet the water scarcity.

Significance

- Most of the waste water potential is underutilised.
- DRF \Rightarrow 80% of waste water from 110 populous cities will meet 75% of Industries water demand by 2025.

Framework

Recently released National waste water recycling & guidelines will provide procedural framework

Success model

Singapore's waste water policy \Rightarrow 40% of waste water treatment meets water needs of most of industries and is about to increase to 55% by 2060

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Drinking water

Cities like Santiago and communities in Namibia and Australia use treated water for drinking purpose

Decentralisation:

It can be used for small sector also.

eg: Bengaluru based Vishuddh Plastic Recycling ~~Feeds~~ had 11 ~~recycle~~ filter to convert ETP to high quality portable water and used for cooling tower, laundry's etc.

win-win situation

Apartments installed modern wastewater recovery and even selling treated water to industries and earning.

Thus waste water treatment ~~provid~~ has following advantages like self reliance, no effect on environment, prevent deep bore wells revenue generation and also meets the demands of country's water demands