Water Stress in India

What is the issue?

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- The NITI Aayog's water management index was released recently. Click here to know more.
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- This, along with a NABARD sponsored study on water productivity of different crops depicts the country's increasing water stress.
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What are the highlights of NITI Aayog's report?

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- The current water crisis in the country is said to be the worst in history.
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- NITI Aayog maintains that about 600 million people face high to extreme water scarcity.
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- This is almost half the population of the country.
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- About 200,000 people die every year due to lack of safe water.
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- The crisis will escalate with the water availability dwindling to merely half of the effective demand by 2030.
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- Groundwater resources (40% of total water supply) are also predicted to deplete rapidly.
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- This may accentuate water paucity in both rural and urban areas.
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- Some 21 cities, including Delhi, Bengaluru and Hyderabad, will almost run out of groundwater by as soon as 2020.
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- If these come true, around 40% of the population will lose access to water.
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- Also, the gross domestic product (GDP) will take a hit of about 6%.
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What does NABARD's study reveal?

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- It holds the overuse of water in the agricultural sector responsible for the present adversity.
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- Over two-thirds of the nation’s available water is consumed in the farm sector.
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- In this, about 80% goes just to three crops — rice, wheat and sugarcane.
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- The most intensive cultivation of these water-guzzling crops is high in water-stressed regions.
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- E.g. sugarcane in Maharashtra, rice and wheat in Punjab and Haryana.
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- The report attributes the water crisis to unsustainable cropping trends.
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- This in turn is attributed to ill-advised incentives
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i. liberally determined minimum support prices
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ii. assured marketing through open-ended procurement
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iii. subsidised or free supply of water and power
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What are the possible solutions?

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- The largely academic suggestions mooted in these reports to remedy the

situation include the following:
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- Effective pricing for water and power.
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- Greater marketing support for water-efficient crops in water-constrained areas.
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- A general shift from price support to cash transfer to let the actual crop prices to be determined by market forces.
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- Dis-incentivising the cultivation of water-intensive crops in states like Maharashtra, Punjab and Haryana.
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- Shifting these crops to water-rich eastern and north-eastern regions.
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What is the way forward?

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- It is to be noted that present water crisis is largely man-made.
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- India is not an inherently water-starved country.
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- It receives annually about 2,600 billion cubic metres (BCM) of water through rain and snow.
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- However, only around 258 BCM (or less than a tenth) can potentially be stored in available water reservoirs.
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- Measures such as rainwater harvesting to conserve water have to be taken.
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- The efficient use of water in farming through micro-irrigation should be ensured.
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- This would be more sustainable than changing the cropping patterns in order to withstand the water crisis.
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Source: Business Standard

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