Punjab’s case of desertification

What is the issue?

Series of reports on water table depletion predicted that Punjab will turn into a desert in 25 years.

What were the reports?

- The Punjab Vidhan Sabha committee has said that the state will turn into a desert in the next 25 years if the present trend of drawing water from underground aquifers continues.
- The State of the World Report, 1998 published by Washington-based World Watch Institute (WWI) said that Punjab’s aquifers could be depleted by 2025.

What were the reasons cited for desertification?

- Drawing more water than is being replenished
- Use of tubewell or submersible pumps for extraction of groundwater
- faulty cropping pattern such as predominant cultivation of water guzzling paddy especially with the advent of Green Revolution
- The rate of water extraction in Punjab is 1.66 times against the rate of replenishment.
- Puddling (tillage of paddy field in a flooded condition) has created a thick hard layer on the agricultural fields, disturbing the recharging system and creating flash floods.

How to explain the two 25-year predictions?

- Out of 138 blocks in Punjab, 109 have already gone into the ‘dark’ or over-exploited zone, which means groundwater extraction is more than 100 per cent here.
- Paddy takes at least 4,000 liters water to grow one kg of rice, estimating that the remaining half of Punjab will also slip into the dark zone in the coming 25 to 27 years.
- Already upper aquifers have been dries and this could happen to deep aquifers too, and then Punjab will be like another Rajasthan.
- Farmers must be incentivised to choose cropping patterns that require

less water, and go for drip irrigation or other water management mechanisms.

Source: The Indian Express

