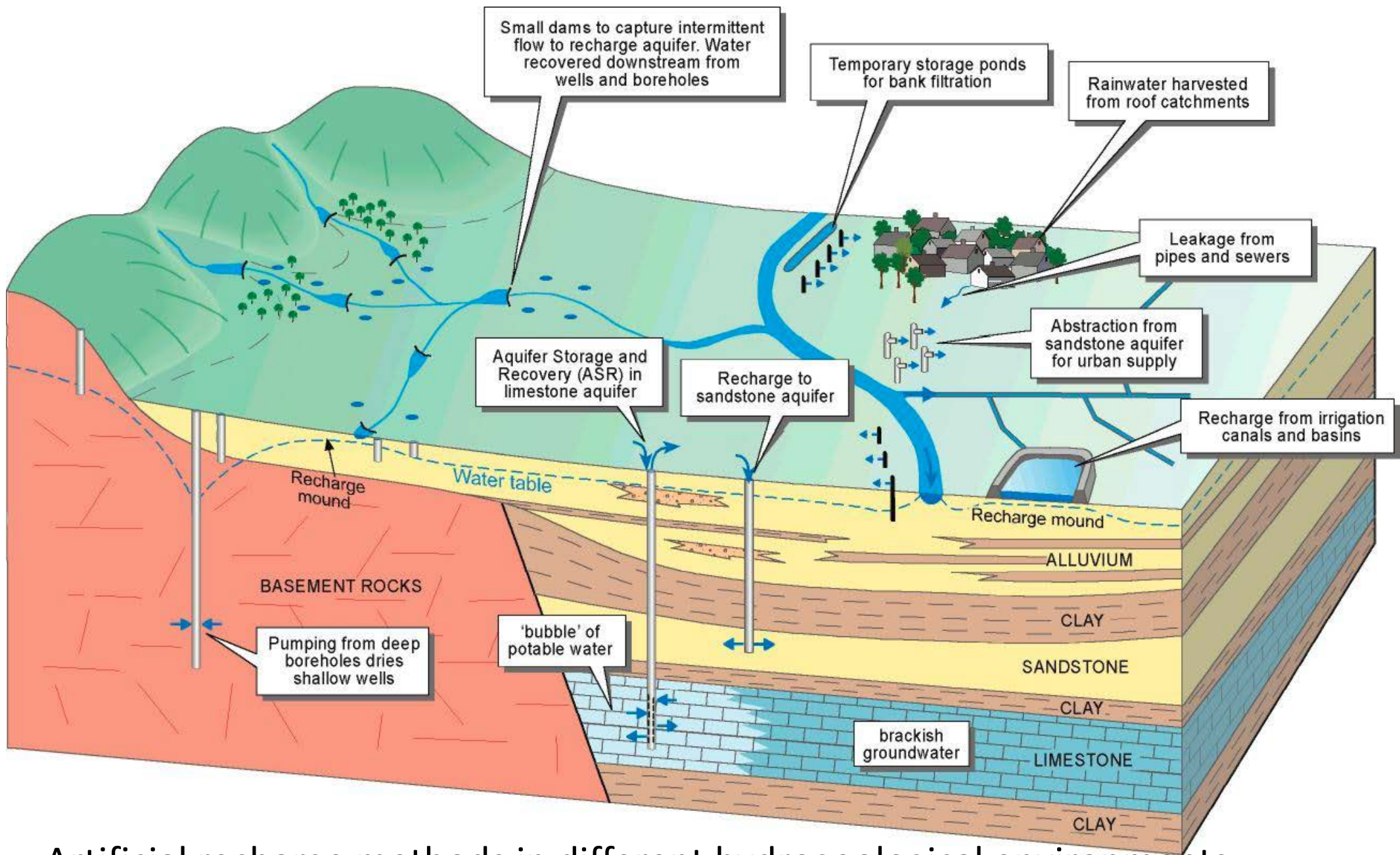
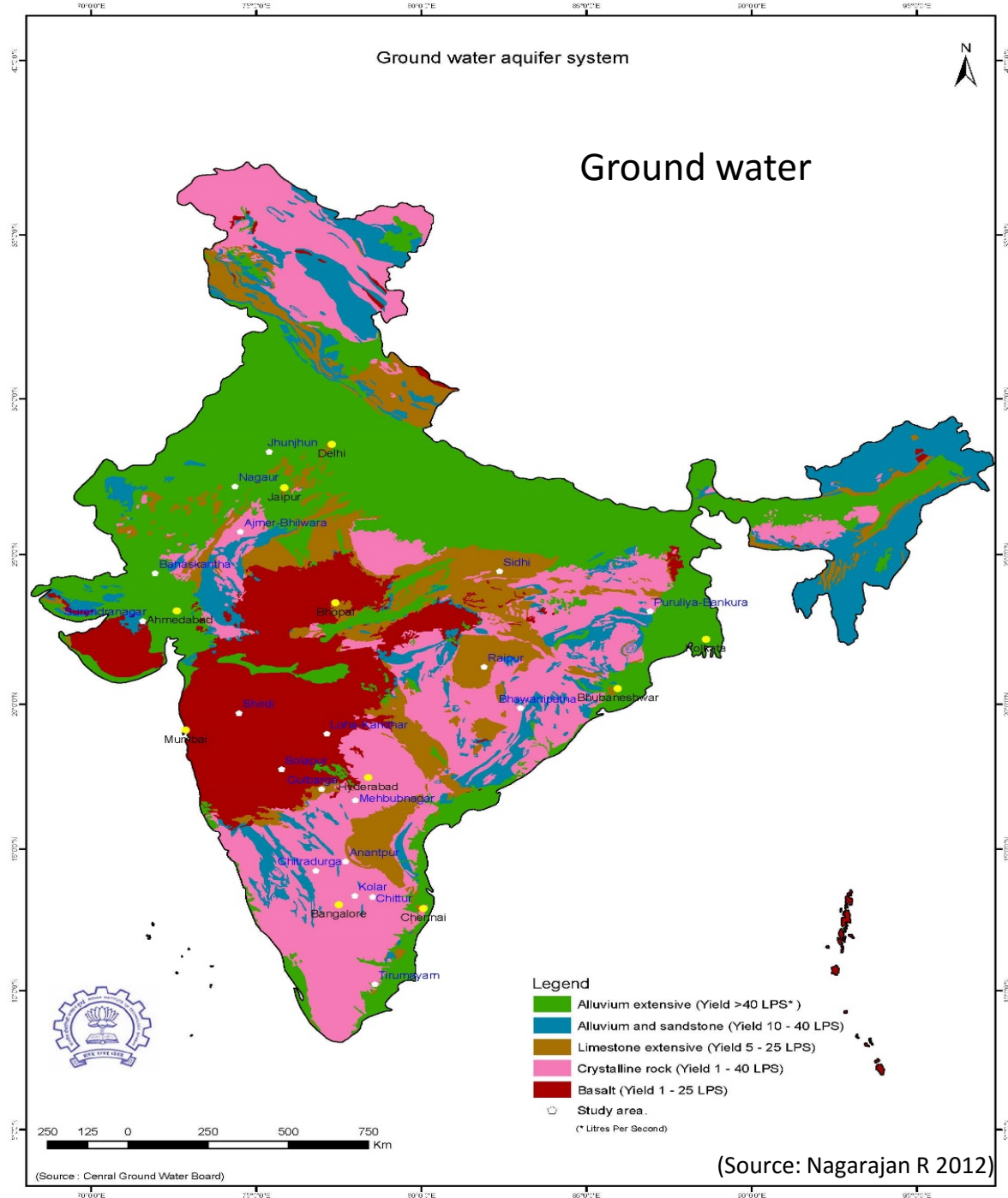


# **Groundwater, Potential Mapping and Availability**



Artificial recharge methods in different hydrogeological environments



**Aquifer:** A saturated geologic unit that yields water in a usable quantity to wells and springs. Geologic materials can be consolidated or unconsolidated. Therefore, the aquifer classification system refers to "unconsolidated aquifers" and "consolidated or bedrock aquifers".

**Open dug wells** draw water from shallow aquifer (<3-5m) mostly unconsolidated material –soil, weathered material. Yearly recharge and discharge

**Bore wells** draw water from deep aquifer from bed rock at having fractures/solution cavities. Recharge is a long process

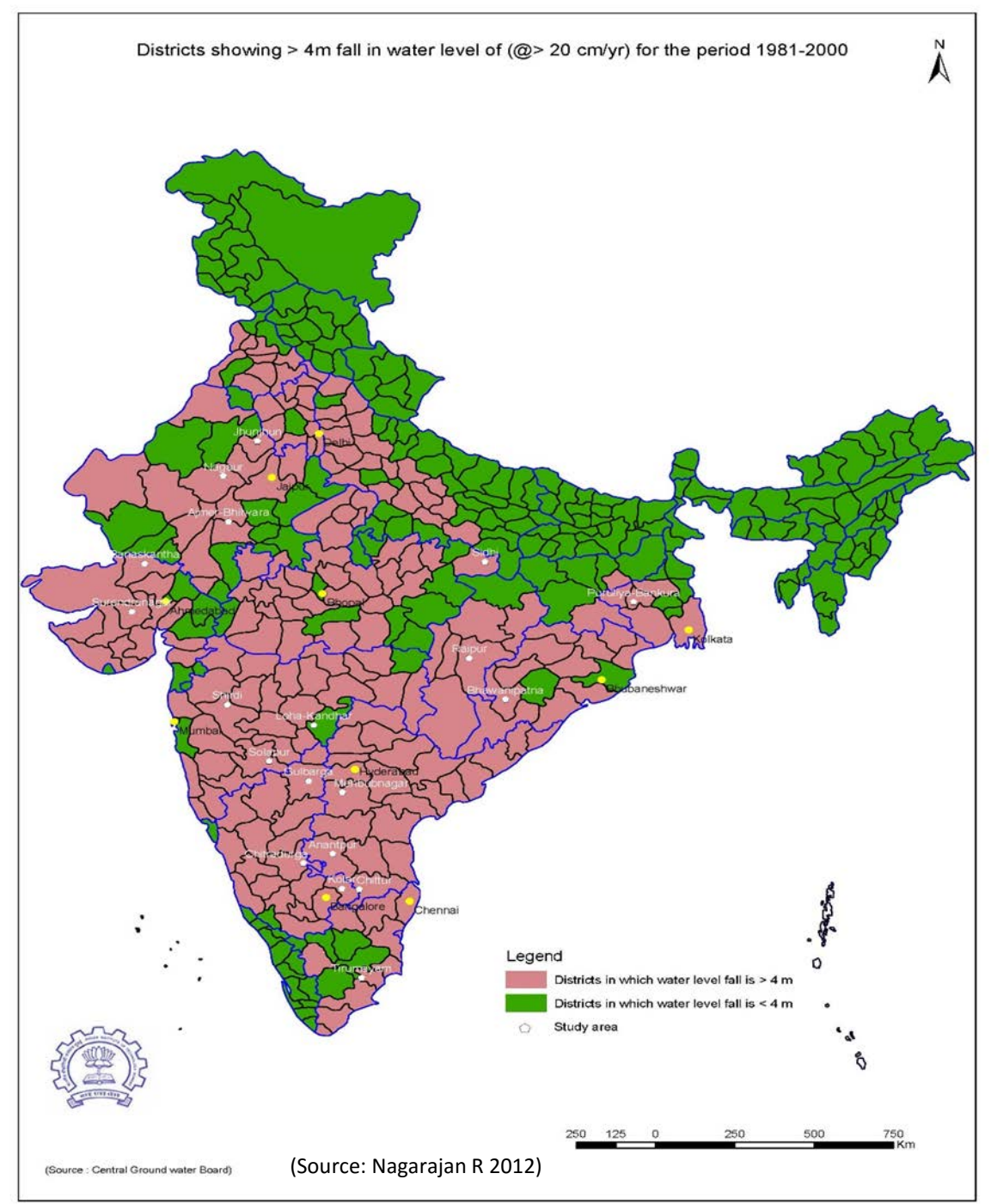
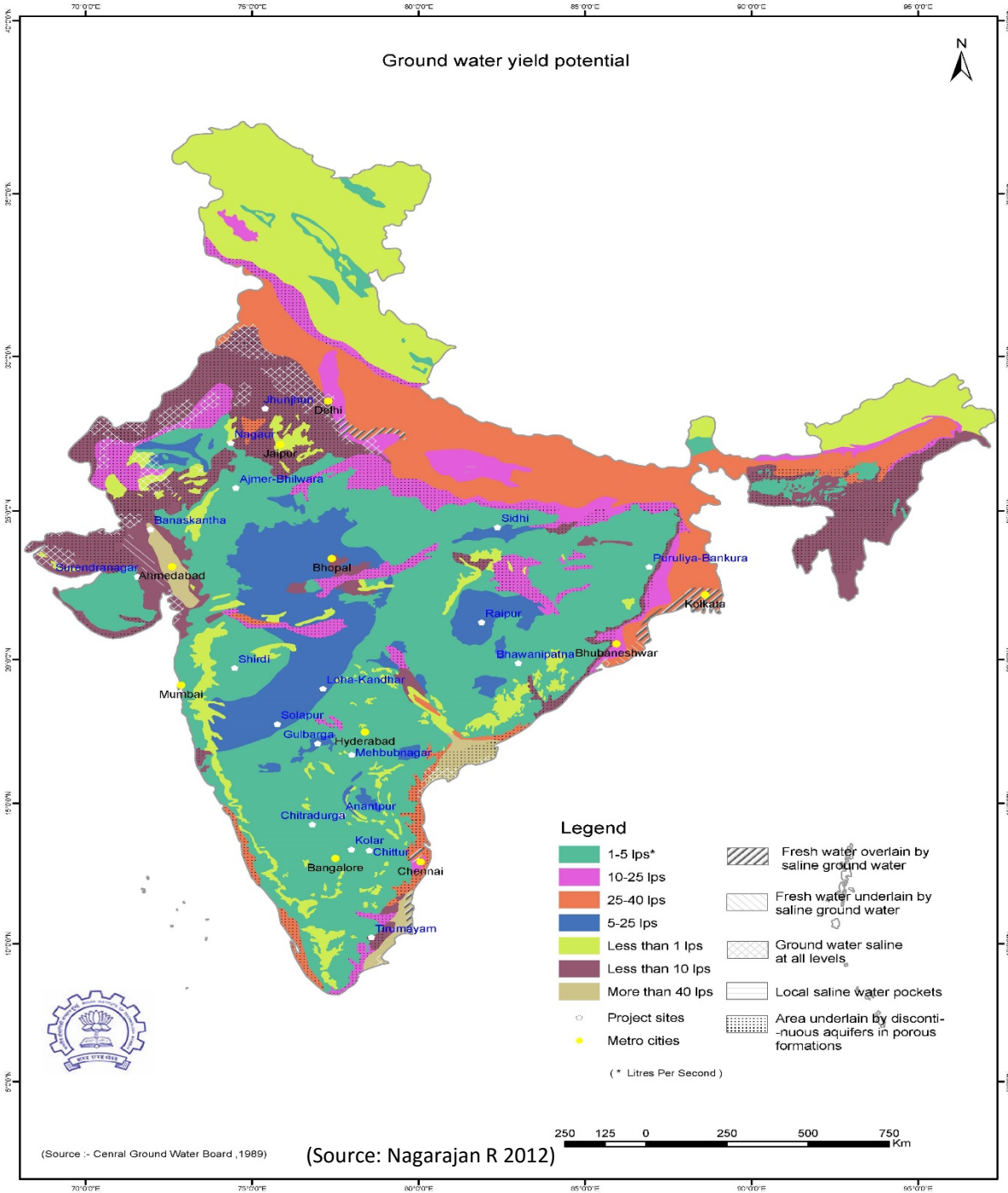
**Water level** is the depth to water observed in a well;

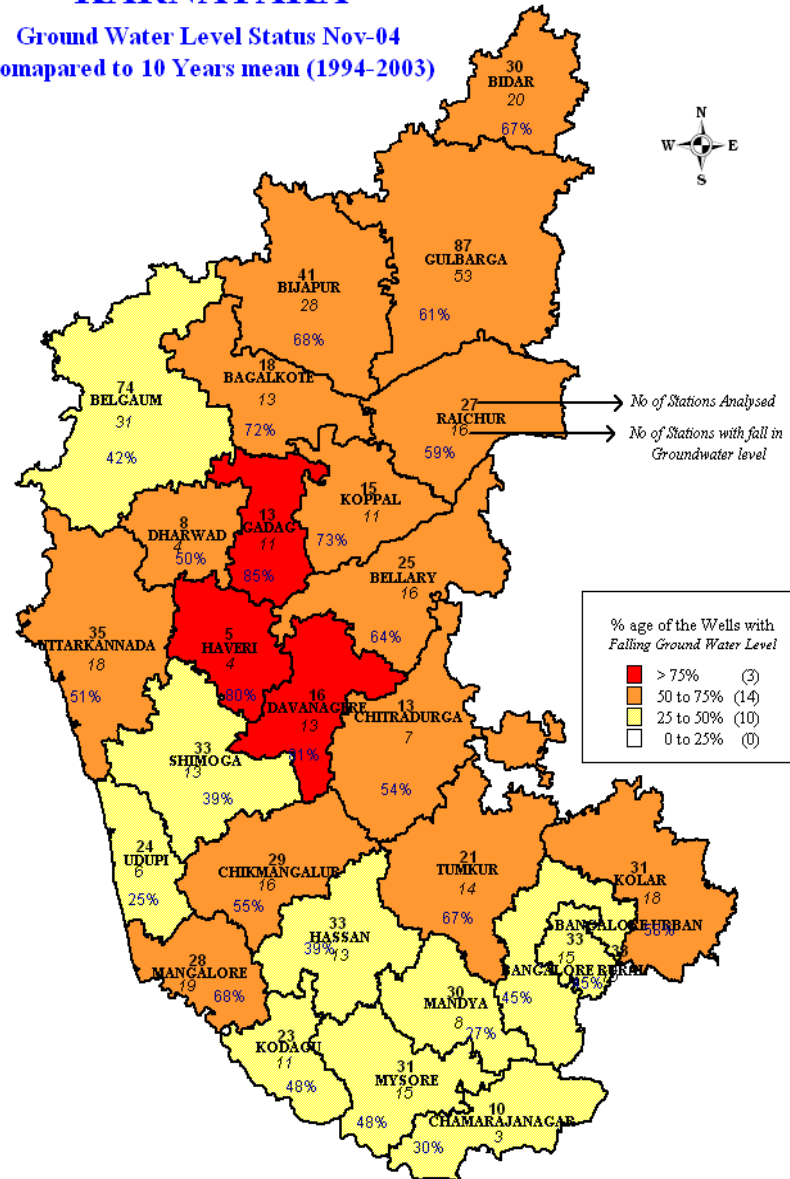
**Water table** is the average water level of an aquifer

**Fluctuation of water level** (before & after monsoon) is used in estimating the balance – recharge – withdrawal

**Pump test** is conducted to determine aquifer characteristics. To determine the transmissivity and storability of an aquifer and the capacity of a well supply.

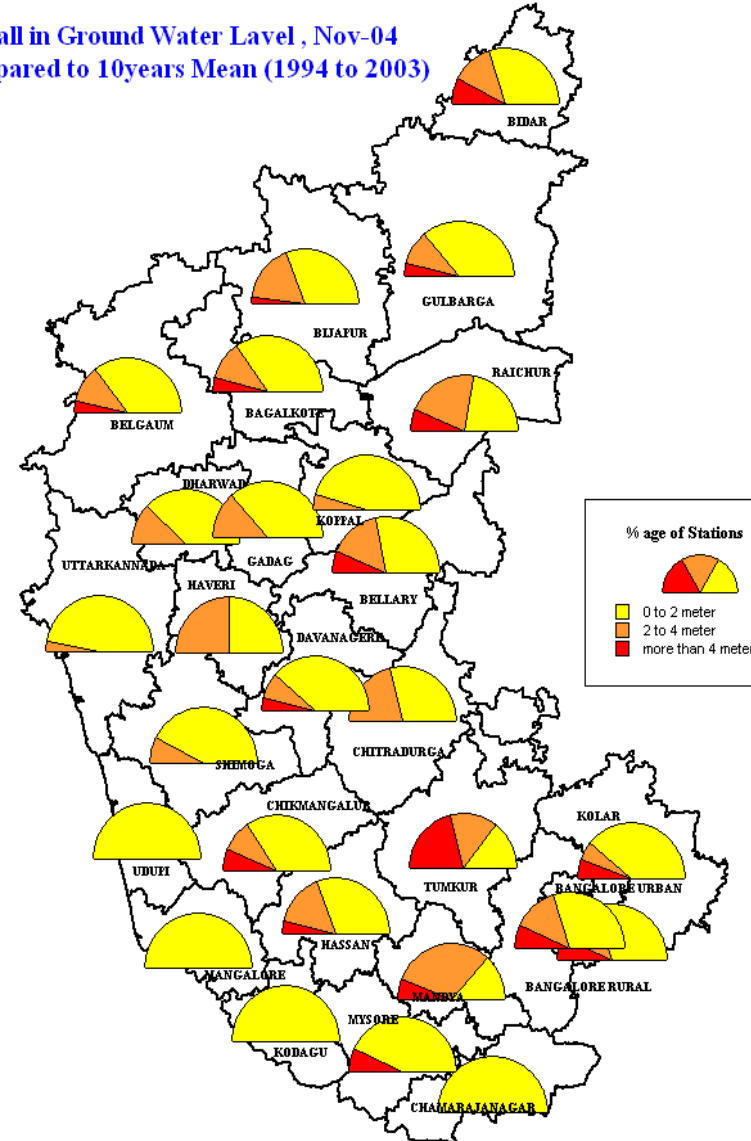




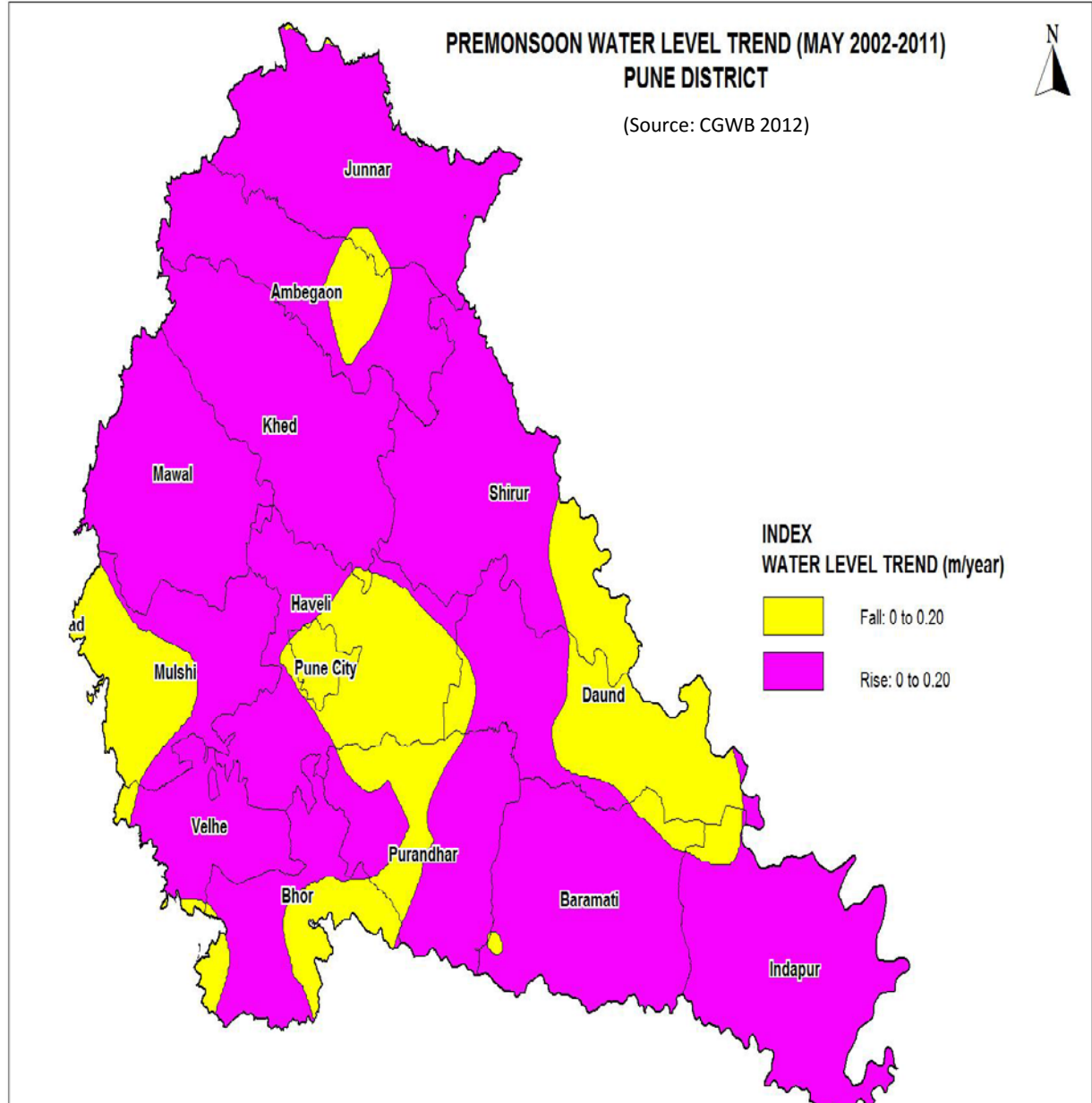
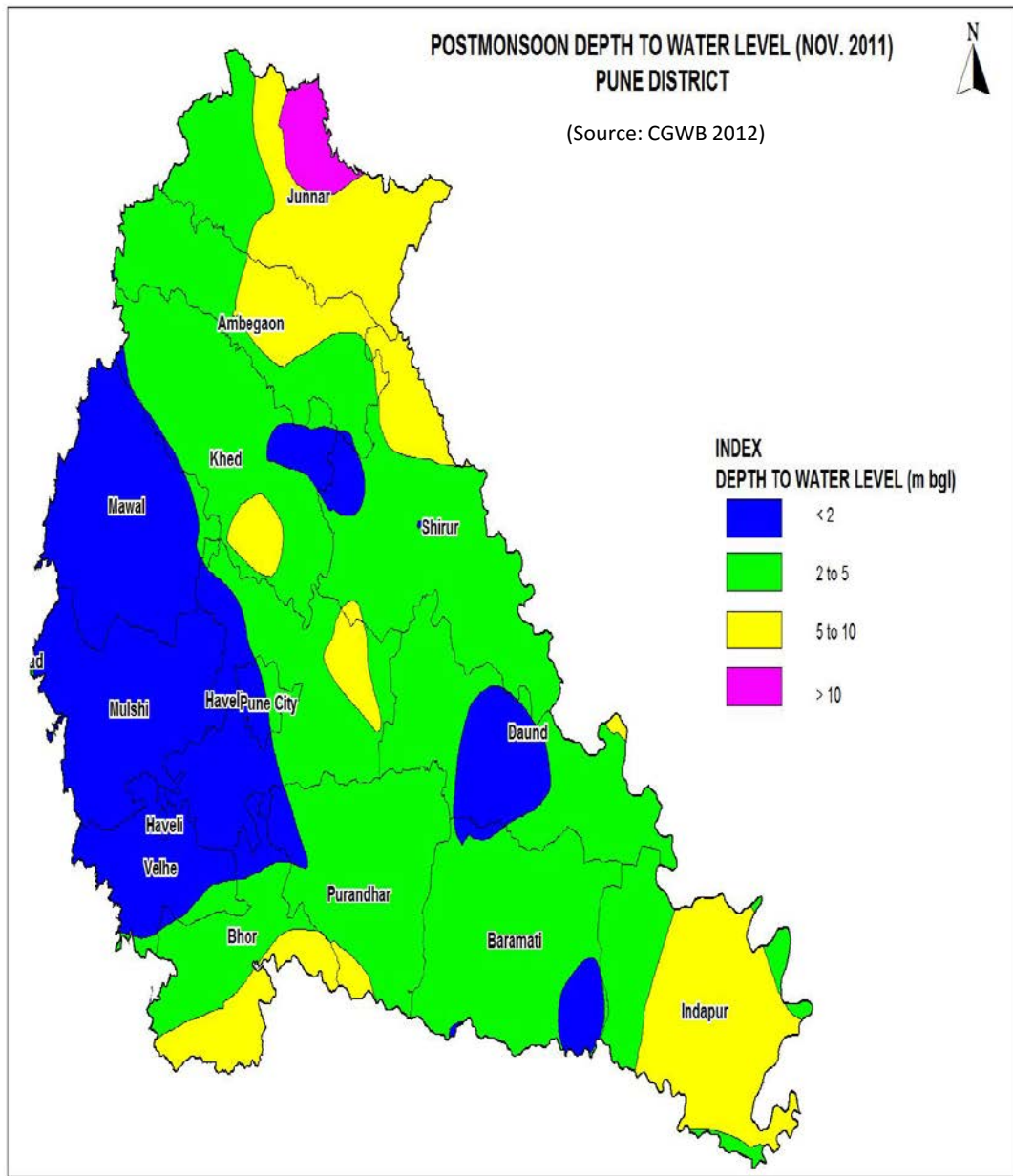


### *Drought Monitoring Cell*

**Fall in Ground Water Level , Nov-04  
Compared to 10years Mean (1994 to 2003)**



*Drought monitoring Cell*



### Formation

- Massive basalt poorly weathered/jointed with thin vesicular zone.
- Weathered and highly jointed massive basalt with thick vesicular zones.
- Weathered, fractured and jointed massive basalt with thick vesicular zone.
- Highly weathered and moderate to poorly jointed basalt

### Yield Range (l.p.m./day)

- 30-60
- 90-150
- 60-120
- 40-80

### Elevation Range (m, a.m.s.l.)

- 787-838
- 721-787
- 651-721
- 560-651

**Thank you**