



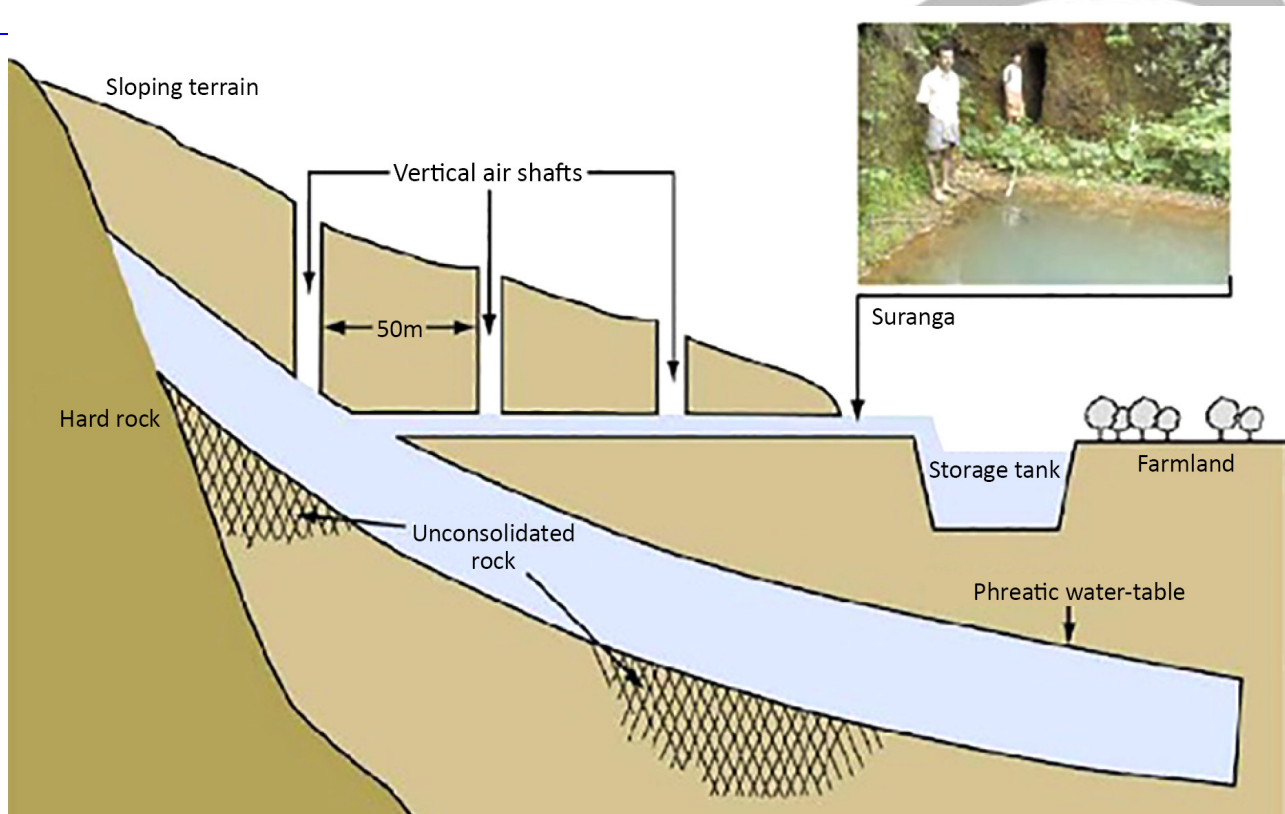
# Surangam System

## Why in News

The **Karez System of Afghanistan is in threat** whereas a **similar system named Surangam in South India is thriving**.

- Surangams resemble the karez System both in structure and spread.

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## Key Points

### ▪ About Surangams:

- The surangam or suranga is **usually found in northern Kerala and southern Karnataka**.
- Surangam is basically **a tunnel dug through a laterite hillock from the periphery of which water and moisture seeps out**.
- Surangams are **similar to Qanats** which once **existed in Mesopotamia and Babylon around 700 Before Common Era (BCE)**. By 714 BCE, this technology had spread to Egypt, Persia and India.
- **Qanats** are underground tunnel systems that bring infiltrated groundwater, surface

water, or spring water to the earth's surface using only gravitational force.

- This system has been very effectively **used for domestic and agriculture purposes in dry areas of northern Malabar.**
- Some people believe the surangam is indigenous and a likely origin of the suranga system refers to **18 Karhada Brahmin families** that had been moved to the Kasargod area from modern-day Maharashtra in the 17<sup>th</sup> century under duress.

▪ **Karez System:**

- The karez system is a legacy of its Persian cultural moorings. It has suffered **extensive damage in 43 years of war** and stares at an uncertain future under the [Taliban's](#) second regime.
- Karez is **a water harnessing technology in which groundwater is brought to the surface** by a tunnel.
- In this system, **no mechanical pump or lift is used.** Gravity alone brings the water from the underground source.
- The technology originated in **Persia/Iran and was widely used during the medieval period.**

Sr No	Ecological Region	Traditional Water Management System
1.	Trans - Himalayan Region	Zing
2.	Western Himalaya	Kul, Naula, Kuhl, Khatri
3.	Eastern Himalaya	Apatani
4.	North Eastern Hill Ranges	Zabo
5.	Brahmaputra Valley	Dongs / Dungs/ Jampoies
6.	Indo-Gangetic Plains	Ahars - Pynes, Bengal's Inundation Channels, Dighis, Baolis
7.	The Thar Desert	Kunds, Kuis/beris, Baoris / Ber/ Jhalaras, Nadi, Tobas, Tankas, Khandins, Vav/Bavadi, Virdas, Paar
8.	Central Highlands	Talab, Bandhis, Saza Kuva, Johads, Naada/Bandh, Pat, Rapat, Chandela Tank, Bundela Tank
9.	Eastern Highlands	Katas / Mundas / Bandhas
10	Deccan Plateau	Cheruvu, Kohli Tanks, Bhandaras, Phad, Kere, The Ramtek Model
11	Western Ghats	Surangam
12	West Coastal Plains	Virdas
13	Eastern Ghats	Korambu
14	Eastern Coastal Plains	Eri / Ooranis
15	The Islands	Jack Wells

**Source: DTE**

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