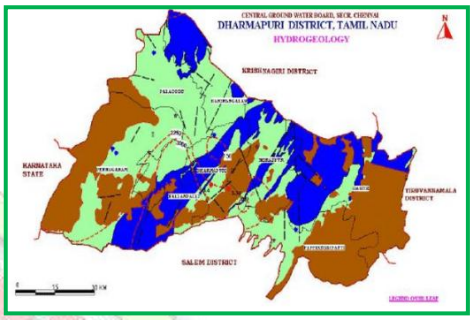
Agri Articles
(e-Magazine for Agricultural Articles)
Volume: 04, Issue: 01 (JAN-FEB, 2024)
Available online at http://www.agriarticles.com

Overview of Wells in Dharmapuri District

(*Saranya M)
Agricultural Engineering College and Research Institute,
Tamil Nadu Agricultural University, Coimbatore
*Corresponding Author's email: saranyamuthuvel8@gmail.com

Abstract

Dharmapuri, located in Tamil Nadu, India, faces a semi-arid climate with a dependence on groundwater resources for both domestic and agricultural purposes. Therefore, various types of wells have been traditionally used and continue to be relevant in the present day. Here's a breakdown:



Traditional wells

Dug wells: These are the most common and ancient type, manually dug to reach the groundwater table. They are typically 3-10 meters deep and lined with stones or bricks. Their use has declined due to high labor costs and limited water availability in deeper layers.

Kalyanis (stepwells): These are elaborately carved structures with descending steps leading to the well at the bottom. They served as a community water source and gathering place, but their construction has ceased in recent times.

Modern wells

Borewells: These are drilled deep into the ground, reaching deeper aquifers. They are more efficient than dug wells, yielding higher water volumes, but require drilling equipment and are expensive.

Open wells with pumps: These are existing dug wells or kalyanis equipped with electric or manual pumps to draw water. They are a cost-effective solution for accessing deeper water without extensive drilling.

Types of wells used nowadays

The choice of well type in Dharmapuri today depends on various factors like:

Depth of water table: Dug wells are suitable for shallow water tables, while borewells are needed for deeper ones.

Water demand: Borewells are preferred for high water requirements, while dug wells suffice for domestic use.

Cost: Dug wells and open wells with pumps are cheaper than borewells.

Land availability: Dug wells require more surface area compared to borewells.

Therefore, a mix of traditional and modern wells continues to be used in Dharmapuri, adapted to specific needs and circumstances.

Conclusion

The type of well also influences water quality. Dug wells and open wells are more susceptible to contamination, while borewells drawing from deeper aquifers have better water quality. Government initiatives and regulations play a role in promoting sustainable groundwater management and preventing over-extraction.