

## **Hard Factor: Dharapuram Water Crisis**

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**Dharapuram**

### **Abstract**

Dharapuram is a Municipality in the Tirupur district of Tamilnadu. The population of Dharapuram is 56007. The total *Firka* of Dharapuram is 7 and it's having 77 villages. In ancient times it was known as *Rajarajapuram* and it was the capital of *Kongu Nadu* under *Kongu Cholas*. *Dharapuram* lies on the bank of *Amaravathi* River. Facts about *Dharapuram* water scarcity. Dharapuram is one of the least rainfall areas of Tamilnadu . It comes under the semi arid region in Tamilnadu state. The people of *Dharapuram* over exploiting of groundwater for both household and agricultural purpose. Most of the factories, schools, government offices are spending huge money for either buying or for purifying water for drinking and cooking purpose. A sample survey conducted in Aurobindo Vidhyalaya School (CBSE), showed that out of 800 students' homes, 578 students are having bore well for both agriculture and household purposes. The survey also shows that groundwater quality is showing declining trends throughout many parts of *Dharapuram*. The preference for water intensive agriculture with the growing population, is putting enormous pressure on the fragile freshwater resources in *Dharapuram*. Growing water scarcity problems pose serious threat to agriculture, social sustainability and economic growth of the *Dharapuram* municipality. Pollution of groundwater due to indiscriminate disposal of industrial effluents and municipal wastes in *Amaravati* River is a major concern in *Dharapuram*.

**Keywords:** Water crisis, *Dharapuram*, *Amaravathi* River, Tamilnadu, Semiarid, Groundwater, *Aurobindo Vidhyalaya School*, Water Conservation, Rainwater Harvesting.

## Introduction

Tamil Nadu State is endowed with limited surface and ground water resources that need to be systematically developed and properly utilized adopting new approaches for the overall development of the State. The occurrence and distribution of rainfall in the State is highly erratic. As the recent desperate protest by Tamil Nadu farmers at Delhi's *Jantar Mantar* attempted to highlight, the Tamilnadu state is in the grip of severe drought. To draw attention to their terrible plight, the protesters stuffed live rats into their mouths, stripped naked outside Prime Minister Narendra Modi's home and drank their own urine.

Tamil Nadu's agrarian crisis has been exacerbated by the fact that the 2016 retreating Northeast monsoon, when the state receives most of its rainfall, was the worst in 140 years. The situation is so bad that more than 250 Tamil farmers have either died or committed suicide.

As can be seen, Tamil Nadu is facing acute water shortage, with 81% less water in its reservoirs than its 10-year average. The water level in its major reservoirs is at just 6% of their total capacity. And it is unlikely that the situation will improve soon. Already, Karnataka has refused to release water from the *Cauvery* River, which the two states share, to Tamil Nadu, saying that it has barely enough to meet its own needs. Last year, the tussle over the Cauvery River had led to protests, *Bandhs* and violence in both states.

Tamil Nadu is spending 976.76 crore in its cities and towns to tackle the severest water shortage in over 140 years, said the Minister for Municipal Administration, SP Velumani. In addition, in rural areas drinking water projects estimated at Rs 703 crore are being taken up; the government is spending 98.57 crore on refurbishing 1,898 water

resources structures; 1,337 new bore wells and drought relief work are being taken up at a cost of ₹ 65.35 crore; 15 million litres of water is being distributed daily through water tankers in cities and towns; and 1,565 million litres of water is being supplied through 553 integrated water supply projects benefiting 4.21 crore people.

## **DHARAPURAM**

Dharapuram is a Municipality in the Tirupur district. The population of Dharapuram is 56007. The total *Firka* of Dharapuram is 7 and it's having 77 villages. In ancient times it was known as *Rajarajapuram* and it was the capital of *Kongu Nadu* under *Kongu Cholas*. Dharapuram lies on the bank of *Amaravathi* River. Dharapuram Municipality was promoted to first grade municipality on May 6, 1983 when Tirupur was a township. Major development in Dharapuram is Agriculture & Textile Trades. In ancient (850 A.D) times, Dharapuram town was part of *Chera & Kongu* Country. In 1000 A.D. - 1275 A.D. Dharapuram was renamed as *Rajarajapuram* and was made the Military and Political Headquarters of *Cholan* capital. From 1276 A.D. the *Pandyan* empire took control of *Rajarajapuram*. A Pandyan ruler Veerapandian made Kalingarayar, a Kongu chieftain the Prime minister of the Pandyan Empire.

## **FACTS ABOUT DHARAPURAM WATER SCARCITY.**

- One of the least rainfall areas.
- Comes under the semi arid region in Tamilnadu state.
- Over exploitation of groundwater.
- Most of the factories, schools, government offices are spending huge money for either buying or for purifying water for drinking and cooking purpose.

- Large number of bore wells. A sample survey conducted in *Aurobindo Vidhyalaya School* (CBSE), showed that out of 800 students' homes, 578 students are having bore well for both agriculture and household purposes.
- Groundwater quality is showing declining trends throughout many parts of Dharapuram
- The preference for water intensive agriculture with the growing population, which is about to touch the Lakh mark, is putting enormous pressure on the fragile freshwater resources in Dharapuram.
- Growing water scarcity problems pose serious threat to agriculture, social sustainability and economic growth of the Dharapuram municipality.
- Lack of awareness related to water conservation.
- Many government buildings, factories, schools and houses have not even started water conservation methods and roof top harvesting.
- 80% peoples were engaged directly or indirectly in primary sector
- The presence of minerals in the formation bearing water. Several parts of Dharapuram having saline groundwater.
- Due to over extraction, the level of fluoride, nitrates and arsenic in the groundwater is above the permissible limits. Increased human activities directly contaminate the groundwater.
- Pollution of groundwater due to indiscriminate disposal of industrial effluents and municipal wastes in *Amaravati* River is a major concern.
- Intensive use of chemical fertilisers in farms and indiscriminate disposal of human and animal waste on land result in leaching of the residual nitrate and potassium causing high nitrate concentrations in groundwater.

**The average annual rainfall of Tirupur district.**

Actual Rainfall in mm					average Rainfall in mm
2013	2014	2015	2016	2017	
703.00	360.10	277.60	411.2	679.8	618.14

1. Average rainfall of Tamil Nadu is 998mm
2. Average rainfall of Tirupur 618.14mm
3. Average rainfall of Dharapuram 593 mm.

**Suggestions for solving the issues of water scarcity in Dharapuram**

1. Control *Amaravati* River pollution.
2. All the government building, schools, factories should start effective roof water harvesting.
3. Most of the rainwater harvesting pits is not proper. Most of us did it for name sake. Proper planning has to be done.
4. Roof top rainwater has to be collected and connected to nearby ponds or wells (Wells won't need that much space. Small area in public parks can be used for this purpose).
5. Restriction on water pollution, such as , water hungry industries like mineral water companies, tanning, dying, etc.,
6. Mandatory drip water irrigation for vegetables and plants.
7. Close all the cold drink companies and ban them from taking water from rivers.

8. Conduct awareness program in all villages about saving rain water and proper usage.
9. Domestic Rooftop rainwater Harvesting (DRWH) systems make a lot of differences to the lives of rural poor in Dharapuram.
10. Prepare literature for awareness and publicity.
11. Document and disseminate information on print and electronic media.

## Conclusion

Rainwater is an important and sustainable source of drinking water for dharapuram. But, users must be cautious about its safety and good practice. It is necessary that the rainwater be collected, stored and maintained in a safe way.

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