STRATEGY FOR INCREASING PER CAPITA AVAILABILITY OF WATER FOR GINGEE TOWN, TAMILNADU

Supported by
WATER TECHNOLOGY INITIATIVE (WTI)
DEPARTMENT OF SCIENCE AND TECHNOLOGY
NEW DELHI

CENTRE FOR WATER RESEARCH
SATHYABAMA UNIVERSITY, CHENNAI

In Association with
DHAN FOUNDATION, MADURAI, TAMILNADU

- Gingee is a heritage town bounded by mountains
- Located at a distance of 150kms from the State capital
- It is at a distance of 38kms north of Villupuram, 27kms west of Tindivanam and 38 kms east of
- Thiruvannamalai.
- Shankarabarani River flows on the eastern side of the town boundary

- The town falls under the geographical coordinates of 12°.15’N and 79°.25’E., above the Mean Sea Level of 30.45m
- Gingee has a mild slope from the west to eastern part of the town towards the Shankarabarani River
- The maximum temperature and the minimum temperature of the town are 36 to 30 C
- On an average the town receives 700mm of rainfall.
- As per 2001 census the town has a population of 21,251 persons and 4453 households.
- The projected population for the years 2011, 2021 $ 2031 are 25,439, 30,453, 36,456

PRESENT WATER SUPPLY

Ananthapuram Combined Water Supply Scheme : consists of four infiltration wells in Then Pennaiyar River - at

Nerkunram 55 kms from the

Town - estimated to supply 14.50 lakh litres of water daily, where as the town currently receives only 8.50 lakh lpd

Siruvadi Water Supply Scheme : Open well at Kothamangalam. Located at a distance of 6 kms; estimated to supply 1 lakh liters of water

ON GOING SCHEME: Water Supply improvement scheme for the Town Panchayat at an estimated cost of Rs.14.64 crores proposed for the ultimate year of 2040 covering an

estimated population of 42,863. Proposed for 3 nos of infiltration wells are created at Nerkunram at Thenpennaiyar River and OHT's of 1 LL capacity each at Sakkarapuram and Sirkadambur and an OHT of 2 LL capacity at Santhaithoppu are proposed.

PROPOSED STUDY

- ❖Assess the present status of per capita water availability
- ❖Study the tanks in the study area
- ❖Study the surface runoff pattern in the study area
- ❖Study of water table conditions and fluctuations in the study area
- ❖Identify favourable zones for recharge in the study area
- ❖Recommend strategies to augment surface water and groundwater

METHODOLOGY

- Preparation of Maps
- Surface Water Investigations
- Subsurface Study
- Identification of strategies for augmentation of per capita availability:

ROLE OF DHAN FOUNDATION

- Primary and secondary data collection related to the study
- Household survey to assess the per capita availability, and dependence on various water sources
- Street survey to identify water logged areas
- Survey on the location of culverts and surface run off flow directions
- Mapping of the surface water bodies and their characteristics in and around Gingee
- Capturing communities perception on water supply status, needs, augmentation strategies etc., for a sustainable water supply system.

DELIVERABLES OF THE PROJECT

- Measures to augment the inflow into the tanks
- Measures for In stream flow augmentation
- Locations and structures for artificial recharge
- The estimated potential from
  - Surface water
  - Groundwater
  - Diversion from the stream

Thank you