

Water Security: Fishermen of Foreshore, Chennai

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AIM OF THE RESEARCH

To study the climate resilience & water security of the fisherman residing along the coast of Chennai with a focus on the communities residing in the Foreshore Area.

OBJECTIVES

- To understand the water footprint, source dependency and quality of water consumed by the fishermen residing in the area of interest, their resilient practices and the effect of water security on public health.
- To understand the underlying cause of the reduced water security with respect to the development in the city.

Water Sustainability Assessment of Chennai Metropolitan Area

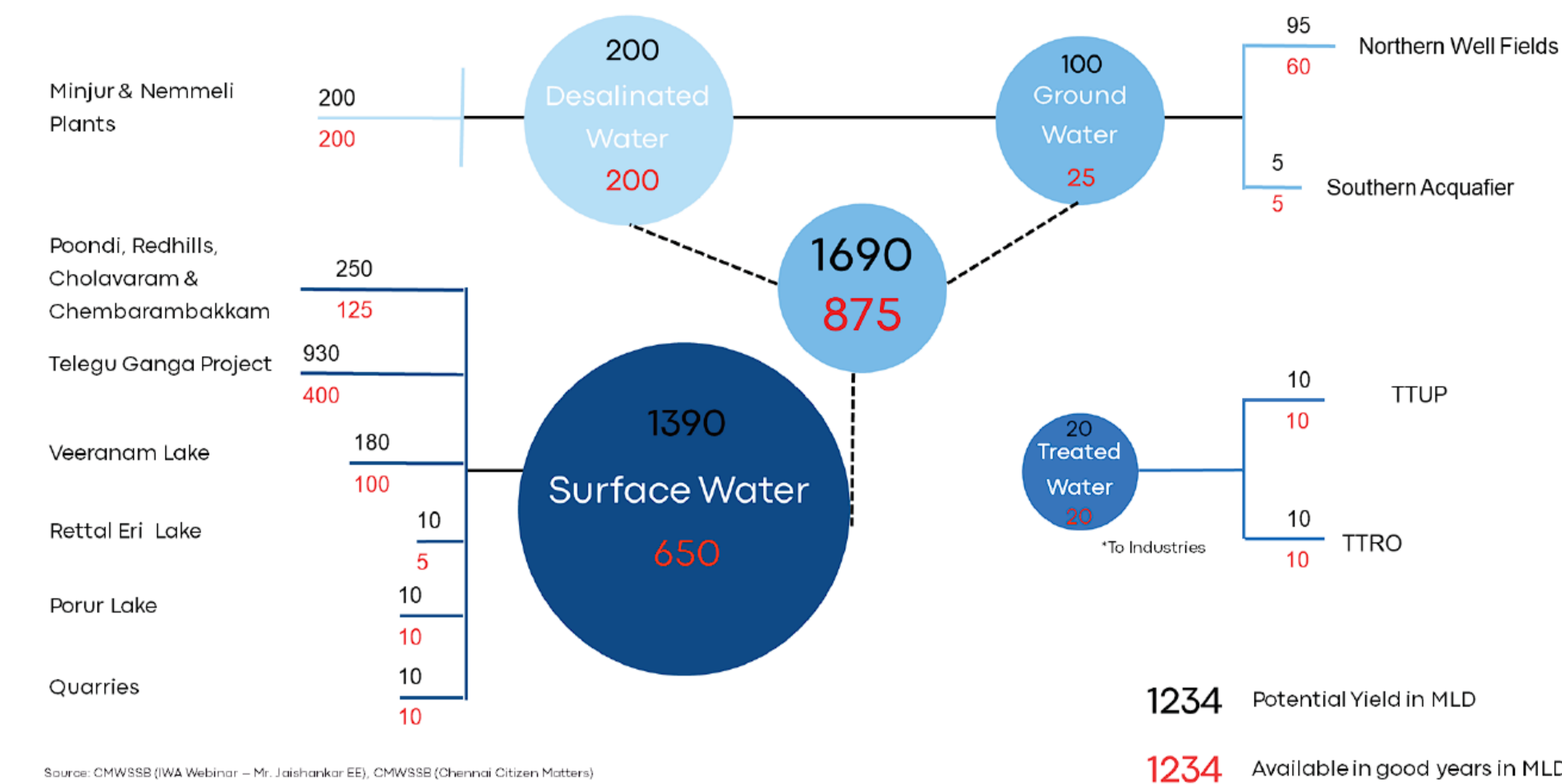
The water assessment by TERI highlights that, CMA is facing a variety of water related problems due to its rapid built-up expansion, increasing population and water demand, decreasing catchment area and waterbodies, pollution, water infrastructure issues and changing climate. This necessitates the implementation of alternative water sources, water-efficient technologies, urban water planning and management boards, and other adaptation strategies to ensure adequate and equitable water supply.

Second Master Plan for Chennai

The second master plan's water and infrastructure components are significant to this research, hence, the same has been understood within the scope of the Chennai Metropolitan Area (CMA). The chapter four on infrastructure in CMA dictates the provision for potable water supply in the region across the city, municipal towns, developing urban local bodies and upcoming areas.

The Second Master Plan of Chennai does not highlight the urgent requirement to prevent the depletion of groundwater due to rapid unregulated development. Further, the encroachment of water bodies and reduction of the Pallikaranai Marshland due to authorized and planned development is not tackled, even though it has a significant effect on the water resources of Chennai. The Master Plan highlights the gap in supply, demand, equity and infrastructure but the juncture of rapid development and protection of water resources is not tackled through the Second Master Plan of Chennai.

CHENNAI & ITS WATER - TODAY



Source: CMWSSB (IWA Webinar - Mr. Jaishankar EE), CMWSSB (Chennai Citizen Matters)



SRINIVASA PURAM



FORESHORE ESTATE

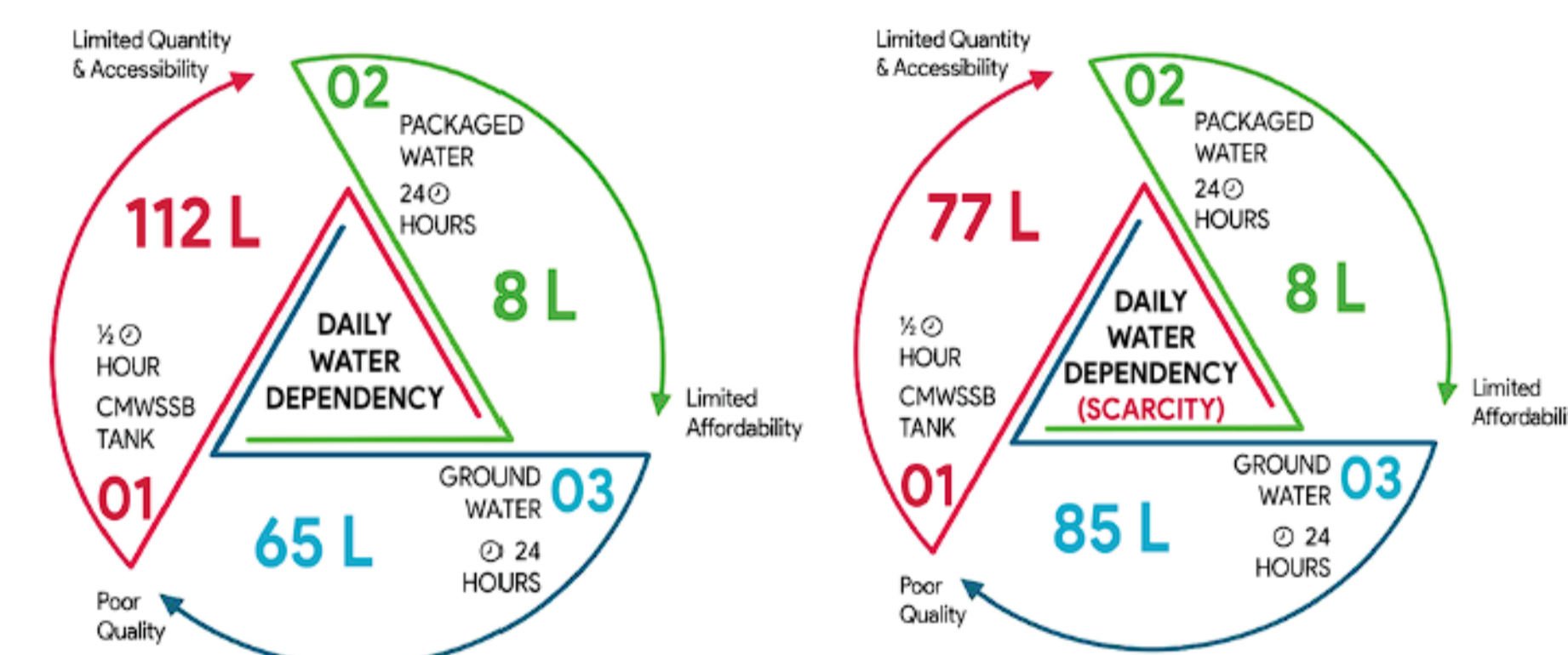


SRINIVASA PURAM



WATER SECURITY, PUBLIC HEALTH & CLIMATE RESILIENCE FOR FISHERMEN COMMUNITY IN FORESHORE, CHENNAI

SRINIVASA PURAM - NORMAL & SCARCITY SCENARIO



LOW VULNERABILITY PERCEPTION AVERAGE VULNERABILITY PERCEPT HIGH VULNERABILITY PERCEPTION VERY HIGH VULNERABILITY

RECOMMENDATIONS

WATER, FORESHORE, CLIMATE, ULB & FISHERMEN

The recommendations presented below are targeted to be localized resolutions. Infrastructure for the recommendations would be provided by the Urban Local Bodies, yet the citizens would be self-dependent to ensure the continuation of the resolutions, hence increasing dependability and decentralization. While the recommendation of Lifeline Water Supply would be solely dependent on the Urban Local Bodies.

| | STRATEGY | | | | | |
|-----------|---|-------------------------------------|--|---|--|---------|
| IMMEDIATE | RISK MICRO-ZONING FOR VULNERABLE COMMUNITIES | INFRASTRUCTURE INDEX | LAND REPLACEMENT POLICY - GOVERNMENT | LAND REPLACEMENT POLICY - CITIZENS | BLUE TRIBUNAL AUTHORITY | GRADUAL |
| | CLIMATE CHANGE INFORMED URBAN PLANNING FOR THE VULNERABLE COMMUNITIES | INFRASTRUCTURE INFORMED DEVELOPMENT | GOVERNMENT LED SUSTAINABLE B.G.I. & LAND DEVELOPMENT | CITIZEN LED SUSTAINABLE B.G.I. & LAND DEVELOPMENT | UNIFYING CENTRAL DISTRICT WATER AUTHORITY - WATER BODIES, SUPPLY, CENSUS, SOURCING, ETC. | |
| IMPACT | | | | | | |

WATER & DEVELOPMENT AUTHORITY

The requirement of centralized measures by the development authority arises to provide effective long term resilient water security. These would be primarily focused on water resource development, conservation, and resilient development. The aim is to cultivate sustained and sufficient water resources, so that focus can shift to improved quality and service, rather than demand fulfilment.

| | STRATEGY | | | | | |
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