



DECADE PROGRAMME IN TAMIL NADU

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1. PRELUDE

The Tamilnadu Water Supply and Drainage (TWAD) Board is an organisation in Tamilnadu State (INDIA) created by an Act of the State Legislature as an autonomous body on a statutory footing vested with the task of provision of water supply and sewerage facilities in the entire State excepting the Madras Metropolitan area.

Tamilnadu is one of the 22 States in India with a population of 48.30 million as per the provisional 1981 census figures. Of this, 21.30 million live in 740 Urban towns. The rural population of 27.00 million is scattered in about 12600 villages comprising about 47000 habitations in 376 Panchayat Unions.

In the Urban Sector, about 75 percent of the urban population is covered by water supply while only 32 percent is covered by sewerage facilities. In the Rural Sector, about 22 percent of the rural population is covered by water supply while the coverage under rural sanitation is practically nil. Though the global goal is safe water and adequate sanitation for all by 1990, India has consciously fixed the target for the International Drinking Water Supply and Sanitation Decade Programme at 100% coverage in Urban and Rural Water Supply, 80% coverage in Urban Sewerage and 25% coverage in Rural Sanitation.

Based on this, the following financial assessment is projected by the TWAD Board to achieve the objectives of the Decade Programme.

	<u>Rs.in million</u>
(a) Water supply to all the people in the Urban towns.	2950
(b) Sanitation with full sewerage and treatment to benefit 100% of all Class I towns (Population more than 1,00,000) and low cost sanitation methods to benefit about 50% of the other Urban towns making the total Urban population to be benefitted as not less than 80%.	1990

(c) Water supply for all the Rural habitations. 4170

(d) Sanitation for 25% of the rural population with economical and safe sanitary toilets for the disposal of human wastes. 350
1 Sterling = Rs.17.20 (From 2-11-81) 9460

2. URBAN SCHEMES IN TAMILNADU

Water supply schemes in Tamilnadu were initiated about a century ago. The first two water supply schemes in the State were in Madras, the capital city, and in Uthagamandalam, the well known hill station both completed in 1874. Subsequently by 1900, water supply schemes were provided in four more towns and by the time of Independence in 1947 Water Supply was available in 45 towns. Soon after Independence in 1947, a Water Supply and Drainage Committee composed of Legislators and Officials was set up in the State to go into the progress of water supply and sanitary drainage in the State. Since then during the three successive five year plans, work on water supply was carried out based broadly on the priority list drawn up by the Committee giving recognition to the importance of water supply to different towns in the State depending on their proneness to water borne diseases, scarcity of drinking water, population, religious commercial and historical importance etc.

The TWAD Board came into existence on April 14, 1971 and took over the duties and responsibilities of the erstwhile Public Health Engineering and Municipal Works Department of the Tamilnadu Government.

Of the 740 towns in the state, 222 towns have been provided with water supply and works relating to provision of water supply to 70 towns are in progress. Thus 448 towns with a population of 4.88 million (1981) remain to be provided with water supply. Augmentation of water supply in respect of 72 towns is also to be taken up. The total investment on Urban Water Supply Schemes in Tamil-

nadu excluding Madras city from commencement to date is of the order of Rs. 1218 million.

An unfortunate factor impeding water supply works in Tamilnadu has been the poor water resources position in the State. The average rainfall in the State is only about 100 cm. There are only a few perennial rivers in the State. Also in the case of most rivers, irrigation rights have developed to a very great extent leaving little water to be tapped for Public Water Supply.

Tamilnadu is not rich in ground water sources either. Deep aquifers which can yield potable water in substantial quantities for Urban Water supply have been found only near the coastal belt. Most of the inland areas of the State have hard rock substratum which can yield only limited quantities of water.

The poor water resources of the State have necessitated distant sources for many water works. Inadequate yield has made it necessary for several towns to depend on more than one source of water supply.

The lack of adequate water sources within reasonable distances has also induced an unfortunate tendency in the State to design water supply schemes for low rates of supply in an attempt to keep down costs.

The water supply schemes in operation in the State may be classified on the basis of sources of supply as Surface water from perennial rivers, Impounded water across rivers, in artificial basins or storage reservoirs, Infiltrated surface water from perennial rivers, Subsurface water from seasonal rivers and Ground water from deep or shallow aquifers. The water quality position in the State has been fairly satisfactory.

Regarding sewerage schemes, only 20 out of 740 towns are provided with underground sewerage facilities. It is proposed to take up underground sewerage schemes in the case of class I towns (towns with a population of over 100,000) in the first instance. There are twenty such class I towns in the State. Of these, sewerage schemes have been completed or works are in progress in respect of 3 class I towns. Hence provision of underground sewerage facilities in respect of the remaining twelve class I towns is contemplated during this Decade. Regarding the remaining towns, low

cost sanitation facilities are proposed. The report of the studies conducted by UNDP on its Global Project is expected shortly. The technical aspect of the low cost sanitation will be mainly based on the result of studies of the Global Project Team.

3. RURAL SCHEMES IN TAMILNADU

The rural habitations in the State of Tamilnadu are categorised under six types depending upon the nature of source available as tabulated below:

Classi- fica- tion.	Definition	No. of habi- tati. ons.	Popu- lation (1931) in million
Type-1	Habitations with no source within the habitations.	3454	0.93
Type-2	Habitations where the source yield only non-potable water.	1966	1.02
Type-3	Habitations where water is potable but source is not perennial.	6487	2.28
Type-4	Habitations where water is potable and perennial but the source is either privately owned or unprotected.	4955	2.17
Type-5	Habitations where there is no good source within the habitations but an alternative good source is available within 1 km.	1107	0.36
Type-6	Habitations where there is good source available.	29106	20.06
Total.		47075	26.87

Water supply to all the habitations under types 1 and 2 is almost completed. Works on the remaining types of habitations are taken up in stages with due preference to the priority on the need of water. The Government of Tamilnadu has evolved the self sufficiency programme by which it is proposed to provide water supply to all the habitations within the sixth Five Year Plan period itself.

Regarding Rural Sanitation, it is to be stated that at present there is no co-ordinated Rural Sanitation programme in Tamilnadu. Hence setting up of an agency solely responsible for tackling the problems in this sector has to be the main objective. Planning, programming and implementation of the facility will have to be geared up during the Decade so as to achieve the target fixed for the coverage.

4. DECADE TARGET AND THE TWAD BOARD PLAN

A. Financial

In the words of Mr. James P. Grant, Executive Director of the UNICEF, the goal of the Decade is a reasonable and dischargeable commitment. It is an affordable and a practical commitment. It is an imperative humanitarian and developmental commitment.

If we look into the history of this sector during the last 3 decades, the progress made in 1971-1990 in this sector is many times more than what was done during the previous 7 decades. Till 1970, only 133 towns were provided with the facilities whereas during the decade 1971 to 1980 the facilities were extended to 89 towns.

Therefore, it will not be a surprise if we could provide safe drinking water to all the people by the end of the decade provided, the political will and the community participation are encouraging. The capital investment for this sector in Tamilnadu, during the last 5 years (1975-76 to 1979-80) was Rs. 92 crores. The revised 6th Five Year Plan now finalised has provided Rs. 180.75 crores. In order to implement the programme successfully, the tempo of investment in this sector will have to be increased further. It is hoped with confidence that the aid from Bilateral and International Agencies may fill the gap, if any, to achieve the target with the available resources in 6th and 7th Five Year Plans and the first year of the 8th Plan. Tamilnadu has approached the World Bank for loan assistance for executing Water Supply Schemes in medium sized towns and also improvements to the existing schemes in major towns and low cost sanitation facilities for small towns.

B. Material

A major portion of the cost of Water supply and Sewerage Schemes will be represented by materials such as pipes, specials, valves, pumps,

jointing materials etc. The experience in the State is that more than 70 percent of the cost of any such scheme is accounted for by materials used therein.

Among materials, the most important are pipes like Cast Iron, Asbestos Cement, Prestressed Concrete, Reinforced Cement concrete, Poly Vinyl Chloride etc. Stoneware pipes will be required in sewerage schemes. The procuring of these materials itself is a challenging task under present conditions and in the quantities involved. To achieve some stability in prices, long term contracts or arrangements may be necessary. The Central Purchase and Stores Organisation (CPSO) now in existence in TWAD Board will be able to meet this challenge. The State and Central Government may endeavour to set up factories to meet the demand. Also action may be taken to increase the production capacities of the existing factories and productivity of the labour force. The Government should also come forward to help in procuring the pipes either within the country or by importing.

The availability of essential materials like Cement and Steel is a pre-requisite. The State Government and Central Government should give priority in allocating these materials required for the Urban and Rural Water Supply Programme.

C. Man Power

The Personnel available at present may be sufficient for the top and middle level to manage the programme for 1981-90. But the lack of trained personnel in the lower cadre is a constraint that has to be overcome. For this, the inputs to Technical Institutions have to be increased and junior level personnel should be given necessary training in technical and accounting during their recruitment.

To maintain or improve project performance, information should be obtained from regular monitoring of the project performance as a routine activity of the project management system. Insights from both monitoring and evaluation can assist in the preparation of detailed project reports and their appraisal. Monitoring and evaluation of project performance should receive high priority in order to have effective and real appraisal of the project.

A massive training programme for all levels of personnel should be undertaken for the successful implementation of the Decade Programme.

5. CONCLUSION

India is the first among the developing nations which has made an impressive beginning to tackle the problem immediately after the resolution by the United Nations. A rapid assessment of the situation was undertaken by the World Health Organisation with the help of Government of India for a clear picture to emerge in respect of the problems. The sector study in the field of Water Supply and Sanitation was also carried out by the State of Tamilnadu.

A Global effort to bring safe water and sanitation to all people in developing countries within the next 10 years was launched by the U.N. General Assembly on 10th November 1980 when it adopted unanimously a resolution to that effect. The resolution proclaimed 1981-1990 as 'The International Drinking Water Supply and Sanitation Decade' and called upon member states to commit themselves to improve substantially the standards of drinking water supply and sanitation by 1990 to rid the World of water borne diseases that claim millions of lives. It also called upon them to develop policies, set national targets, accord high priorities for water and sanitation projects and strengthen the institutional framework for carrying out the programme. The United Nations agencies, the United Nations Children's Fund, the World Health Organisation and the United Nation Development Programme affirmed they would co-operate in making the Decade purposeful.

The Minister for Works and Housing and Parliamentary affairs, Government of India, has pledged the country's full support to the aims of the Inter-National Decade 1981-90 for Drinking Water Supply and Sanitation launched by the United Nations on 10th November 1980. The Minister for Health,

Government of Tamilnadu launched the Decade Programme on 24th June 1981 and affirmed Tamilnadu's faith in fulfilment of the goal.

The general goal of the decade is to greatly improve the water and sanitation service enjoyed by the population of the developing countries. The particular goal (ratified at the United Nations World Water Conference at Mar del Plata in 1977) is to provide all the World's population with adequate access to safe water and to hygienic latrines by 1990. The Indian goal will be to provide adequate access to reasonably safe water to all the population and easy access to sanitary toilets to sizeable portion of its population.