### **Coastal Salinity Prevention Cell**

Coastal Salinity Prevention Cell (CSPC), a joint initiative of Aga Khan Rural Support Programme (India), Ambuja Cement Foundation and Tata Trusts has been created as an institution visualized as a fulcrum to develop and strengthen various initiatives of government and civil society organizations. CSPC aims at addressing the issue of salinity, thereby enhancing the quality of life of the coastal communities of the State.

The key function of CSPC are (i) developing itself as the knowledge bank on issues related to coastal salinity in Gujarat; (ii) networking and developing linkages with the government and other agencies; (iii) Idea incubation and piloting of area-specific innovations and community approaches for addressing salinity related issues.



#### COASTAL SALINITY PREVENTION CELL (CSPC)

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Story of TWM Gujarat in 500 villages across 11 Districts of Gujarat from 2008 to 2018



Reduction in average TDS from 2500 to 1100 through Public Water Supply System

**Availability of Drinking Water** increased to 80% of Households



Saving in WaSH related medical expenses upto Rs 60,000











Significant increase in usage of Toilet from 5% to 95%

TWM's presence in 11 states of the Country







Over 63.4 million Indians don't have access to clean drinking water and 732 million don't have access to Toilets







#### **Tata Water Mission**

Water is the foundation of Life, the most essential need of every being. But today, India, along with the rest of the world, is facing challenges in providing safe drinking water to all citizens, especially those living in rural areas. On the one hand, there is severe scarcity of drinking water, deteriorating water quality, and depleting groundwater resources, on the other there are floods and seawater ingress, aggravating the crisis further. Tata Water Mission (TWM) is a programme initiated by Tata Trusts to tackle the water crisis with a multi-pronged approach. Under TWM, the Trusts support various initiatives in addressing water related issues.



**Drinking Water** 

Partnership with Water and **Sanitation Management Organisation (WASMO)** 

In partnership with WASMO, CSPC and local ISAs has facilitated development of sustainable drinking water and

# TWM in (Coastal) Gujarat

Imbalance between the ecology and economy in coastal regions has created serious problems for the life and livelihood of coastal population. One of these problems is ingress of salinity in to land and water resources on the coast. Gujarat State, with its more than 1600 Km of the coast, is suffering from this problem, and the coast of Saurashtra is affected maximum by this problem. A major consequence of this problem is the acute shortage of potable water in this region.

It required majorfocus on the drinking water and sanitationissues in the coastal salinity affected villages of Gujarat, a special initiative Coastal Areas DevelopmentProject (CADP) in different coastal districts

by the Water and Sanitation Management Organization (WASMO) and the Coastal Salinity PreventionCell (CSPC) was launched - with the financial support of Sir Ratan Tata Trust and Conrad N Hilton Foundation.

The project, which also involves the community and civilsociety organisations, was designed to ensureavailability of safe drinking water and sanitation facilities across 300 coastal villages, spread across 21 talukas of nine districts, namely Ahmedabad, Anand, Amreli, Bharuch, Bhavnagar, Jamnagar, Junagadh, Porbandar and Rajkot.

10000

Households across

250

villages are reached under the program



# Innovations with TWM in Gujarat

#### **Water Metering**

In Gujarat, village drinking water schemes are developed by the demand-responsive and community-managed approach. Exploring the economically sustainable solutions: Automated water metering system is found to be the alternatives through a pilot in Thordi village of Gir Somnath. There are 80 households (HHs) in the village and drinking water is supplied from the common resource of Panchayat to all the HHs through the individual based pipeline to every HHs. The meter installed at each HH has an automated system of sending information through SMS to every HH, village-based Pani Samiti and to CSPC about the quantum of water being used by the HH. To enable understanding the usage pattern, wastage if any and equitable distribution of water to tail end HHs and to levy charges as per the usage.

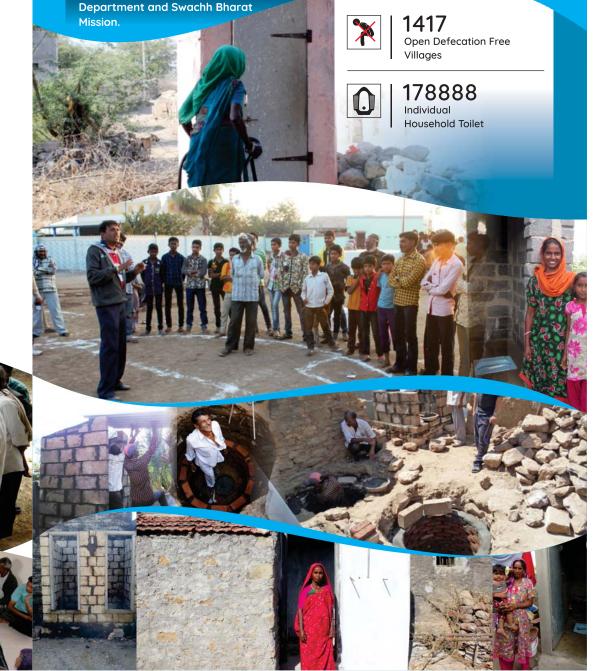
#### Panama Blue Ultrafiltration Unit

Sanitation

In partnership with Rural Development

The Panama Blue Water Treatment system is a gravity-based ultrafiltration unit which mitigates the issues of microbial contamination and turbidity in the drinking water. It does not require any electricity for operating, neither it requires any chemicals. There is no wastage of water or effluent like what is seen in Reverse Osmosis units. All it requires an overhead tank where the raw drinking water is stored and with gravity is passed through the ultrafiltration unit. The output water is microbial contamination free as well as free from turbidity.

TWM – Gujarat team has piloted this unit in one of the villages having 150 HHs who used to drink water from an open pond unsuitable for drinking. The Panama Blue unit has removed all possibilities of microbial contamination for drinking water reducing the occurrence of water-borne diseases to negligible today.



# **Behaviour Change Communication Campaigns**

The day long campaign follows multiple activities

- Scheduling Swachhta vote by students at School- the students put mark against the use of Toilet by their family members
- Engaging students with Games which conveys Health Practices and its importance
- The rally is carried out with students, teachers and BCC Supporting team
- Visiting the Households who have been marked not using Toilet by their child/children under Swachhta voting
- Invitation to Households for attending evening program and acknowledging the Samajdar Parivar who has constructed the Toilet and using it
- The mass is gathered at community hall/ common place of village and are shown Samajdar Parivar film
- Dialogue with community about the message of the Film
- People are encouraged to construct Toilet and give adequate guidance



#### **SWM**



There is no greater sight that seeing a clean village with no garbage or litter around. TWM team envisages undertaking Solid Waste Management (SWM) project to inculcate the habit of waste segregation at source and disposal at the designated spaces of the village. The aim is to keep health hazards at bay by focusing on overall cleanliness in the village.

#### MHM



There are age old taboos attached to menstruation. The menstruating females have to undergo lot of difficulties during their periodic cycles, which eventually leads to unwanted health issues. Through series of trainings and behaviour change communication, TWM aims to educate the menstruating women and the male counterparts about science of Menstruation, the hygienic practices associated with it, disposal of the menstruation waste and also to break the negative beliefs around it.

# Water Budgeting



The most essential resource- 'Water' is getting constantly depleted because there is huge mismatch in the demand and supply. TWM will undertake series of water budgeting exercises to enable the villagers to calculate the amount of water received from various sources like rains, groundwater, surface water, etc and amount of water gets utilized/exhausted in agriculture, domestic use, industrial use, evaporation, percolation, etc. Accordingly, the water management interventions will be designed towards equitable water balancing and usage in the village.

# **WASH** in Schools



TWM has plans to take up the interventions for repairs of dysfunctional Drinking Water Systems, repair of Toilets, and develop the habit of proper Hand Washing among the students.

The students will be provided by trainings and relevant IEC materials adept practices towards health and hygiene. It is foreseen that the seed of good behaviour sown in School with children, will have ripple effect with their family members followed by society at large.

# Controlling microbial contamination of drinking water at point of use



It is a known fact that the Drinking water gets contaminated most adversely at the point of use since the user does not store the water properly. This leads to consuming contaminated water which results in water borne health hazards especially for vulnerable members of the family. In order to control microbial contamination, TWM team has planned for conducting series of BCC interventions of safe storage and handling of water along with promotion of low cost water purifiers.