POLICY BRIEF

POLICY INPUTS TO PROMOTE TEXTILE WASTEWATER REUSE AND POLLUTION PREVENTION IN GUJARAT

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Textile “processing” broadly involves unit operations such as dyeing, printing, and finishing, and is highly water consuming. Textile clusters in the country have come up in proximity to rivers and groundwater sources. In Gujarat, clusters in locations such as Surat, Ahmedabad, Vadodara, Bharuch, etc. largely use surface water supplied from rivers and canals, occasionally supplemented by groundwater. In recent years, treated municipal sewage water has also been identified as a source of water for the industry.

Water consumption varies with technology and process efficiencies at individual units. Dyeing and finishing operations consume between 70 to 150 litres of water per kilogram of yarn, with the latter figure being attributed to older units/equipment. The process water is treated for pH and other basic parameters before releasing it to CETPs (Common effluent treatment plants). Some of the large businesses and mills have adopted ZLD (Zero Liquid Discharge) and recycle most of their wastewater internally.

Most clusters have a mix of processing units working on cotton and polyester. The Narol cluster in Ahmedabad has about 80-90 units, whereas the Pandesara cluster in Surat has about 100 processing units and 10 chemical manufacturing units. The clusters are usually catered by one CETP each, managed respectively by the clusters’ associations. Clusters where the CETP capacity has been exhausted, new units can come up only if they install ZLD, as no further effluent can be handled by those CETPs. Clusters that fall under GIDC (Gujarat Industrial Development Corporation) or municipal corporations receive centralized water supply from these authorities. Any shortfall in the water supply is usually managed with groundwater.

Several stakeholder consultations and meetings were organized in Gujarat by Centre for Responsible Business (CRB) with support from The Refashion Hub to gauge awareness on water reuse and wastewater treatment. Inputs were sought from stakeholders in the Gujarat government and industry, on the current scenario of wastewater reuse in the textile industry and what policies and incentives can bring a transformation. These can help promote textile wastewater reuse and overall water stewardship in the state.

The following points emerged from these discussions:
WATER REUSE-ORIENTED INDUSTRIAL SURVEYS

Survey businesses of different sizes to determine water treatment needs and suitable technology. Blanket regulations mandating a particular technology for all clusters or units should be avoided. Each textile processing unit and other industries would have varying needs, capabilities and opportunities—a survey can help understand the needs of the industry to move towards greater water reuse.

Gujarat Cleaner Production Centre (GCPC) has already undertaken extensive surveys on industries. These data sets can help formulate policies or offer better incentives for promoting water stewardship.

DECLARE WATER RECYCLING NORMS ACROSS INDUSTRIES AND OFFER INCENTIVES FOR IMPLEMENTING THE SAME

The government should declare recycling of up to 50% of textile wastewater or process water to be mandatory at least at the cluster level. Examples from Surat and Tirupur show that both regulations and business models based around treatment and recycling can be successful in curbing water pollution as well as conserve water. Stakeholder consultations should be done to understand what help businesses would require in achieving water recycling targets, both at individual and cluster levels. Document best practices and disseminate.

Policy hook: Scheme for Assistance to encouraging “Green Practices and environmental audit to MSMEs” – the eligibility criteria already mention industries that practice wastewater recycling at 50% at least.
The Amended-Technology Upgradation Fund Scheme should be augmented with state-level funds to include technology and equipment that can help with water treatment, recycling and reuse, as well as pollution prevention.

Policy hook: (Scheme for MSMEs) Scheme 8: Assistance for saving in Consumption of Energy and Water – 25 % cost of equipment, up to Rs 20 Lakhs. The amount could be expanded, keeping in view that water treatment technologies are expensive to acquire and run. Currently, A-TUFS doesn’t cover ETP upgradation (advanced equipment, capacity upgradation, etc.)

Currently, wastewater from all kinds of industries (having varying characteristics) are sent to CETPs for treatment. This causes overload and breakdowns, leading to further pollution of downstream water bodies. Industries with similar effluents profiles should be allowed to set up in a way that they can be serviced by a separate CETP designed to handle their effluent parameters. e.g., electroplating and dyeing have different effluent parameters and should be treated in separate CETPs.
MONITORING AND COMPLIANCE

Regular sampling (preferably continuous) of groundwater and surface water streams near processing clusters to detect release of untreated effluent would help curb pollution of soil and water bodies in Gujarat’s clusters, thus increasing their sustainability.

GREENER CHEMICALS

The Gujarat government (in consultation with the industry) can declare a list of chemicals that are less harmful, or that of restricted chemicals, along the lines of accepted standards such as ZDHC (Zero Discharge of Hazardous Chemicals) and Responsible Care.

Policy hook: Gujarat Pollution Control Board (GPCB) offers an additional year of Consent to industries that follow Responsible Care. Awareness camps and seminars/webinars could be organized to increase uptake of such industry-led standards.

REPLICATION OF SURAT MODEL - SUPPLY OF TREATED SEWAGE WATER TO INDUSTRY

A potential replication of the Surat Model (collaboration between municipality and industry for supply of treated wastewater) could be explored in other clusters in Gujarat. The barriers and opportunities towards implementing the same need to be studied.

Policy hook: Ahmedabad Municipal Corporation has received a loan of Rs 3000 Crores from the World Bank to upgrade 3 of its 11 Sewage Treatment Plants (STPs). Treated water from these STPs will be supplied to industrial clusters in Ahmedabad to reduce freshwater consumption, and conserve groundwater. In Surat, treated wastewater has been supplied to the industry since 2014; funds to create the infrastructure was availed from Swarnim Jayanti Mukhya Mantri Sheheri Vikas Yojana. Similar avenues could be explored to replicate this model in other clusters/municipalities in Gujarat.

SET UP A WATER STEWARDSHIP COMMITTEE

A water stewardship committee should be constituted with officials from GIDC, GPCB, Groundwater Authority, Irrigation Department, etc. with high level powers to take cross-agency decisions that can positively impact water sustainability in Gujarat. The committee could also oversee the funding and development of “Model Clusters”, which would implement best practices to manage water in a holistic manner across districts. These model clusters would generate data and evidence on water stewardship, combining elements of environmental sustainability and efficient industrial production. These clusters could be developed under a Public Private Partnership (PPP) model, with brands and large buyers joining hands with the government to support green industrialization.
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