THE REFASHION HUB

10th year 2011-2020 CRB CENTRE for RESPONSIBLE BUSINESS

Enabling Change for Impact

POLICY BRIEF

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

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INTRODUCTION

Karnataka is a frontrunner in the garment industry, with a number of spinning mills as well as weaving and finishing units. Bengaluru, one of the largest garment hubs in India, boasts many large-scale factories owned by Shahi Exports, Gokaldas Exports, Himatsingka, etc. employing lakhs of workers. It also has a presence of global apparel brands. Bengaluru is also a tech hub, as it hosts a large number of tech MNCs as well as start-ups, complete with Silicon Valley-like characteristics such as micro-breweries meant for wooing tech talent who want to relocate back to India.

Meanwhile, Bengaluru is also faced with a crippling water crisis, with its groundwater resources running low, and Cauvery river giving limited yields of freshwater annually. While the urban built environment has increased manifold in the city in the past few decades, the wetlands and lakes have decreased, leading to dyring of aquifers. Over 20% of the municipal water supply is wasted, while a lot more usage is unaccounted for or unbilled. Most individual houses in the city are equipped with borewells; even these are mostly non-functional as the water table has gone down below 80 feet. Industries and households are both forced to often rely on tankers for water supply. Cauvery water, which is pumped from about 100 kilometres away, costs about USD 6 million in electricity bills per year.

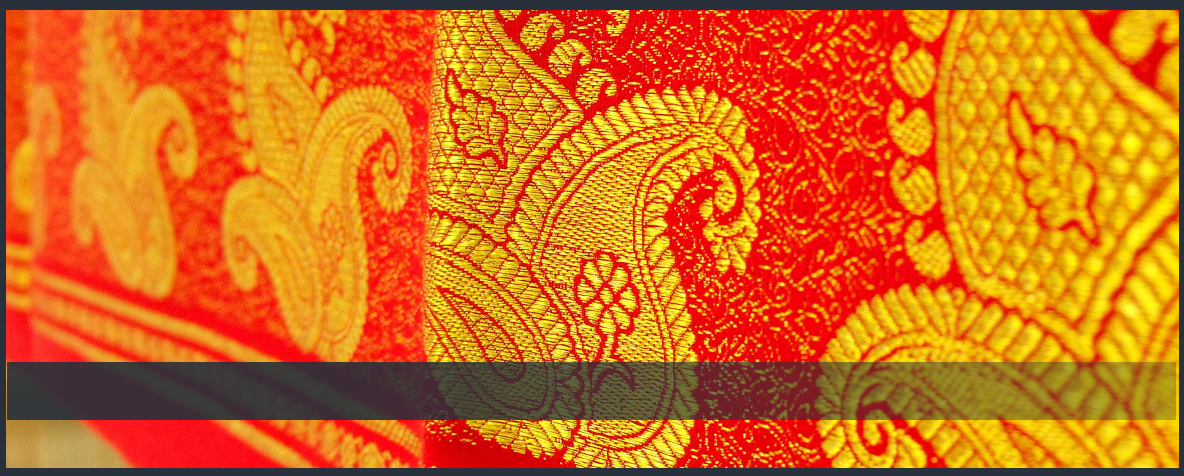
With Bengaluru's population on the way to reach 20 million by 2031, the pressure on existing resources will only increase. In such a scenario, reuse of wastewater is imperative for the sustainability of industries in the region, especially water-intensive ones like textiles.

Several stakeholder consultations and meetings were organized in Karnataka (virtually) 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 Karnataka 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:

ZERO LIQUID DISCHARGE AND CAPTIVE POWER PLANTS

Industrial parks, especially textile clusters can be equipped with zero liquid discharge (ZLD) along with captive power plants (thermal or preferably solar), which would help in power supply and steam generation. Given a looming water crisis, it is imperative that industries proactively adopt water conservation practices. Approaches like Zero Liquid Discharge (ZLD) are currently costly to implement—a



ZLD set up costs a minimum of 10-15 crores INR. Industriessuch as textile units will need financial assistance and tax subsidies to implement such technology, while remaining competitive in the short term.

Policy hook: The IPDS Scheme (Integrated Processing Development Scheme, 2017), notified by the Ministry of Textiles can be modified to provide assistance to units/parks to set up ZLD and required power supply. Under this scheme, the state provides 25% of the project costs.

MONITORING OF GROUNDWATER WITHDRAWAL

Currently, consent for groundwater withdrawal is given with a one-time fee, beyond which no monitoring is undertaken to determine the amount of water withdrawn by industry or households. In view of the current water availability in and around Bengaluru, steps must be taken (such as, installing piezometers) to monitor groundwater withdrawal.

GROUNDWATER RECHARGE

Every apartment complex, malls, office campuses etc. with large amounts of paved surfaces must be mandated to harvest rainwater and/or recharge groundwater. Bengaluru receives sufficient rainfall annually; if this resource is tapped into, the water table would rise, easing the pressure on households and industry who are often forced to rely on water tankers.

SET UP SMALL SCALE STPS (ZONE WISE)

Bengaluru Municipal Corporation could look into setting up small-scale Sewage Treatment Plants that would cater to designated areas in the city. These STPs could help recycle sewage water for various industrial and non-industrial purposes. Tertiary treatment level would be necessary for such reuse/recycling of wastewater. Surat is a

leading example of such a collaboration between industry and municipality.

Various departments such as Urban Development Department, Bangalore Water Supply and Sewerage Board, Karnataka State Pollution Control Board (KSPCB), etc. have previously worked together on planning to use 20% of recycled wastewater in the city for various purposes (non-potable uses) such as agriculture, industrial, etc.) A similar collaboration can help create a setup similar to Surat.

Policy hook: KSPCB had notified STP norms in 2016, which mandated all apartment complexes to treat their sewage water. While this could be daunting for all complexes to implement, a zone-wise STP setup would be more feasible. These could be funded in a PPP model, where apartment complexes, or homeowners can partially fund the setups, instead of individually investing in STPs.

INCENTIVISE WATER-SAVING TECHNOLOGY FOR PROCESSORS THROUGH THE STATE TEXTILE POLICY

100% wastewater reuse is a reality in the coming years. Both industry and domestic consumers should plan on setting up infrastructure and upgrading equipment to be able to treat and recycle water. For the textile industry, capital investments on technology such as waterless dyeing, colour separation, etc. are costly. Financial and tax subsidies will be required in the next 3-5 years to help the industry become water-efficient.

Policy hook: New Textile and Garment Policy 2019-2024 provides various subsidies on power, common facilities, etc. This could be tapped into or amended to provide wider assistance on water sustainability actions.

WATER AUDITS AND SURVEYS

Comprehensive data on water consumption by industry is lacking. Regular surveys and audits must be undertaken to help understand the scope of utilisation of treated sewage water and to implement other water sustainability measures. Such data can help both the industry and policymakers to identify water-intensive operations and make recommendations accordingly. A similar exercise has been undertaken by Gujarat Cleaner Production Centre (GCPC), to understand water usage and scope for improvement, especially in the textile clusters in Gujarat.

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