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 PUNJAB

JUNE 2021

INTRODUCTION

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.

The Ludhiana cluster consists of roughly 300 units comprising processing and dyeing units. The units are largely small and medium scale enterprises with only a few large units. Water consumption for individual units varies from 100 KLD for smaller units to nearly 2000 KLD for the larger units. At present the units are drawing groundwater, which will now be charged at differential rates based on the zones where the units are located (red, orange or green). Existing units can draw the water as per earlier consumption but new upcoming units will receive limited approvals to draw water. The state is facing acute water shortage and the groundwater is depleting at a rapid rate. However, industry draws a negligible amount of the groundwater in comparison to agriculture.

The pollution of the river Sutlej especially from industrial and domestic sewage has drawn much attention and has resulted in the formation of the "Sutlej Action Plan" anchored with the Punjab Pollution Control Board. Ludhiana is one of the key locations identified as the source of pollution. Of the 2400+ industrial units identified in Ludhiana, nearly 10% belong to the dyeing units. In the absence of CETPs, the industrial wastewater is being released into municipal sewers. 1-2 units have ZLD plants and recycle most of their wastewater internally. Further, given the high TDS of treated wastewater (>2000), the wastewater cannot be reused by the processing and dyeing units. The costs of further treatment are prohibitively high for industry to consider.

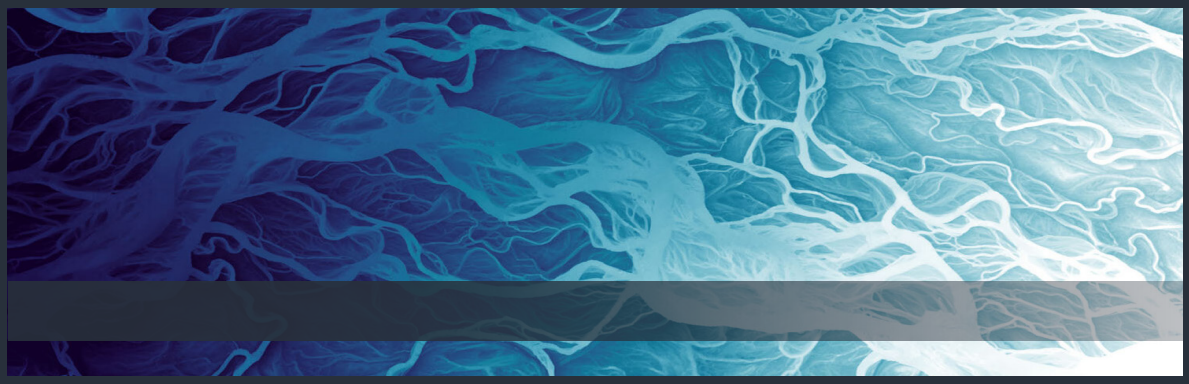
Water consumption varies with technology and process efficiencies at individual units. Dyeing and finishing operations consume between 70 to 150 litres of water per kilogram of yarn, with the latter figure being attributed to older units/ equipment. The process water is treated for pH and other basic parameters before releasing it to CETPs (Common effluent treatment plants).

As per input received from the industrial associations and state government agencies in clusters like Ludhiana, 3 CETPs with a capacity of 105 (15 MLD operational and others nearing completion) MLD have been planned for the industrial units. Wastewater will be diverted from releasing into Municipal STPs to CETPs and then used for irrigation. While industry units are treating waste water as per prescribed norms by the Pollution control board, there is an increasing awareness to adopt a more holistic approach to water management.

A recent decision to levy charges on industry's use of groundwater may encourage industry to explore more judicious use of water and increasing depletion of groundwater thus making it imperative for the industry to explore other sources of water. There is scope to explore more water efficient technologies that will not only lower consumption of water but will also result in energy savings. Industry players have also asked for rain water harvesting for smaller units which is currently disallowed in certain industries.

POLICY INTERVENTIONS

Several stakeholder consultations and meetings were organized with stakeholders in Punjab 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 Punjab 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.



REUSE OF MUNICIPAL SEWAGE WATER (TERTIARY TREATED)

Tertiary treated municipal sewage water can be supplied to the industry. This will reduce freshwater use, especially groundwater. Municipal sewage water is usually low on total dissolved solids (TDS) and has been found suitable for dyeing and finishing operations. Surat Municipality is the prime example of such an arrangement.

GENERATE DATA ON WATER USE AND RECATEGORIZATION OF INDUSTRIES/ ZONES

Comprehensive data on water usage at factory/cluster level is lacking. Regular water audits are necessary to understand the water footprint and also to develop a long term strategy to reduce consumption of water. The Punjab Industrial Policy 2017 provides incentives for water audits and reimburses upto 1 lakh rupees for water audits. Industry units should leverage this incentive and undertake detailed water audits. This is especially important in light of recent developments wherein ground water consumption will be charged. There is also a need to explore and discuss alternate sources of water for the industry to avoid disruption to production on account of depleting ground water.

The current categorization of orange, red, and green zones are made on outdated data. Current water consumption and water table data should be generated, based on which fresh categorization of zones should be made.

INCENTIVISE WATER CONSERVATION INITIATIVES

Incentives and subsidies for water efficient technologies should be included under the Amended - Technology Upgradation Funds Scheme (A-TUFS). Further, pending subsidies under A-TUFS should be expedited – this is a much needed boost for make-in-India and green industrialization, and also post-covid recovery. Awareness programs can be organised that showcase water efficient technologies, delve into water conservation measures such as good housekeeping, rainwater harvesting etc.

Policy hook: The Central Ground Water Authority (CGWA), through a notification on 24 September 2020, has declared that permission to extract groundwater would not be granted to large industries, for purposes other than domestic use. MSMEs are also restricted from drawing more than 10 cubic metres of groundwater per day. In view of this notification, infrastructure must be created to reuse wastewater and eliminate groundwater use, along with interest and/or capital subsidies to industries.

CREATE CROSS-SECTORAL TASK FORCE FOR WATER STEWARDSHIP

Water must be managed holistically, cutting across economic sectors. A task force should be created that can plan water allocation, restoration of underground aquifers and surface water bodies, and recommending suitable technologies to the industry. The taskforce should have participation from Punjab Water Regulation and Development Authority, Punjab Pollution Control Board, Municipal Corporations, Industry representatives (associations like the Ludhiana Dyer's Association, Federation of Industrial and Commercial Organisations), technical experts, civil society etc. Further, the taskforce could be aligned to ongoing initiatives such as Clean Sutlej Action Plan.

CONTACT US

CENTRE FOR RESPONSIBLE BUSINESS

USO House, USO Road, 6 Special Institutional Area, Off Shaheed Jeet Singh Marg, New Delhi-110067 (India)

Phone : +91 7838953577

E-mail: info@c4rb.in

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