



PTC JF Water Stewardship Performance



Shared Challenges – Research & Engagement

Sr.No	Shared Challenge	Impact	Likelihood	Prioritization	Actions	Key Players
1	Pollution of Surface Water	High	High	High	Deployment of Onsite Effluent Treatment Plant - G Infrastructure modification to ensure Zero Wastewater Discharge from Site - G Soil and Groundwater Protection Plans to be made- G Sewage Treatment Plant in Catchment- R Collaboration with NGOs for CSR Projects – G Clean up Drives for Surface Water Sources – A	1. Municipal Committee Jhelum 2. DC Jhelum
2	Pollution of Groundwater	High	Medium	Medium	Deployment of Onsite Effluent Treatment Plant - G Infrastructure modification to ensure Zero Wastewater Discharge from Site - G Soil and Groundwater Protection Plans to be made- G Sewage Treatment Plant in Catchment- R Deployment of Filtration Plants in Communities- A (on going project) Deployment of Highly Absorptive Filtration Plants on Site- G	1. Municipal Committee 2. DC Jhelum
3	Depleting Water Table	High	Low	Medium	Water Withdrawal Monitoring of site - G Hydrological Study - G Awareness sessions on responsible water usage both on site and in the catchment- G Identification and sharing of Drip Irrigation Practices/Learnings – A Enable Tree Plantation – G	1. MC 2. DC 3. EPA
4	Inadequate Maintenance of Water Filtration Plants & Mangla Reservoir	Medium	Medium	Medium	Organization of promotional and information campaigns for the local community, farmers, BAT employees, subcontractors regarding the value of water, broadly understood wastewater management and good practices in water management- G Maintenance and operation of PTC's own Filtration Plants– G	1. Local farmers Local community 2. BAT employees and subcontractors
5	Piping and sanitation network Infrastructure Failure	High	Low	Medium	Water Infrastructure of Site has a Maintenance Regime Opportunities: Development of Infrastructure Maintenance Regime of Catchment Water Sources	1. DC Jhelum 2. Municipal Committee
6	Poor Water Management	High	High	High	Identification of good practices related to water and wastewater management that may be applicable to the BAT catchment area and the factory itself. Collaboration with stakeholders in the implementation of identified good practices in the catchment area, the implementation of which is technically feasible and economically rational. Replication of identified good water management practices in the factory- A	All Stakeholders
7	Lack of Awareness	High	High	High	Awareness Sessions – G (Cont. initiative) Share Hydrological Study Report with Stakeholders – G	All Stakeholders

Shared Challenges – Hydrological Study

Sr.No	Shared Challenge	Impact	Likelihood	Prioritization	Actions	Key Players
1	Potential Contamination of groundwater from surface water pollution	High	High	High	Deployment of Onsite Effluent Treatment Plant - G Infrastructure modification to ensure Zero Wastewater Discharge from Site - G Soil and Groundwater Protection Plans to be made- G Sewage Treatment Plant in Catchment- R Collaboration with NGOs for CSR Projects - G Clean up Drives for Surface Water Sources - A	1. Municipal Committee Jhelum 2. DC Jhelum
2	Deficiency of regulations and groundwater modeling tools	High	Medium	Medium	Deployment of Onsite Effluent Treatment Plant - G Infrastructure modification to ensure Zero Wastewater Discharge from Site - G Soil and Groundwater Protection Plans to be made- G Sewage Treatment Plant in Catchment- R Deployment of Filtration Plants in Communities- A (on going project) Deployment of Highly Absorptive Filtration Plants on Site- G	1. Municipal Committee 2. DC Akora 3. PCRWR
3	Weak institutional framework in the water sector	High	Low	Medium	Water Withdrawal Monitoring of site - G Hydrological Study - G Awareness sessions on responsible water usage both on site and in the catchment- G Water conservation initiative awareness for eg Alternate Furrow- A Enable Tree Plantation - G	1. MC 2. DC 3. EPA
4	Land use change in terms of industrialization & urbanization in area, resulting in decreasing recharge area.	Medium	Medium	Medium	Organization of promotional and information campaigns for the local community, farmers, BAT employees, subcontractors regarding the value of water, broadly understood wastewater management and good practices in water management- G Maintenance and operation of PTC's own Filtration Plants- G	1. Local farmers Local community 2. BAT employees and subcontractors
5	Groundwater Depletion & Insufficient water storage capacity.	High	Low	Medium	Water Infrastructure of Site has a Maintenance Regime Opportunities: Development of Infrastructure Maintenance Regime of Catchment Water Sources	1. DC Jhelum 2. Municipal Committee
6	Effluent disposal in ponds and seepage boreholes in villages.	High	High	High	Identification of good practices related to water and wastewater management that may be applicable to the BAT catchment area and the factory itself. Collaboration with stakeholders in the implementation of identified good practices in the catchment area, the implementation of which is technically feasible and economically rational. Replication of identified good water management practices in the factory- A	All Stakeholders
7	Lack of data availability regarding groundwater pumping in the city surroundings and its impact on water table.	High	High	High	Awareness Sessions - G (Cont. initiative) Share Hydrological Study Report with Stakeholders - G	All Stakeholders
8	Public Perception as a Water Steward	High	High	High	Awareness Sessions - G (Cont. initiative)	

Water Stewardship Initiatives

Effluent Treatment Plant

12m³/Hr.
 ETP Treatment Capacity

combines all elements of the activated sludge purification process into a single compact unit

Treated Water Quality

PH 6-9
BOD < 80 mg
COD < 150mg/L
TSS < 200mg/L



Water Stewardship Initiatives

Enabling Governmental Stakeholders

The site has **shared** the **Hydrological Study Report** of the catchment area with **key governmental Stakeholders** to enable them to take steps to mitigate the water related risks in the area. This initiative is an important step in onboarding the **Key Players** in the catchment.



Water Stewardship Initiatives

Awareness Session



Education & Awareness

- ***AWS Vision & outcomes***
 - ***Good Water Governance***
 - ***Sustainable Water Usage***
 - ***Sanitation & Hygiene***
 - ***IWRAs Maintenance***
 - ***Water Quality Issues***
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Feedback

- ***Stakeholders provided feedback to PTC***
 - ***Attendees approached the NGO to volunteer***
 - ***Best Practices and learnings shared***
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Collective Effort

- ***Collaboration between PTC, NGO and General Public***
 - ***Pledge to work towards a common goal: Saving Water***
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Water Stewardship Initiatives

Awareness Session



Water Stewardship Initiatives

Public Awareness

The site has deployed **Signs & Signages** in the mosques to educate and urge the users to be **mindful of water wastages**.

The signages present **religious references** that **discourage water wastage** to create and impact on the users.



Water Stewardship Initiatives

Door to Door Engagements

- › *Education of Private Stakeholders regarding maintenance of catchment IWRAs*
- › *Engagement on identification of best practices in catchment*
- › *Identification of Water Related challenges faced by the Stakeholders*



Water Stewardship Initiatives

Collaboration with NGOs – Clean Up Drive

Being a responsible water steward, PTC Jhelum collaborated with We Fixers to execute a **clean-up drive** on the bank of **River Jhelum**.

The Jhelum River is an Important Water Related Area in the catchment and a famous **recreational spot**.

Unfortunately, the maintenance of the IWRA is poor. PTC participated in and enabled the clean-up drive to **spread awareness** regarding **IWRAs maintenance**.



Water Stewardship Initiatives

Enabling Water Conservation

Community Mosques are one of the most intensive water consumers. Around **2 liters** of water is used by an average person for **ablution**. This amounts to **~500 liters** of **daily** water usage by each mosque.

The mosques are Important Water Related Areas since they have **high value** for the community from a **religious, and cultural** perspective.

PTC has deployed **water efficient taps** in **four** of the **local mosques**. The aim of the initiative is to raise awareness among the local community regarding the significance of maintaining Important Water Related Areas and reducing water wastages.

The estimated **water savings** from the initiative are **40%**



Water Stewardship Initiatives

Identifying & Supporting Drip Irrigation

*PTC visited the Porilla Farmhouse to **appreciate** the **water stewardship efforts** of the owner: Mr. Waseem and to enlighten the workforce regarding the vision of AWS and the possible **best practices** that could be further implemented*

*The site aims to **take learnings** from the owner and **share with other landowners** to replicate the same.*



Water Stewardship Initiatives

Tree Plantation

PTC donates **trees** from its nursery to **Governmental Stakeholders** and **General Public** in efforts to drive collective action



700K Saplings
donated in 2022



**Enabling Tree
Plantation**
On green belts & small towns



Installation & Maintenance of Filtration Plants

PTC has deployed **5 Filtration Plants** in Jhelum to provide stakeholders with Clean Drinking Water. The **Maintenance** is **borne by the company**.

Maintenance includes:

- CIP of membrane, Sand Filter, Carbon Filter and UV Rod
- Cartridges Replacement
- Product Water Tank CIP
- Servicing
- Monitoring Parameters



Providing Clean Drinking Water

Continuous Collaboration with NGOs

As a responsible water steward, PTC Jhelum recognizes the importance of **collective action** and **continuous improvement**, hence we collaborated with an active NGO in the catchment; **Al-Khidmat** to deploy various water stewardship projects including **Clean Up Drives, distribution of Water Filters, Water Coolers & Push Button Taps**



Provision of Water Coolers

Recognizing the **challenges** regarding **provision of Drinking Water & Sanitation**, PTC **collaborated** with **Al-Khidmat Foundation** and deployed Drinking Water Coolers at 5 locations in the District:

- 1- Sanghoi
- 2- Chotala
- 3- MM3
- 4- Dina
- 5- Sohawa

The coolers were provided based on the **inputs from the NGO and governmental Stakeholders**



Provision of Carbon Filter Stone Faucets

Recognizing the **challenges** regarding **WASH**, PTC provided 20 Carbon Filter Faucets via Al-Khidmat Foundation to catchment users.

The aim of this initiative is to enable easy-access to water for basic needs such as dishwashing and cleaning.

The faucets were provided based on the **inputs from the NGO**



Thank You