



PTC JF Water Stewardship Performance



Shared Challenges – Research & Engagement



Sr.No	Shared Challenge	AWS Outcome	Impact	Likelihood	Prioritization	Actions	Key Players
1	Pollution of Surface Water	Water Quality Water Governance IWRA	High	High	High	Deployment of Onsite Effluent Treatment Plant - G Soil and Groundwater Protection Plans to be made- G Collaboration with NGOs for CSR Projects – G Clean up Drives for Surface Water Sources – G Drain cleaning & repair of minority community – G Provision of Machinery & Equipment for Improvement of Solid Waste Management in Jhelum City by Municipal Committee Jhelum- G	1. Municipal Committee Jhelum 2. DC Jhelum
2	Pollution of Groundwater	Water Quality Water Governance	High	Medium	Medium	Deployment of Onsite Effluent Treatment Plant - G Soil and Groundwater Protection Plans to be made- G Collaboration with NGOs for CSR Projects – G Clean up Drives for Surface Water Sources – G Drain cleaning & repair of minority community – G Provision of filtration plants, coolers & filters – G Cleaning of sewer lines in Jhelum city by Municipal Committee Jhelum- G	1. Municipal Committee 2. DC Jhelum
3	Depleting Water Table	Water Balance Water Governance	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 – G Enable Tree Plantation – G Provision of Water Efficient Taps in Local Mosques – G Drip irrigation systems provided to farmers at subsidized rates by department of agriculture (OFWM) to reduce water usage- G	1. MC 2. DC 3. EPA
4	Inadequate Maintenance of Water Filtration Plants & Mangla Reservoir	Water Quality Water Governance	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	Water Quality Water Governance	High	Low	Medium	Water Infrastructure of Site has a Maintenance Regime Rehabilitation of Municipal Services Infrastructure by Municipal Committee Jhelum- G Opportunities: Development of Infrastructure Maintenance Regime of Catchment Water Sources	1. DC Jhelum 2. Municipal Committee
6	Poor Water Management	All Outcomes	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- G Awareness sessions on responsible water usage both on site and in the catchment- G	All Stakeholders
7	Lack of Awareness	All Outcomes	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	AWS Outcome	Impact	Likelihood	Prioritization	Actions	Key Players
1	Potential Contamination of groundwater from surface water pollution	Water Quality Water Governance	High	High	High	Deployment of Onsite Effluent Treatment Plant - G Soil and Groundwater Protection Plans to be made- G Collaboration with NGOs for CSR Projects – G Clean up Drives for Surface Water Sources – G Drain cleaning & repair of minority community – G Provision of Machinery & Equipment for Improvement of Solid Waste Management in Jhelum City by Municipal Committee Jhelum- G Cleaning of sewer lines in Jhelum city by Municipal Committee Jhelum- G	1. Municipal Committee Jhelum 2. DC Jhelum
2	Deficiency of regulations and groundwater modeling tools	Water Governance	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	1. Municipal Committee 2. DC Akora 3. PCRWR
3	Weak institutional framework in the water sector	Water Governance	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 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.	All Outcomes	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	1. Local farmers Local community 2. BAT employees and subcontractors
5	Groundwater Depletion & Insufficient water storage capacity.	Water Balance Water Governance	High	Low	Medium	Water Infrastructure of Site has a Maintenance Regime Drip irrigation systems provided to farmers at subsidized rates by department of agriculture (OFWM) to reduce water usage- G 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.	WASH Water Quality Water Governance IWRAs	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	All Stakeholders
7	Lack of data availability regarding groundwater pumping in the city surroundings and its impact on water table.	All Outcomes	High	High	High	Awareness Sessions – G (Cont. initiative) Share Hydrological Study Report with Stakeholders – G	All Stakeholders
8	Public Perception as a Water Steward	Water Governance	High	High	High	Awareness Sessions – G (Cont. initiative)	