WATER STEWARDSHIP

Report on Water Performance of the Philip Morris Pakistan PMPKL Mardan

LAST UPDATE 09/2022

Water scarcity, the lack of sufficient available water to meet demands, is recognized by the World Economic Forum as the largest global risk in terms of potential impact for both humanity and the environment. Growing populations, economies, water-related risks as well as climate change have provoked an increase in demand, competition and conflicts over freshwater resources, that are becoming ever more limited.

Philip Morris (Pakistan) Limited ("PMPKL") is an affiliate of Philip Morris International ("PMI"). PMPKL is public listed company incorporated under applicable laws with its Head Office in Karachi, a cigarette manufacturing factory in Sahiwal and green leaf threshing unit in Mardan. As part of PMI's commitment to implement the Alliance for Water Stewardship (AWS), PMPKL is working to adopt a more sustainable water use both on-site and in the territorial context in which it operates. PMPKL's GLT factory in Mardan is working towards achieving the Core Level of the AWS Certification: PMPKL Mardan will become the second Site in the Pakistan to receive this important recognition and have formalized its commitment to water stewardship principles and outcomes.

By implementing the AWS Standard, PMPKL Mardan is working towards offering a credible, globally-applicable framework for other major water users and Stakeholders in the catchment, with the scope of encouraging their understanding of water use, impacts and shared water-related risks. The long-term aim is to join forces and set fundamental stepping stones for synergic and meaningful collaborations towards sustainable water management practices within the local territory in which we all live and operate.

Over the upcoming years, PMPKL Mardan aims to progressively implement, improve and grow its commitment as a water steward. PMPKL Mardan's scope is to raise awareness on shared water-related challenges, such as degrading surface water quality, provision of safe Water, Sanitation and Hygiene (WASH), flashfloods and baseline water stress, and actively contribute to addressing these risks with projects, actions and campaigns in collaboration with relevant Stakeholders of the local territory.

Dealing with a shared resource, such as water, requires working in a transparent, collaborative and synergic way with relevant figures in a catchment area: actions and projects cannot be limited to a site's physical boundary alone.

PMPKL Mardan factory is proud of this journey that it is undertaking and, although the path to build a sustainable future is still ongoing, the AWS Certification and related actions have and will continue to make a significant change in the management and perception of the water resource in the Pakistan.

The PMPKL Mardan Pakistan AWS TEAM

PMPKL Mardan's Commitment to water stewardship and AWS outcomes, signed by **Faisal Mushtaq - Director Manufacturing Pakistan**, is illustrated below and available both in English and Urdu.

PHILIP MORRIS
(PAKISTAN) LIMITED

7th July, 2023

PMPKL Water Stewardship Commitment

Philip Morris Pakistan Limited ("PMPKL"), as a result of its commitment to good water stewardship , undertakes to implement following measures at its Green Leaf Threshing plant situated at 22nd KM Mardan Swabi Road-Mardan:

1. Endorse, sustain and support the Alliance for Water Stewardship ("AWS") principles and 5 outcomes: i) good water governance, ii) sustainable water balance, iii) good water quality, iv) good conservation of important areas related to water, and v) safe water, sanitation and hygiene;
2. Engage and involve stakeholders in an open and transparent way;
3. Comply with any legal and regulatory requirements related to water;
4. Respect water-related rights, including ensuring appropriate access to safe water, sanitation, and hygiene for all persons at Site;
5. Support and coordinate with stakeholders (internal and external) for implementation of plans and policies, including working together to meet the right to water and sanitation;
6. Implement the AWS standard in alignment with existing catchment sustainability plans
7. Improve and continually adapt the actions and plans for water stewardship of the Site in order to mitigate shared water related risks;
8. Implement and disclose progress on water stewardship programs to achieve improvements in AWS water stewardship outcomes
9. Maintain the organizational capacity required to successfully implement the AWS Standard, through necessary resources required to accomplish the implementation and maintenance of requirements of the AWS Standard i.e., improving water quality, water sanitation and hygiene, reduce water wastage, etc.
10. Disclose relevant information related to water.

Director Manufacturing, Pakistan
Faisal Mushtaq

Philip Morris (Pakistan) Limited
Green Leaf Threshing Plant, 22nd KM Mardan Swabi Road- Mardan
www.philipmorrispakistan.com.pk

PHILIP MORRIS
(PAKISTAN) LIMITED

7 جولائی 2023

پی ایم پی کے ایل واٹر اسٹیورڈ شپ کا عزم

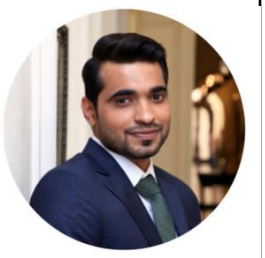
فلپ مورس پاکستان لمیٹڈ ("پی ایم پی کے ایل") پانی کی اچھی دیکھ بھال کے عزم کے نتیجے میں، 22 ویں کلومیٹر مردان صوابی روڈ- مردان میں واقع اپنے گرین لیف تمباکو پلانٹ میں مندرجہ ذیل اقدامات پر عمل درآمد کا عہد کرتا ہے:

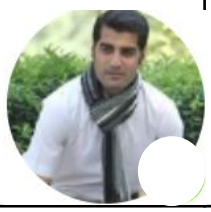
- الائنس فار واٹر اسٹیورڈشپ ("اے ڈبلیو ایس") کے اصولوں اور 5 نتائج کی توثیق، برقرار اور حمایت: 1) اچھی پانی کی حکمرانی، 2) پائیدار پانی کا توازن، 3) پانی کا اچھا معیار، 4) پانی سے متعلق اہم علاقوں کا اچھا تحفظ، اور 5) صاف پانی، صفائی ستھرائی اور حفظان صحت؛
- اسٹیک ہولڈرز کو کھلے اور شفاف طریقے سے شامل کریں اور شامل کریں۔
- پانی سے متعلق کسی بھی قانونی اور ریگولیٹری تقاضوں کی تعمیل کریں۔
- پانی سے متعلق حقوق کا احترام کریں ، بشمول سائٹ پر تمام افراد کے لئے محفوظ پانی ، صفائی ستھرائی اور حفظان صحت تک مناسب رسائی کو یقینی بنانا۔
- منصوبوں اور پالیسیوں کے نفاذ کے لئے اسٹیک ہولڈرز (اندرونی اور بیرونی) کے ساتھ تعاون اور ، بشمول پانی اور صفائی ستھرائی کے حق کو پورا کرنے کے لئے مل کر کام کرنا؛
- موجودہ کیچمنٹ پائیداری کے منصوبوں کے مطابق اے ڈبلیو ایس معیار کو نافذ کریں
- مشترکہ پانی سے متعلق خطرات کو کم کرنے کے لئے سائٹ کے پانی کی دیکھ بھال کے لئے اقدامات اور منصوبوں کو بہتر بنانا اور مسلسل ڈھالنا؛
- اے ڈبلیو ایس واٹر اسٹوریشپ کے نتائج میں بہتری حاصل کرنے کے لئے واٹر اسٹیورڈشپ پروگراموں پر پیش رفت پر ایک رپورٹ شائع کریں اور شائع کریں۔
- اے ڈبلیو ایس اسٹینڈرڈ کے نفاذ اور ضروریات کی دیکھ بھال کے لئے ضروری وسائل کے ذریعہ اے ڈبلیو ایس اسٹینڈرڈ کو کامیابی سے نافذ کرنے کے لئے درکار تنظیمی صلاحیت کو برقرار رکھنا یعنی پانی کے معیار کو بہتر بنانا، پانی کی صفائی اور حفظان صحت کو بہتر بنانا، پانی کے ضیاع کو کم کرنا وغیرہ۔
- پانی سے متعلق متعلقہ معلومات کا انکشاف کریں۔

ڈائریکٹر مینوفیکچرنگ، پاکستان
فیصل مشتاق

ALLIANCE FOR WATER STEWARDSHIP ORGANIZATION

The AWS team members are responsible for implementing the AWS Standard criteria as well as achieving the AWS outcomes by the implementation of social, community and technological actions both on-site and in the catchment territory.

Project Sponsor	M. Irshad Khan Head of Leaf		Faisal Mushtaq Director Manufacturing, PMPKL	
PMI Buddy	Haseeb Ahmed Manager Sustainability			
Coach	Chiara Rizzi Manager Global AWS certification			
Consultant	Saera Kirmani External Consultant- Geoscience			

AWS Project Lead			
	 **Kulsoom Iftikhar** **Project Lead**		
AWS Core Team Members			
	Asghar Khan Boiler Engineer		M. Bilal Ahmad Manager Leaf, Processing
	Syed Muhammad Ali Manager Production		Abdul Waris Manager Maintenance
	Hussain Ali Sr Mgr Social Sustainability. LDR & Culture		Hassan Zahoor Procurement category lead
	Ahad Abdullah Manager Illicit, trade prevention, EA		Basit Tufail OPEN+ Deployment lead
	Kulsum Khan/ Ramsha Legal Affairs- Counsel		Waseem Ali Supervisor WPE

AWS Project Lead			
	Kulsoom Iftikhar **Project Lead**		
AWS Core Team Members			
	Arshad Zaman Supervisor warehousing & logistics, S&PD		M. Ikraam Warehouse executive, S&PD
	Hammad Shoaib GT, Production		Faiza Lodhi Manager Environment sustainability, SA
	Ammara Shahjahan Sustainable Agriculture		Hajira Khan Internal Communications Lead
	Sana Hashmi Company secretary, Ext Communications		Waqas Ali Labour Relations Executive

Check out our Water Risk Assessment results!

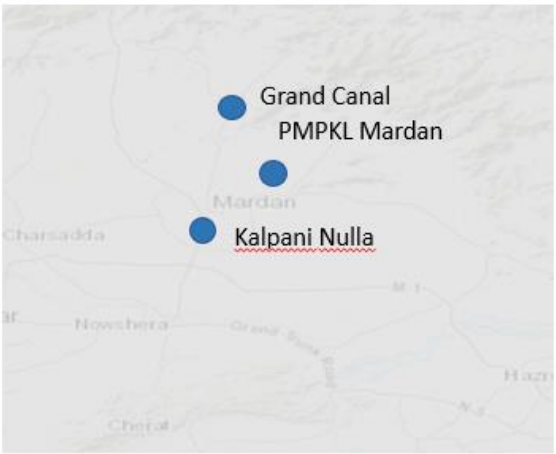
In 2023 PMPKL Mardan conducted a detailed water-risk assessment in order to identify the main water-related challenges that the factory is subjected to, as well as those shared by catchment Stakeholders!

The higher ranking risks in the catchment territory are directly linked to **surface water quality deterioration**, **increase in flashfloods** and **lack of adequate WASH availability**.

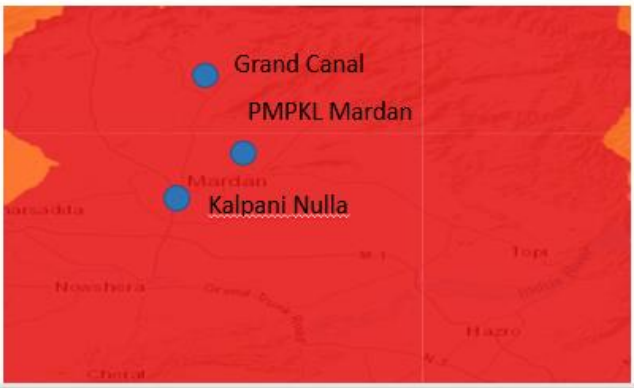
In the next few pages of this report, PMPKL Mardan will share some of the best practice actions, campaigns and projects that are aiming to make a difference.

Flood Occurrence

Drought occurrence



Water Quality



Water Risk Filter

n/a Very low risk Very high risk

Map source: Water Risk Filer

Water-realted actions in PMFTC Marikina are focused on the 5 AWS outcomes of the AWS Standard:

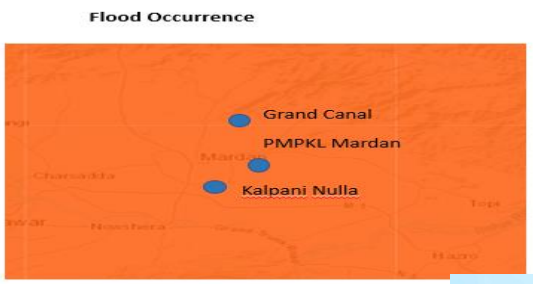
WATER RISK ASSESSMENT

In order to better understand its local, catchment contexts and prioritize risk mitigation efforts, PMPKL Mardan carried out a water risk assessment by use of both global and local data sets.

The scope was to develop a reliable and integrated water stewardship strategy plan by:

- identifying water-related risk hotspots
- focusing responsive actions to address higher water risks
- anticipating, when possible, trends and impacts

Higher and more cataclismatic water risks for PMPKL Mardan and it's catchment context appeared to be realted to flooding and predicted increase as well as degrading freshwater quality.



AWS Performance Update (Social)

Water Quality Tests
- At different locations
- At local hospital

WASH at farmers premises
- Construction of washrooms
- Installation of commodes
- Installation of water tanks
- Data collection on WASH showing 100% drinking water availability & improved sanitation

To ensure water quality, good governance and WASH

Disclaimer: Some of the farmers are not contracted with us anymore but the facilities are still in use

AWS Performance Update (Social)

Distributed 170,000 saplings to selected contracted farmers

Provision of saplings to contracted farmers for self-sufficiency to reduce forest cuttings

To ensure sustainable water balance, IWRA and good governance

RAINWATER HARVESTING FOR WATERING PLANTS

WATER-RELATED AWARENSS CAMPAIGNS WITH EMPLOYEES

PMKL Mardan conducted internal awareness campaigns on water-related themes in relation to their water stewardship Commitment and AWS Certification journey. Employees were engaged in numerous activities:

- water-related information sharing via email, posters and dedicated posts
- collection of water-saving best practices and amelioration proposals
- dedicated workshops and water-related information request to outsource service providers
- water conservation art contest for employee children
- best practice WASH prescriptions in common areas
- flood awareness alert emails to ensure quick emergency responses to flash floods
- Clean up day at locations
- donation of 17000 tree sapling to promote tree planting and mitigate deforestation

The scope was to disclose water-related challenges and increase employee sensibilization and responsibility regarding water-related themes, both at home and in their workplace.

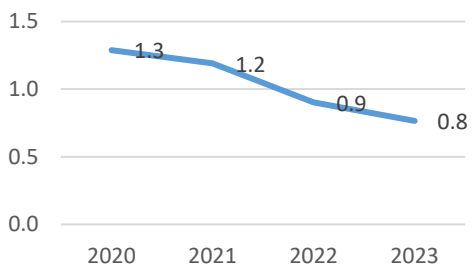





The progressive and on-going AWS Standard implementation in PMPKL Mardan is leading to the implementation of two types of initiatives:

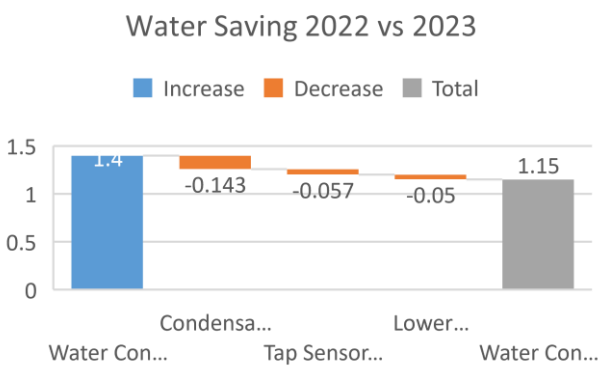
- **Social actions**, which include participation in synergic community-based projects, gathering water-related data to assess water risk hotspots and prioritize mitigation actions, as well as engagement activities with local Stakeholders, such as the execution of awareness workshops, best-practice sharing and feedback requests
- **Technological actions**, which include implementation of water saving technologies, settings and related best practices, which resulted in an immediate benefit due to the reduction of the amount of potable groundwater removed from the catchment territory

In PMPKL Mardan, improvements in water-saving performances are traced and tracked via a water-dedicated KPI, based on **m³ per ton of packed tobacco** d (m^3/ton of packed tobacco) and WEI water efficiency index



As illustrated above, from 2019 to 2023 PMPKL Mardan has **reduced its WEI** from **1.3** to **0.8 m³/ton packed**.

This accounts for a water consumption reduction of aproximately 0.20 m3/ton in 2023 vs 2022 in terms of water consumed per ton of packed tobacco .



It is evident from the figure shown that sustantial water savings are done by implementing innovative solutions like Condensate recovery, Tap sensors, lower steam used on tobacco , optimization of feed water tank, to name a few

Wash at Site

AWS Performance Update (Social)

WASH at site

Upgradation of workers washroom

Upgradation of Office washrooms (Ongoing)

Upgradation of ablution area

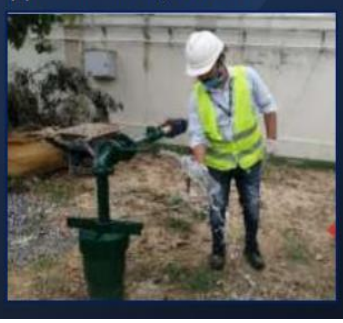
New common room with attached washroom for ladies

To ensure good WASH at site

AWS Performance Update (Technical)

- Installation of food grade taps
- Installation of sensor taps
- Heat exchanger
- Installation of rain harvesters
- Upgradation of washrooms
- Water quality tests (new parameters & new area samples)

- To ensure sustainable water balance, good governance, water quality & quantity, requirements under applicable laws, WASH



AWS Performance Update (Technical)

- New operational well
- Plugging redundant connections
- Gemba walks
- Installation of new meters
- Condensate recovery
- Rain harvesters

- To ensure sustainable water balance, IWRA, good governance, water quality & quantity, requirements under applicable laws, WASH

Projects/Initiatives Planned

AWS Performance Update (Social)

Engagements planned with stakeholders (Rescue 1122, PHED, EPA, local schools & local hospital)

- Awareness session on
  - Floods and safety measures
  - Spread of contagious diseases
  - Clean drinking water
  - Sustainable use of water
  - WASH

PMPKL contribution by donating:

- First-aid boxes, portable de-wash pump, life jackets
- PPEs (face masks, face shields, gloves, full body safety kit and aprons)
- Tree saplings
- Waste bins
- Washroom accessories
- Water filtration units & cooler
- Rain harvesters
- Anti-littering posters

We hope you enjoyed a piece of our water stewardship journey towards a more sustainable future in the Pakistan!

Mardan.

PHILIP MORRIS
(PAKISTAN) LIMITED

6th June-2023

PMPKL Alliance for Water Stewardship Strategy (2.3.1)

In line with PMI's vision to create a smoke-free future through science and innovation, and with the PMPKL Mardan Water Stewardship Commitment (2.1.1)., PMPKL Mardan has identified the following Water Stewardship Strategy:

- Assessment of specific water risks at site and catchment level
- Identification of shared-water challenges, opportunities, and risk mitigation actions at catchment level and site level.
- Engagement of relevant stakeholders from diverse and representative sectors to plan, identify and execute joint initiatives and projects in relation to shared water challenges.
- Reduction of the factory water footprint via water consumption reduction.
- Minimization of factory effluent discharges and improve parameters.
- Ensure adequate factory water quality and WASH standards.

This strategy aims to act as a pillar for achieving potable water reduction and/or optimization at factory level with the aim of generating a positive impact at a wider scale (i.e., increase catchment water availability) for other users and sensitive environments.

We are committed to create, maintain, and continuously review and adapt the factory Water Stewardship Strategy Plan (2.3.2.), which contains site and catchment—based SMART actions and targets description, targets measurement and monitoring methods for the five AWS outcomes.

Director Manufacturing

Faisal Mushtaq

Philip Morris (Pakistan) Limited
Green Leaf Threshing Plant, 22nd KM Mardan Swabi Road Mardan
www.philipmorrispakistan.com.pk

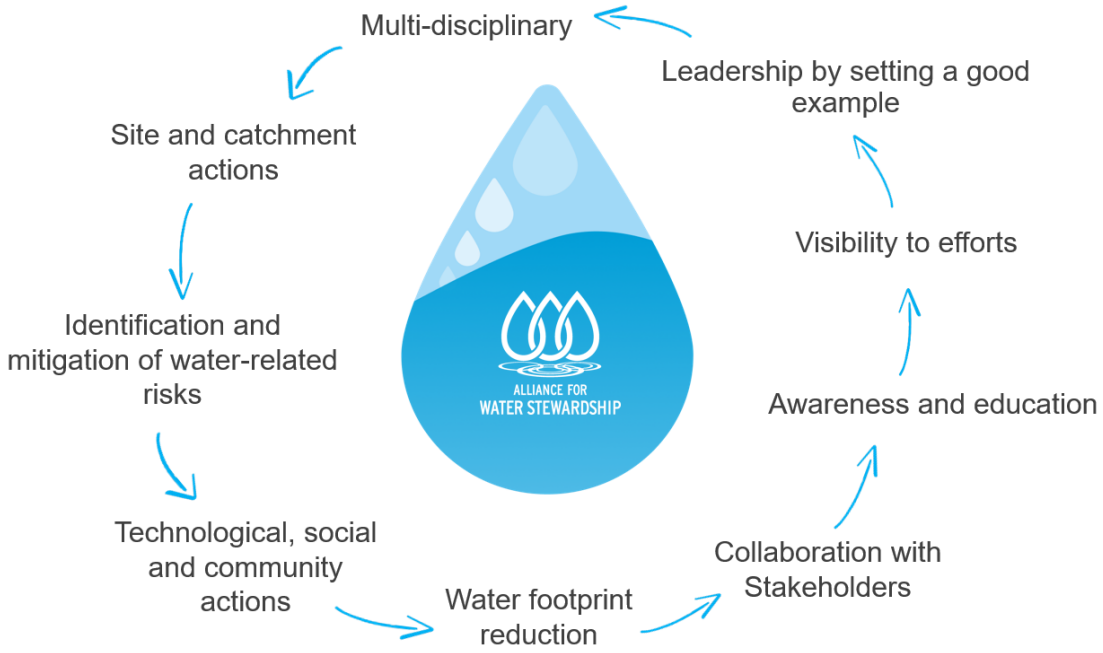
Stakeholder Engagement

ALLIANCE OF WATER STEWARDSHIP- Journey

Introduction

Benefits

- Global organization committed to leading water stewardship
- Certification based on a 5-step Standard that certifies water stewardship
- Water stewardship means sustainable water management by mitigating challenges and risks in a **out of the box** approach
- Stakeholder engagement and participation in catchment-based projects is key to successful water stewardship



PHILIP MORRIS
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7th July, 2023

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10. Disclose relevant information related to water.

Director Manufacturing, Pakistan

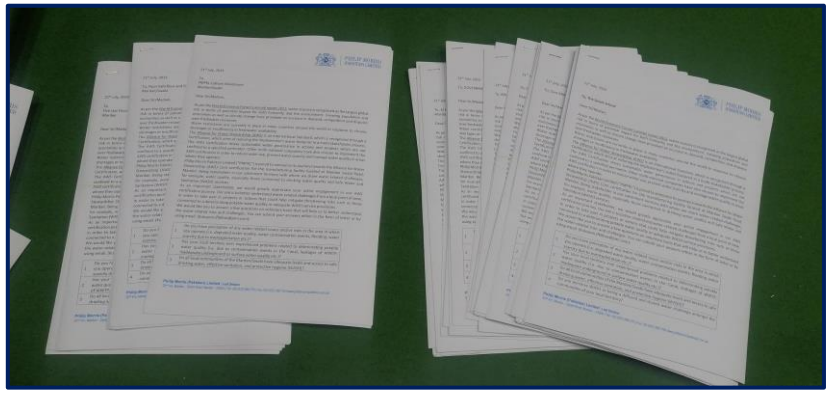
Faisal Mushtaq

ALLIANCE OF WATER STEWARDSHIP- Journey Commitment

Disclaimer: Pictures are blurred in view of the data privacy and confidentiality

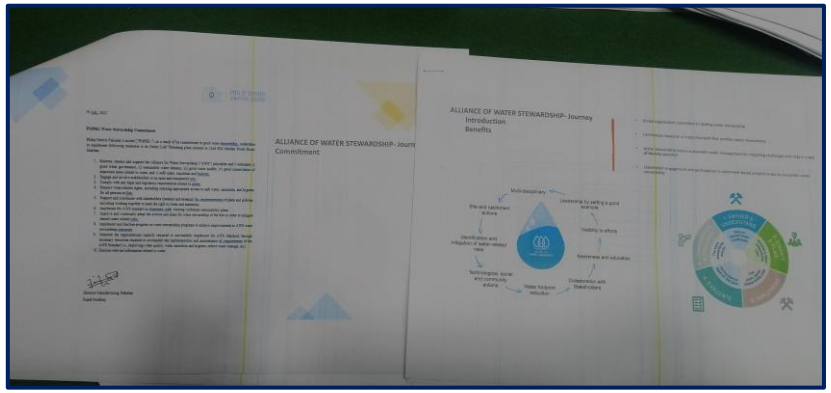
Stakeholder Visits

- Introduction about AWS.
- Site viewing with stakeholders
- Feedback survey in view of AWS including performance feedback
- Identification of projects in view of 5 AWS outcomes
- Invitation to GLT to share best practices and work on combine projects in view of the shared risks & challenges.










Stakeholder Visits

- Risks & Challenges
- Site viewing with stakeholders
- Identification of projects in view of 5 AWS outcomes (Washrooms R&M, Installation of waste bins, Tree plantation, Drinking water tests, Provision of sanitation PPEs, Water filtration units, Bores/wells, site cleanup activities, R&M of drain channels to avoid mixing of rain water & waste water.
- Awareness sessions

Engagement with Local community & stakeholders via Engaging NGO

By Collaborating with local NGO “Dragon Fly”, 17 master trainers were developed.
The master trainers will be delivering awareness sessions to Females, PMPKL contracted farmers, sharecroppers, tenants, local labors (temporary and full time) on below topics:

1- WASH
2- Water Saving and shared challenges
3- AWS and 5 intended outcomes
4- Feedback & Queries

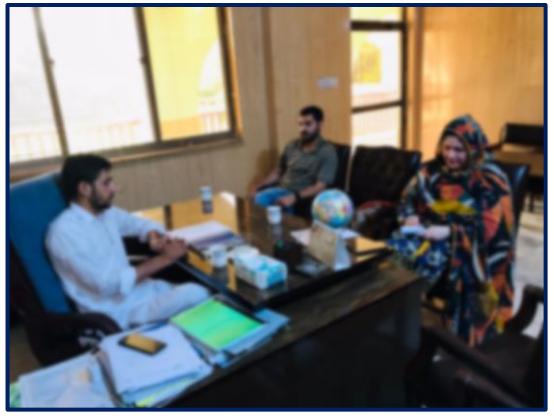
Stakeholder Engagement (Rescue 1122, PHED, Irrigation, TMA)

Rescue 1122

TMA

PHED

Irrigation



Meet & Greet

Introduction & Awareness Session on AWS, its 5 outcomes

Risks & shared Challenges, collaboration on initiatives

Feedback Survey & Performance feedback

Discussion on the Government Projects done or planned

Sessions conducted on 7th & 8th of August, 2023

Stakeholder Engagement – EPA and PCSIR

- Meet & Greet
- Introduction &Awareness Session on AWS
- Risks & shared Challenges, collaboration on initiatives
- Feedback Survey
- Discussion on the Government Projects done or planned

Stakeholder Visits (District Forest Officer, Irrigation, AWKUM

- Introduction about AWS.
- Site viewing with stakeholders
- Feedback survey in view of AWS including performance feedback
- Identification of projects in view of 5 AWS outcomes
- Invitation to GLT to share best practices and work on combine projects in view of the shared risks & challenges.

Stakeholder Engagement with Water & Sanitation Service Company Mardan (WSSCM)

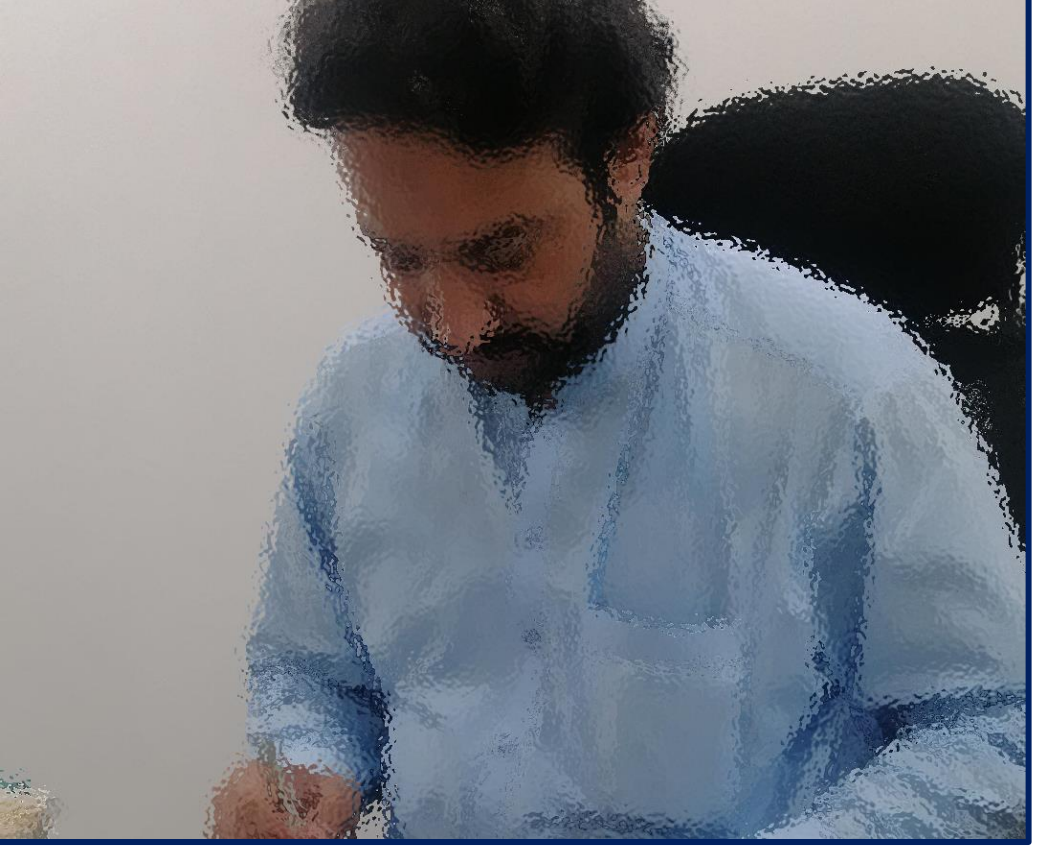
Meeting Highlights:

- Meet & Greet with Head- AWS & its 5 outcomes, PMPKL intentions & way forward
- Discussed the risks challenges (Water shortage, Water contamination due to rusted pipelines, WASH)
- Mitigation measures- Plans (Sewerage treatment plant in construction for 6UCs, Water testing kits, Addition of low quality plastic in the STP – including segregation, recycling, composting), conversion of low plastic in usable products.)
- Site visit: STP plant under construction & Integrated Resource Recovery Center where organic fertilizers as output.
- Collaboration: Rain harvesting Project reapplication as best practice, To check if the organic product can be used as fertilizer for farmers.









Stakeholder Engagement with Mardan Development Authority (MDA)

Meeting Highlights:

- Meet & Greet with DD- AWS & its 5 outcomes, PMPKL intentions & way forward
- Discussed the risks challenges (Water contamination with diseases like Hep B & C
- Mitigation measures- Plans (Sewerage system under construction where pipelines, drain archery would be made and the drain lines would be directed to STP and complaint disposal in Kalpani, R&M of roads.)

Water Governance- Stakeholder Meetings

S.NO	Authority	Authority representative & designation	PMPKL representative & designation	Outcome
1	PCSIR	Farhan Nasir-Liaison Officer Director P&D Head Food	Kulsoom Iftikhar Manager EHS Leaf	- Initiative discussed - Risks & challenges & feedback - PMPKL water quality tests collaboration - AWS & 5 outcomes
2	EPA	Intekhab Alam- Assistant Director	Kulsoom Iftikhar Manager EHS Leaf	- AWS & 5 outcomes/ feedback - Risks & challenges & feedback - Rules & regulations discussed - Collaboration on Tree plantation activity
3	Rescue 1122	Imran – District Officer	Kulsoom Iftikhar Manager EHS Leaf Hassan Rehman- EHS specialist	- Initiative discussed - Risks & challenges & feedback - PMPKL Awareness session collaboration - AWS & 5 outcomes
4	PHED	Syed Azam Shah- Executive engineer	Kulsoom Iftikhar Manager EHS Leaf Hassan Rehman- EHS specialist	- Initiative discussed - Risks & challenges & feedback - PMPKL Awareness session collaboration - AWS & 5 outcomes
5	Irrigation	Sadiq Ali- SDO	Kulsoom Iftikhar Manager EHS Leaf Waseem Ali- WPE supervisor	- Initiative discussed - Risks & challenges & feedback - PMPKL Awareness session collaboration - AWS & 5 outcomes
6	TMA	Sarfaraz- TMO Mohsin Amin- Architect	Kulsoom Iftikhar Manager EHS Leaf Waseem Ali- WPE supervisor	- Initiative discussed - Risks & challenges & feedback - AWS & 5 outcomes
7	WSSCM	Imran Afridi- HR Faraz Ahmad- Asst Manager	Kulsoom Iftikhar Manager EHS Leaf Waseem Ali- WPE supervisor	- Initiative discussed - Risks & challenges & feedback - PMPKL collaboration on Rain harvester - AWS & 5 outcomes - Site visit
8	MDA	Fazle Ghaffar- DD	Kulsoom Iftikhar	- Initiative discussed

PMPKL AWS Strategy and Plan

Stragety & Plan Document Evalution, Review and Update Process

1) Staregty & Plan Document shall be reviewed and updated at least **yearly** by EHS AWS Team Lead and AWS Team unless there is no other changes needed to be included within a year.
2) This document shall be updated, when any changes, new projects, updates of ongoing projects are needed to be included.
3) Document last update date, reason of update and responsible person's name shall be noted when any changes made.

Last updated: 9/10/2023, 13.10.2023
Updated by: Kulsoom Iftikhar (AWS Team Leader)
Update reason: Projects details and actions were updated. value creation added

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PMPKL Water Strategy and Action Plan for 2023-2025

No	Shared Water-related challenges to mitigate: Baseline water stress / Water Level Depletion	Surface Water Quality	Access to WASH	Flood Occurrence / Biodiversity Degradation	Goal	Strategy	Action	Decription	Type	Benefit	Standard	Responsibles & Supporting roles/ functions	Time Frame: Start Date	Evaluation D	Measurement / Monitoring: Modality	Typology	Target	Result	Status	Follow-up Action (status)	Intended AWS Outcomes	Completed Results
1	✔	✔	✔	✔	Establish a leadership commitment on water stewardship	Define AWS policy and commitment; communicate internally	Prepare a local AWS commitment and get them signed by PMPKL Manufacturing Director.	Local AWS commitment is to be developed and share with all the stakeholders to get them on-board on water stewardship policy of PMPKL Mardan.	Social & Community (Internal)	Water stewardship commitment on water stewardship addressing the importance of AWS and how to achieve the end goal	2.1 Commit to water stewardship	Kulsoom Iftikhar	15th March, 2023	15th July, 2023	Direct	Engagement	Share with All external Stakeholders & Internal Employees	Shared with All external Stakeholders & Internal Employees	Completed	Done.	Good water governance	Created Water Stewardship commitment on water stewardship
2	✔	✔	✔	✔			Train AWS Team and PMPKL Management Team on AWS requirements	Conduct a AWS Kick-off session with AWS team and PMPKL Site to train them on AWS requirements and expectation from them to participate in all the AWS projects and initiatives	Social & Community (Internal)	Water stewardship commitment on water stewardship addressing the importance of AWS and how to achive the end goal. Also, to train people on self awareness and training work 5 pyhsiology	2.1 Commit to water stewardship	Kulsoom Iftikhar	Nov, 2022	Nov, 20222	Direct	Engagement	84 employees	84 employees	Completed	Done. AWS standard requirements trainings for all employees conducted.	Good water governance	Created Water Stewardship commitment on water stewardship
3	✔	✔	✔	✔			Communicate Commitment internally via boards	Signed AWS commitment communication with all the sites to share ownership and responsibilities on water stewardship. Install AWS commitment on Canteen, notice boards CLA, main gate, Office block & locations	Social & Community (Internal)	to display, disclose and communicate the AWS commitment for easy visualisation and engagement with people.	2.1 Commit to water stewardship	Kulsoom Iftikhar	July, 2023	20 th Aug, 2023	Direct	Visualization	options in site & e	ations in site & e	Completed	Done. Communicating the PMPKL AWS, and AWS strategies will continue via trainings, stakeholder engagement	Good water governance	Created Water Stewardship commitment on water stewardship
4	✔						Define Water KPI for PMPKL Mardan and track on Leadership PDCA monthly and daily ODS	Water KPI to be defined in the SDDS and track in the leadership monthly PDCA to gauge the perfomance.	Social & Community (Internal)	Good governance of water and water savings and adding to water scarcity.	2.4 Responsiveness and resilience to respond to water risks (climate change)	Abdul Waris	Dec-22	Jan-23	Direct	m3/ton of packed tobacco	1.4	1.51	Continuous	Daily assesed in DDS to monitor the trend and how to achive the target	Good water governance and sustainable water balance	Monthly follow up in PDCA is Completed. Water consumption reduction 5926 m3. 0.25 m3/ton water use reduction
5	✔	✔	✔	✔			Review water related regulatory requirements to ensure compliance	Review of legal register with departments to ensure compliance against all water related legal requirements.	Social & Community (Internal)	Developed good water management systems. Identification & listing of legal requirements specific to water & AWS.	2.2 Dowelop and document a process to achieve and maintain legal and regulatory compliance	Kulsoom Iftikhar	Dec-22	25th Jul, 2023	27th July, 2023	Direct	Compliance %	100% Compliance	100% Compliance	Completed	Done. Legal compliance is quarterly followed and reported. Next evaluation is on 27th Nov, 2023	Good water governance Good water quality status Safe Water, Sanitation and Hygiene for all	Good documentation, good water governance
6	✔	✔	✔	✔	Dewlop a system that promotes and evaluates water- related legal compliance	Improved management systems promoting and evaluating water- related legal compliance	Improve on Regulatory follow up via digitalization (Red-on- Line Software deployment)	Implementation of Red-on-line software by engaging 3rd party as a global initiative to improve regulatory compliance and follow up.	Social & Community (Internal)	Developed good water management systems. To make people more capable on laws and introducing the digital platform in line with excel legal register.	2.2 Dowelop and document a process to achieve and maintain legal and regulatory compliance 3.1 Implement plan to participate positively in catchment governance	Kulsoom Iftikhar	Jan-22	Sep-22	27th July, 2023	Direct	Compliance %	100% Compliance	100% Compliance	Completed	Red-Online regulatory follow up system is launchd. Next review is in Nov, 2023	Good water governance Good water quality status Safe water, Sanitation and Hygiene Sustainable water balance	Standard legal documentation availabilty for water management, good water governance
7	✔				Reduction of potable water consumption	Increased water efficiency measures Recycle/reuse of waste water,	Reuse of water usedf for cooling system of hydraulic oil	Water Heat Exchanger is used in order to cool down Hydraulic Oil of packing Station, the Water once pass through heat exchanger were wasted. Cooling Tower is installed to cool down heat exchanger water and recirculated thus water loss is recovered 100%	Technological	Reuse of water brings reduction of water consumption required for cooling helping us in catering for water scarcity, water depletion.	3.3 Implement plan to achieve site water balance targets	Abdul Waris , Asghar Khan	Jan-22	Dec-22	Dec-22	Direct	m3	2238	2238	Completed	Done. Reuse of water brings reduction in water consumption	Good water governance Sustainable water balance	Reduce water consumption, understanding sustainable water management. 0.14,3/ton water savings
8	✔				Reduction of potable water consumption	Recycle/reuse of waste water, Increased water efficiency measures	Reuse Condensate from redryers to reduce water and energy consumption- Best Practice	Reuse Condensate from redryers to reduce water and energy consumption- Best Practice	Technological	Reuse / recycle water to reduce water consumption and also saving energy i boiler area. Aiding in betterment of water sarcity, water stress and re-utilization.	3.3 Implement plan to achieve site water balance targets 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Jan-21	Dec-21	Aug-23	Direct	m3	500	500	Completed	Done. Compressor condensate line has been re-routed to feed water tank. Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions.	Sustainable water balance Good water governance	Reduce water consumption, understanding sustainable water management. 0.14,3/ton water savings
9	✔		✔		Reduction of potable water consumption	Increased water efficiency measures	Replacement of existing Manuel Faucets with Automatic faucets to reduce water consumption in Washrooms, Common rooms and Ablution Area.	• Replacement of existing manual Faucet with automatic sensor type faucet to reduce Water consumption and limit the wastage in; Canteen Washrooms	Technological	Reduce water consumption, increase awareness on water conservation (This initiative was suggested by one of employee)	3.3 Implement plan to achieve site water balance targets 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Mar-23	23-Aug	Nov-23	Direct	m3/ton of packed tobacco	1.51	1.51	Completed	Done. Automatic faucets inspection maitnence in included in inspection plan. In case of any fault, sensors are being replaced.) Evaluation of saving in m3 will be done in Nov 2023 when enough data is available	Good water governance Sustainable water balance	Reduce water consumption, increase awareness on sustainable water conservation 0.06m3/ton water savings
10	✔				Reduction of potable water consumption	Increased water efficiency measures	Plugging of redundant water connection at GLT	All water valves were checked to plug the redundant connections to avoid excessive water usage	Technological	Reduce water consumption, increase awareness on water conservation. Moving towards sustainability and giving a message of optimization and sustainability.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Mar-23	Mar-23	Nov-23	Direct	m3/ton of packed tobacco	1.4	1.51	Completed	Done. Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions. Saving evaluation will be done in Nov 2023 when enough data is available.	Good water governance Sustainable water balance	Reduce water consumption, increase awareness on sustainable water conservation. 0.06m3/ton water saving
11	✔				Reduction of potable water consumption	Increased water efficiency measures	Permanent closure of redundant washrooms	Washroom to be closed that is redundant to avoid water usage and water loss	Technological	Reduce water consumption, increase awareness on water conservation. Moving towards sustainability and giving a message of optimization and sustainability.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Apr-20	May-20	May-20	Direct	m3/ton of packed tobacco	1.4	1.51	Completed	Done. Pipings are installed to recover the rejected water from RO. Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions.	Good water governance Sustainable water balance	Reduce water consumption, increase awareness on sustainable water conservation 0.06m3/ton water saving
12	✔				Reduction of potable water consumption	Increased water efficiency measures	Steam pressure reduction of boiler to conserve water and energy.	• Reduction of steam pressure setpoint from 7.8 bars to 5.6 bars to conserve water and energy. (Trial is conducted and optimize the steam pressure to fulfill the primary requirements without hinderence in operation)	Technological	Optimized boiler steam pressure to reduce water consumption; also saving engy cost	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris/Asghar Khan	Jan-24	Jul-24	Jan-25	Direct	m3	1.4	1.51	Completed	Further study to see the optimization of steam further	Good water governance Sustainable water balance	Reduce water consumption, understanding sustainable water management. 0.05m3/ton water savings
13	✔			✔	Reduction of potable water consumption	Recycle/reuse of waste water , Water-saving plant settings	Piping Infrastructure upgrade in lawns by installing sprinklers to minimize fresh water usage	• In some lawns, treated water pipelines were not available leading to usage of fresh water for irrigation purposes. Sprinklers were installed to reduce fresh water consumption.	Technological	Utilisation of less water to conserve fresh water, increase awareness on water conservation	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Waseem Ali , Abdul Waris	Jan-24	Jul-24	Jan-25	Direct	m3	TBD	TBD	Proposed	Ensure the health of installed piping to conserve freshwater. Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions.	Good water governance Sustainable water balance	Reduce water consumption, understanding sustainable water management
14	✔	✔			Reduction of potable water consumption	Maintenance - monitoring activities	Improvement in water metering at site for effective tracking and monitoring	• Additional water meters are installed in all areas across factory for effective monitoring and action planning	Technological	Improved water monitoring enabling easily focus on focus areas; ultimately creating opportunities for process water consumption reduction.	3.3 Implement plan to achieve site water balance targets 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Feb-22	Nov-22	Jan-23	Direct	Installation	5 new meters installe	5 meters installation	Completed	Done. Monthly follow up on water consumption through meters continue. Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions.	Sustainable water balance Good water governance	More control on water balance; identification of improvement areas, focus areas to focus reduction of water; 0.06 m3/ton water savings
15	✔				Reduction of potable water consumption	Increased water efficiency measures	Improvement in production machines efficiency leading to reduced water consumption	• Production days optimization by improvement in production machines efficiency leading to lower Compressed air and HVAC load	Technological	Reduced water consumption by optimization of machines efficiency to optimize production days. When machines will be efficient so less energy and less water will be consumed.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities	Abdul Waris , Asghar Khan	Nov, 2023	Nov, 2023	May-24	Direct	Frequency	TBD	TBD	Proposed	On-Going. Daily and Monthly water consumption is followed up by Utility-Engineering Department, if any increase of consumption is observed, communication is made to take corrective actions.	Sustainable water balance Good water governance	
16	✔				Reduction of potable water consumption	Increased water efficiency measures	Installation of water & steam flow meters on lamina redryer to optimize consumption	water & steam meters are installed in all areas across factory for effective monitoring and action planning	Technological	Improved water monitoring enabling easily focus on focus areas; ultimately creating opportunities for process water consumption reduction. Moving towards site & catchment betterment and sustainability.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Feb-22	Nov-22	Jan-23	Direct	Installation	100% done	100 % done	Completed	Done. Monthly water quality monitoring followed up by Utility-Engineering Department, if any complain is received., communication is made to take corrective actions.	Good water governance Safe Water, Sanitation & Hygiene	Improve drinking water quality and sustainable water management
17	✔				Develop the Site water balance and diagram	Improved management systems promoting and evaluating water- related to site water balance	Generation of the site water balance and Balance diagram & Sankey Diagram	To conduct and analyze the site water 'balance by data gathering and constructing the balance diagram to identify the losses if any , improve site water quantity, optimize the usage and conserve water.	Technological	Improved water monitoring enabling easily focus on focus areas; ultimately creating opportunities for process water consumption reduction. This wil help in more better visualization and site water analysis or better decisions and acts frequently can be done	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	Jul-23	15th Aug, 2023	30th Aug, 2023	Direct	Visualization	100% done	100 % done	Completed	Done. Monthly water quality monitoring followed up by Utility-Engineering Department, if any complain is received., communication is made to take corrective actions. Follow up is	Good water governance Safe Water, Sanitation & Hygiene	Improve drinking water quality and sustainable water management
18					Reduction of potable water consumption	Maintenance - monitoring activities	Construction of PID diagrams of identified site water infrastructure	Construction of PID diagrams of identified site water infrastructure for effective maintenance & monitoring	Technological	Improved water monitoring enabling easily focus on focus areas; ultimately creating opportunities for process water consumption reduction.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	24th Aug	2nd sep	5th sep, 2023	Direct	N/A	100 % made	100 % made	Completed	Layouts made and shared with team	Good water governance Safe Water, Sanitation & Hygiene	Improve drinking water quality and sustainable water management
19	✔		✔		Reduction of potable water consumption,	Maintenance - monitoring activities	Identify and make the water related infrastructure diagram to know the infrastrutre and perform maintenance & monitoring.	Identify and list down all site related water infrastructure.	Technological	Improved water monitoring enabling easily focus on focus areas; ultimately creating opportunities for process water consumption reduction. Dedicated water infrastructure list will highlight the focus more on these areas and focused undertakings	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Abdul Waris , Asghar Khan	21st June 2023	13th July	15th July, 2023	Direct	Visualization	100 % made	100 % made	Completed	Submitted	Good water governance Safe Water, Sanitation & Hygiene	Improve drinking water quality and sustainable water management
20			✔		Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level & site level	Engage in water-related campaigns and activities with relevant stakeholders in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	1-Construction of ablution area of workers washroom	To construct ablution area for workers & Upgradation/renovation of washrooms to improve the WASH	Social & Community (Internal)	Increased WASH practices, access to WASH. This will also address the basic human rights where PMPKL has been working globally on human rights.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site 1.4 Levels of access and adequacy of WASH at site	Waseem Ali	Sep-23	20th oct, 2023	20th oct, 2023	Direct	Installation	100 % made	100 % made	Completed	Follow up visits done for R&M	Safe water, sanitation and hygiene	Safe water, sanitation and hygiene
21			✔				Construction of new washroom for management	To improve the WASH & good governance at site, new washrooms to be constructed. 2- Upgradation/renovation of ablution area in management washrooms	Social & Community (Internal)	Increased WASH practices, access to WASH. Addressing the needs & expectations + human rights of our people	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Waseem Ali	2nd oct, 2023	10th nov, 2023	11th nov 2023	Direct	Installation	100 % made	100 % made	On-Going	Follow up visits done for R&M	Safe water, sanitation and hygiene	Safe water, sanitation and hygiene
22			✔				Provision of washroom in new lady common room	To improve the WASH & good governance at site, new washrooms constructed for lady common room.	Social & Community (Internal)	Increased WASH practices, access to WASH, good water governance. This is also helping with the inclusion and diversity improvement.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site, 1.3 Levels of access and adequacy of WASH at site	Waseem Ali	15th June, 2023	18th July, 2023	25th July, 2023	Direct	Installation	100% done	100% done	Completed	Phase wise construction was done and inaugurated in presence of leadership	Safe water, sanitation and hygiene	Safe water, sanitation and hygiene, Good water governance
23	✔	✔	✔				Consruction of new operational well to meet the waterrequirements- quiatty & quantity, WASH	Consruction of new operational well to meet the waterrequirements- quiatty & quantity, WASH	Social & Community (Internal)	Increased WASH practices, good water governorsnem, IWRA, Good quiatly & sustained quantity.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site, 1.3 Levels of access and adequacy of WASH at site	Abdul Waris , Asghar Khan	Mar-23	25th Jul, 2023	3rd Aug, 2023	Direct	Installation	100% done	100% done	Completed	New operational well was succesfully constructed	Good water governance Safe Water, Sanitation & Hygiene, Gooe wuality & sustained quantity, IWRA	Good water governance Safe Water, Sanitation & Hygiene, Good quality & sustained quantity, IWRA.
24	✔		✔		Reduction of waste water , Reuse of rain water	Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adopt technological measures	Installation of Rain harvestors in coordination with WSSCM	To reduce water consumption, a water collection tanks constructed to capture rainwater from plant roof and used for the watering of plants	Social & Community (Internal)	Reuse of rain water to avoid excess water usage . This will also show our commitment to stakeholders like WSSCM from where we are copyish this idea.	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Waseem Ali, Kulsoom , Waris	31st Aug, 2023	15th Oct, 2023	15th Oct, 2023	Direct	Installation	100%		On-Going	Rain harvestors feasability study is completed and installation in progress	Sustainable	Sustainable water balance, Important water-related areas
25	✔	✔	✔	✔			Communication on water-related topics awareness raising posters, video sharing through PMI communication channels, emailing, stakeholder communication meetings.	Increased awareness of PMI employees and service providers on AWS stander requirements and water conservation.	Social & Community (Internal / External)	Increased awareness of proper management of resources. Shoing our commitment to AWS and its 5 outcomes.	5.1 Disclose water-related internal governance of the site's management 5.2 Communicate the water stewardship plan with relevant stakeholders	Kulsoom Iftikhar	Dec-22	Oct, 2023	Dec-23	Direct	Visualization, meetings, traini	PMPKL employees, st	PMPKL employees, st	On-Going	Water awareness video preparation(March 2022), Water awareness raising poster preparation (September 2020) TV slide sharing, etc. 2021-June World Environment Day Event communications 2021- September World Cleanup Day Event Communications 2022- March- World Water Day Event Communications	Increase awareness on sustainable water management PMPKL strategies on water among stakeholders.	Increase awareness on sustainable water management through all stakeholders
26	✔	✔	✔				Global Water Day and Water related initiatives campaign to be carried out	• Awarenes campaign on basic Water conservation and WASH principles amongst the employees and in-house contractors, in order to provide information and divulgate best practices to reduce water consumption.	Social & Community (Internal)	Increased awareness of site employees (NCLA+CLA+Service Providers) on natural resources, water scarcity problems, water level depletion, Water risks.	3.1 Implement plan to participate positively in catchment governance 5.2 Communicate the water stewardship plan with relevant stakeholders	Kulsoom Iftikhar/ AWS team	Mar-23	Oct, 2023	Dec, 2023	Direct	Participation	PMPKL employees, st	PMPKL employees, st	On-Going	Water conservation related initiatives and awarenss session in their communities. Awareness videos to be shared. Stakeholder sessions on plan & strategy & performance.	GOOD WATER GOVERNANCE, Sustainable Water Balance, WATER SANITATION AND HYGIENE	Increase awareness on sustainable water management among internal & external stakeholders
27	✔	✔	✔				World Environment Day celebration and flower Plantation Activity to be carried out	• Awarenes campaign on basic environment preservation and ecosystem degradation amongst the employees and in-house contractors, in order to provide information. • Tree/Flower planting activity carried out at on-site green area with PMPKL employees and in-house contractors.	Social & Community (Internal)	Increased awareness on environment, water conservation through planting. Indirectly increase rain potential, reduce evaporation from soil, increase water catchment by soil. Supporting biodiversity and increasing awareness on biodegradable waste using as compost and reducing chemical/ water usage to save water quality.	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom Iftikhar Waseem Ali	Mar-23	Oct, 2023	Dec, 2023	Direct	Plantation	40 flowers plantation	41 flowers plantation	On-Going	Total 40 flowers are to planted at site.	GOOD WATER GOVERNANCE, Sustainable Water Balance, Good Water Quality	Increase awareness on sustainable water management among internal & external stakeholders
28	✔	✔					Water consumption and quality related data to be requested from outsourced service and raw material suppliers	• Detailed investigation (as data request and engagement) of raw material (DIM) suppliers and outsourced service provider's water consumption, quality compliance, exposure to water-related risks and implementation of sustainable water practices • Greater engagement with PMPKL Mardan, growth in motivation towards disclosure and Stakeholder engagement, sharing of water data as well as water safeguarding strategies	Social & Community (External)	Increased awareness of proper natural resources management, and on water scarcity problems, water risks etc. It will include our outsourced/ vendors in the AWS and seriousness of the matter will be cascaded. Responsibility & accoutability factors will be coming into consideration.	3.7 Implement plan to maintain or improve indirect water use within the catchment	Kulsoom/ Hassan	16th Aug, 2023	Sep, 2023	Sep, 2023	Direct	Engagement	0 Outsourced service provider 6 DIM Supplier	5 Outsourced service provider 1 DIM Supplier	Completed	Done	GOOD WATER GOVERNANCE,	Increase awareness on sustainable water management among internal & external stakeholders
29	✔			✔			To check feasability of converting non-operational well to utilize Rain Water for effective ground water table recharge & watering lawn	to convert non-operational well to utilize maximum rain water, in case of heavy rain due to climate change for the future. Identified as risk and challenge	Social & Community (Internal)	• Increased recovery of rain water utility for ground water level recharge. • Promoting and leading by good examples others in the catchment.	1.3 Gather water-related data for the site 3.1 Implement plan to participate positively in catchment governance	Kulsoom/ Waris	Aug, 2023	Dec-24	Jan-25	Direct	m3	TBD	TBD	Proposed	Vendor has visited the site for survey ad PMPKL has susmitted the site data so that vendor can share the plan. The study & cost estimation is on progress	SUSTAINABLE WATER BALANCE GOOD WATER GOVERNANCE	Sustainable water balance, Important water-related areas
30			✔				Water Cooler & Filter Installation in community Schools (By Stakeholder & Employees)	Identification of schools in collaboration with stakeholders to install water coolers with filters to provide safe drinking water. These gaps were obtained after local school visit and shared with us via feedback.	Social & Community (External)	• Joint collaboration with stakeholders to provide safe drinking water to community schools/local people • Increased visibility and setting a good example for others	3.1 Implement plan to participate positively in catchment governance 3.6 IMPLEMENT PLAN TO PROVIDE ACCESS TO SAFE DRINKING WATER	Kulsoom, Waseem Ali, Hajira, Ramsha	July, 2023	Nov-23	Dec-23	Direct	Installation	2 water hand pumps Purifier filters	TBC	On-Going	PO made and will be executed once approval is Completed from Legal & T&C team Water filters will be replaced regularly by the school. Water hand pumps and filter health will be ensured.	GOOD WATER GOVERNANCE, SAFE DRINKING WATER SANITATION AND HYGIENE	5 water coolers, 5 water filters installed in the 5 different school to provide safe drinkging water and increased awareness on water conservation are carried out.
31	✔	✔	✔	✔	Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level	Engage in water-related campaigns and activities in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	AWS Stewardship Report/plan & strategy/AWS organogram/Policy & stakeholder announcement meeting with stakeholders and Community & employees by conducting sessions/ personal meetings/emails	• Public disclosure of AWS implementation, benefits and mitigation strategies carried out • Direct effort in reaching out to Stakeholders, local population and community • Raised visibility on water stewardship efforts	Social & Community (External)	Disclosing the work done on AWS will show our stakeholders that PMPKL is fully committed for the betterment of site as well as catchment. More visibility on our progress.	5.3 Disclose annual site water stewardship summary 5.4 Disclose efforts to collectively address shared water challenges 4.3 Evaluate the stakeholders' consultation feedback	Kulsoom , Hajira, Ramsha	July, 2023	Nov-23	Dec-23	Direct	Engagement	PMPKL employees, st	PMPKL employees, st	On-Going	AWS stewardship report,Plan & strategy, organogram for 2023 shared with stakeholders. While AWS stewardship performance report will be published publically in November, 2023 after certification completion. This is PMPKL Mardan first ever for certification.	Good water governance Sustainable Water Balance Good water quality status IWRA Safe Water, Sanitation and Hygiene	Increase awareness on sustainable water management PMPKL Sahiwal strategies on water among stakeholders; communication with public & customers
32	✔	✔	✔	✔			Engagement event with Rescue 1122, PHED (By Discussion with Irrigation Department), there is a need on the awareness session on floods & safety precautions, spread of contagious diseases, clean drinking water & sustainable use of water and WASH in the catchment area.	conducting 02 engagements with our stakeholders in view of our project AWS, where we will be donating some PPEs and other items (first aid boxes, life jackets, portable de-wash pump, filtration unit, drinking water tanks, tree plantation, installation of waste bins, R&M of washrooms & new installation of wash stations & other accessories, rain harvestor) as per the scope. This is done in view of the risks & challenges identified during our stakeholder meetings, data gathering and insights from govt departments.	Social & Community (External)	Increased awareness of proper natural resources management, and on water scarcity problems, water risks etc., WASH, legal requirements,	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom, Waseem Ali, Hajira, Ramsha, Ahad, Rehma	July, 2023	Nov-23	Dec-23	Direct	Engagement	Engage EPA Engage PHED Engage Rescue 1122 Engage 220 Local Community volunteers 30 tree plantation	TBC	On-Going	This activity will be reported on local news and shared with our stakeholders including PMI global, internal stakeholders via news paper, videos shown on factory TVs. Activity will take place as soon as PMPKL ethics & compliance and legal requirements are completed by Oct, 2023	Good water governance Good water quality status IWRA Safe Water, Sanitation and Hygiene	Increase awareness on sustainable water management among internal & external stakeholders; communication with public & customers
33	✔			✔			TREE PLANTING CAMPAIGN - plant saplings distribution among the community of Bagh(na dei at local hospital	• Joint involvement with local stakeholders EPA • Increased visibility and setting a good example for others This is done in view of the risks & challenges identified during our stakeholder meetings, data gathering and insights from local community.	Social & Community (External)	Joint involvement, water local conservation through planting. Indirectly increase rain potential, reduce evaporation from soil, increase water catchment by soil. As forests are being cut down at fast rate so making a self made forest at local area closer to PMPKL will ensure better over view	3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom, Waseem Ali, Hajira, Ramsha, Ahad, Rehma	July, 2023	Nov-23	Dec-23	Direct	Installation	30 trees donation	TBC	On-Going	Total 30plant saplings will be distributed among the local community of Bachicha Dheri	Good water governance Sustainable water balance Good water quality	Increase awareness on sustainable water management among internal & external stakeholders
34			✔				Installation of hand-wash basins and drain system repair at local coormunity to improve WASH	• Installation of hand-washing facilities and repair of drain system where required in local community schools to improve WASH • Promoting and leading by good examples others in the catchment This is done in view of the risks & challenges identified during our stakeholder meetings, data gathering and insights from govt departments.	Social & Community (External)	Increased awareness of proper natural resources management, and on water scarcity problems, water risks etc.	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom, Waseem Ali, Hajira, Ramsha, Ahad, Rehma	July, 2023	Nov-23	Dec-23	Direct	Installation	6 muslim shower installation 6 sink & installation 5 flush tanks 4 english commode 6 taps & 4 serge taps installation	TBC	On-Going	Handwashing station will be installed and drain system will be repaired. Inspection to ensure the health will be carried out.	GOOD WATER GOVERNANCE, SAFE DRINKING WATER SANITATION AND HYGIENE	8 hand washing facilties and drain system is repaired to improve the hygiene and increased awareness on water conservation are carried out.
35			✔				Workers,management and female washrooms rehabilitation and female common rooms to be build at site	Workers, managemeent and female washrooms to be rehabilitatted to impove the WASH at site. Female common rooms to be build to improve the WASH for females.	Social & Community (Internal)	Increased WASH practices, access to WASH	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom, Waseem	Jun-23	Nov-23	Dec-23	Direct	Installation	100% done	TBC	On-Going	On-Going. Management washroom rehabilitation is in progress.	GOOD WATER GOVERNANCE, SAFE DRINKING WATER SANITATION AND HYGIENE	Workers and female washroom rehabilitation is done to improve the WASH. Female common rooms are built to provide better WASH facilities for women.
36				✔			Emergency Response & preparedness Session covering Flood awareness and water catamination is to be carried out with employees	A detailed emergency response & preparedness awareness session to be conducted with all the employees + service providers to briefly describe their roles and responsibilities in case of any emergency	Social & Community (Internal)	Increased awareness of proper management of resources, and on water scarcity problems, water risks, Giving people more idea on how AWS is also linked with emergency trainings and how we need to act.	2.2 Identify the system to maintain compliance obligations for water and wastewater management	Kulsoom	Jul-23	Dec, 2023	Jan-24	Direct	Engagement	TBD	TBD	Proposed	Email communication and session was conducted on internal governance & role & responsibilities by AWS team. Another session will be arranged in coordination with Rescue	GOOD WATER GOVERNANCE, SAFE DRINKING WATER SANITATION AND HYGIENE	Increase awareness on sustainable water management among employees and service providers.
37	✔	✔	✔	✔			AWS performance and intiatives taken in the catchment to be published in the annual Sustainability Reporting/ yammer & primewbsite	• Global publication of AWS-dedicated article in annual sustainbility report for global PMI views • Increased visibility amongst employees and global PMI community • Awareness regarding on-going accomplishments related to water stewardship.	Social & Community (External)	Increased awareness of proper management of resources, and on water scarcity problems, water risks	5.3 Disclose annual site water stewardship summary 5.4 Disclose efforts to collectively address shared water challenges 4.3 Evaluate the stakeholders' consultation feedback	Kulsoom	Nov, 2023	Dec, 2023	Jan-24	Direct	Engagement	PMPKL employees, st	TBC	Planned	To follo wup with communication team on the publishing in yammer and pmi website	GOOD WATER GOVERNANCE Sustainable Water Balance Good water quality status IWRA Safe Water, Sanitation and Hygiene	

38	✓	✓	✓	✓			AWS awareness session and progress share with employees	• Internal PDCA meeting dedicated to AWS Certification project disclosure • Increased awareness amongst service providers regarding AWS Certification and sustainable water management practices	Social & Community (Internal)	Increased awareness of site employees (NCLA+CLA+Service Providers) on natural resources, water scarcity problems, water level depletion, Water risks. Disclosing the work done on AWS will show our stakeholders that PMPKL is fully committed for the bettwrment of site as well as catchment. More visibility on our progress.	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom	July, 2023	Oct, 2023	Dec-24	Direct	Engagement	84 employees 9 Outsourced service provider 6 DIM Supplier	84 employees 6 outsourced 1 DIM	On-Going	AWS update on initiaitves and action taken shared with the employees to increase their participation and egagement.	Sustainable water balance Good water governance	Increase awareness on sustainable water management PMPKL's strategies on water among stakeholders; communication with public & customers
39	✓	✓	✓	✓	Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level	Engage in water-related campaigns and activities in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	Separtae water meetings to be organized to increase water related concerns and shared water risks awareness and related precautions.	Separate meetings on water stewardship o be carried out to improve collaboration among all the stakehoolders on water related common challenges/risks and opportunities	Social & Community (Internal)	Increased awareness of proper management of resources, and on water scarcity problems, water risks; reduce catchment water risks Planned to be organized in Mardan with the participation of farmers, Industry, University, Municipality, Schools, Regulatory bodies etc. bringing more involvelemnt, engagemnts and inclusiveness of all stakeholders.	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	EA / Sustianability / LR / Stakeholders	July, 2023	Oct, 2023	Nov, 2023	Direct	Engagement	5 industries 8 institutional 1 school 1 BHU 2 NGOs	5 industries 8 institutional 1 school 1 BHU 2 NGOs	On-Going	Feedback taken from them. Risks and challenges identofid and made part of AWS plan & strategy.	Good water governance Sustainable Water Balance Good water quality status IWRA Safe Water, Sanitation and Hygiene	Good water governance Sustainable Water Balance Good water quality status IWRA Safe Water, Sanitation and Hygiene
40		✓	✓		Reduction of potable water consumption	Maintenance - monitoring activities	3rd Party inspection and health check of deep wells and report sharing with PMPKL	3rd party is engaged to perfrom well condition check and also to measure the water table level. Risk identified by thord party vulnerability repo	Technological	Knowing water source predications, being ready for future water related risks related tp good maintence of well, and taking actions on time.	1.5 Gather water-related data for the catchment 1.3 Gather water-related data for the site 5.4 Disclose efforts to collectively address shared water challenges	Abdul Waris, Asghar Khan & Kulsoom	July, 2023	Sep-23	Sep-23	Direct	Engagement	Test results and well videography	Test results and well videography	Completed	Well videography reports received. Detailed report shared for both wells.	Good water governance Good water quality status Safe Water, Sanitation and Hygiene.	Good water governance Good water quality status Safe Water, Sanitation and Hygiene
41			✓		Reduction of potable water consumption	Maintenance - monitoring activities	Washrooms accessories installation to suppot in adequacy of WASH in schools and community	As per recived information from the community and schools , we will install wash rooms in the community to improve WASH. WASH identofiec	Social & Community (External)	Promoting WASH in local community.	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom, Waseem Ali	Jul-23	Nov, 2023	Dec, 2023	Direct	Installation	6 muslim shower installation 8 sink & installation	TBC	On-Going	Planning & survey is done. PO is created for execution. Implementation will satrt after go ahead from legal ,E&C team	Good water governance Good water quality status Safe Water, Sanitation and Hygiene	Good water governance Good water quality status Safe Water, Sanitation and Hygiene
42	✓	✓			Reduction of potable water consumption	Recycle/reuse of waste water, Increased water efficiency measures	Feasability study of WWTP installation at GLT	Discussed with management and vendors & EPA. Feasibility study to install Waste water treatment at GLT. Identifed as site risk .	Technological	Increased WASH practices, safe water disposal, avoid contamination and showing that PMI	3.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Engineering /EHS	Jan-24	Dec, 2024	Jan-25	Direct	Installation	1 WWTP	TBC	Proposed	Expert pinion to be taken, Feasilibity study will be done Jan 2024	Safe Water, Sanitation and Hygiene Good water governance	Safe Water, Sanitation and Hygiene Good water governance
43			✓		Reduction of potable water consumption	Maintenance - monitoring activities	Water filtration unit installation in collaboration with PHED at local hospital/ GLT front wall (For Local Community)	A large capacity water filtration unit installation to be carried out to proivide safe drinking water to the local community as discussed in the water stewardship meeting. Identofied as catchment risk .	Social & Community (External)	Increased WASH practices, access to WASH. Addessing the risks of good water quality to lo	3.9.3 Implement plan to achieve best practice for water quality 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	EA / Sustianability / LR / Stakeholders	Jul-23	Nov, 2023	Dec, 2023	Direct	Installation	1 Filter unit	YBC	On-Going	Planning & survey is done. PO is created for execution. Implementation will satrt after go ahead from legal ,E&C team	Safe Water, Sanitation and Hygiene Good water governance	Safe Water, Sanitation and Hygiene Good water governance
44	✓	✓	✓		Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level	Engage in water-related campaigns and activities in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	Awareness Sessions that will be conducted with local community, households and farmers on daily basis engaging the NGO IRSP- Integrated Regional Support Program).	1-Awareness sessions on : 1- AWS & its 5 outcomes (Good Water governance, sustainable water balance, good water quality, important water related areas, & WASH), Need for AWS, Sustainable Water use & Saving, WASH), AWS policy. 2-PMPKL plan & strategy towards reducing the water footprint. 3-Audience to share any feedback or comments, any risks or challenges they want to share and feedback on PMPKLs initiative towards AWS. 4- PMPKL initiatives that are being done in coordination with the stakeholders towards sustainable water footprint in catchment to be shared.	Social & Community (External)	Increased awareness of proper management of resources, and on water scarcity problems, water risks & Challenges, safe water usage, no wastage of water	4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Kulsoom & Ammara	July, 2023	Oct, 2023	Oct, 2023	Direct	Engagement	17 master Trainers 100 sessions	17 master Trainers 60 sessions	On-Going	Sessions are in progress. This is excellent to broaden our communication to such detailed level and audience including visits to individual houses . Very well done. Besides the trainings, kids have participated in this campaign on AWS by making posters and awareness on water saving was practically demonstrated via small activities. It can be seen that hand wash activity is also conducted.	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA
45	✓	✓	✓	✓	Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level	Engage in water-related campaigns and activities in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	Sharing messages / emails / posters with government bodies so that they can share with rest of the stakeholders	World Water Day / Environment Day / Flood Awareness/ contagious diseases for all catchement communities and stakeholders to be developed and shared with PHED, Rescue 1122 & EPA for further distribiution	Social & Community (External)	Increased awareness of internal / external stakeholders on natural resources, water scarcity problems, water level depletion, Water risks.Disclosing the work done on AWS will show our stakeholders that PMPKL is fully committed for the bettwrment of site as well as catchment. More visibility on our progress.	3.1 Implement plan to participate positively in catchment governance 5.2 Communicate the water stewardship plan with relevant stakeholders	Kulsoom	Jul-23	Nov, 2023	Dec, 2023	Direct	Engagement	Engage EPA Engage PHED Engage Rescue 1122 Engage 200 Local Community volunteers 30 tree plantation	TBC	On-Going	This activity will be reported on local news and shared with our stakeholders including PMI global, internal stakeholders via news paper, videos shows on factory TVs.	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA	
46		✓		✓	Avoidance of contamination -environmental impacts	Maintenance - monitoring activities	• New parameter analysis to ensure best water quality	More water sample points to be identofied including Process, potable & non potable water with additional paaremters added fror water quality tests	Technological	Adding more parametrs as per risks & challenges identofied are going to help with more analysis on water quality. In case of any deviations , timely actions to take that are appropriate relavantto the problem identofied. Also, its gonna help with the root cause of the problem with	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Kulsoom, Asghar Khan, S.M.Ali	Aug, 2023	Sep, 2023	Oct-23	Direct	Chemical, biological parameters	100 % testing	100 % testing	On-Going	Test report sreceived. Analysis to be done by Oct end	Good water quality status, Safe water, sanitation and hygiene	Good water quality status, Safe water, sanitation and hygiene
47	✓	✓			Reduction of potable water consumption	Recycle/reuse of waste water, Increased water efficiency measures	Recycled waste water mapping to be carried out. To check the feasability of reuse of waste water and make a proper action plan.	Recycled waste water mapping to be carried out. To check the feasability of reuse of waste water and make a proper action plan. Identied as op	Technological	Increased awareness of proper management of resources, and on water scarcity problems, water risks & Challenges, safe water usage, no wastage of water	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Kulsoom, Asghar Khan, S.M.Ali	Aug, 2023	Aug, 2025	Sep-25	Direct	NA	TBD	TBD	Proposed		Sustainable water balance Good water governance	Reduce water consumption, increase awareness on sustainable water conservation
48		✓			Avoidance of contamination -environmental impacts	Maintenance - monitoring activities	Waste collection & disposal	Waste collection & disposal at farmers premesis to collect, segregate and dispose off hazardous & non hazardous waste . Identofied as site and catchment risk	Social & Community (External)	Increased awareness & initaitive towards clean environemnt & avoid water pollution with hazardous & non hazardous waste.	3.9.3 Implement plan to achieve best practice for water quality 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Faiza Lodhi/Kulsoom Iftikhar	May, 2023	May, 2023	Sep, 2023	Direct	Engagement	100% coverage of farmers to ensure clean premises	1562 KGs Hazardous & 1450 Non Hazardous waste collected	Completed	Certificates of Recycling and Incineration received	Good water quality status, Safe Water, Sanitation and Hygiene, IWRA	Good water quality status, Safe Water, Sanitation and Hygiene, IWRA
49	✓				Reduction of potable water consumption	Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adapt technological measures	Laser Land Leveler	Water Saving and increase in crop production by introducing land leveler mechanization. Identofied as water scarcity risk and challenge	Social & Community (External)	Save 25mio m3 of water by 2033 PK: 86K m3 water saving for 2023	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Faiza Lodhi/Kulsoom Iftikhar	jan, 2023	jan, 2023	Nov, 2023	Direct	Engagement	86K m3 water saving for PK market	in process of review and validation	On-Going	In Progress	Good water governonce	Good water governonce
50	✓			✓	Reduction of potable water consumption	Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adapt technological measures	PK-Fuelwood Sustainability Study	Ensure sustainability of forest divisions from where fuelwood is sourcing.Supply of fuelwood from declared sustainable divisions and its docun	Social & Community (External)	To save plantation cutting, reduce flood occurance and reduce soil deplition & maintaing water levels, prmoting the IWRA i.e. forest creation	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site 1. 5 Catchment IWRA 1.6 Shared water challenges 4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Faiza Lodhi/Kulsoom Iftikhar	Feb, 2023	Mar, 2023	Aug, 2023	Direct	Engagement	Fuelwood source from identified sustainable forest division	100% fuelwood sourced from selected forest division	Completed	Alignment of sustainability studies with farmers sourced fuelwood from identified fuelwood dealers	Sustainable water balance Good water governance , IWRA	Reduce water consumption, increase awareness on sustainable water conservation
51	✓			✓	Reduction of potable water consumption	Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adapt technological measures	Saplings provision to Own woodlot farmers	Plantation of indeginous tree species in order to save plantation cutting	Social & Community (External)	To save plantation cutting, reduce flood occurance and reduce soil deplition & maintaing water levels, prmoting the IWRA i.e. forest creation	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site 1. 5 Catchment IWRA 1.6 Shared water challenges 4.3 Evaluate the stakeholders' consultation feedback 3.1 Implement plan to participate positively in catchment governance	Faiza Lodhi/Kulsoom Iftikhar	Feb, 2023	Aug, 2023	Sep, 2023	Direct	Engagement	Provision of saplings to farmers for self sufficiency to reduce forest cuttings	Distributed 170,000 saplings to selected farmers	Completed	Follow up visits done for saplings plantation	Sustainable water balance Good water governance , IWRA	Reduce water consumption, increase awareness on sustainable water conservation
52	✓	✓			Reduction of potable water consumption	Increased water efficiency measures	Drain Integrity test of GLT & surrounding drains, tanks, pipelines	Ensure proper drainage of storm water, Drain integrity tests to be conducted. Levels check, pipeline integrity checks.	Technological	To save water and maintain sustainable water balance	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site	Waseem Ali/ Kulsoom/ Waris	July, 2023	Dec-23	Dec-23	Direct	Participation	Drain integrity tests to check no water is wasted/leaked	TBC	On-Going	Coordination with vendor is in progress. Quotation to be shared by vendor. To make PO and perform the tests	Sustainable water balance Good water governance	Sustainable water balance Good water governance
53			✓		Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level & site level	Engage in water-related campaigns and activities with relevant stakeholders in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	Based on several analyses, Pakistan was identified as a key market to be covered by an HRIA. Pakistan is not only a country with potential human rights risks but PMI has significant operations and an important supply chain footprint. In terms of methodology, the HRIA consists of a preparation phase (desktop review) and is followed by a country visit where the consultant performs interviews with internal and external stakeholders. Then, based on the findings, an action plan is established to be	As a part of PMI's Human Rights Commitment and the overall human rights strategy, PMI is committed to assessing human rights risks and impacts by conducting "Human Rights Impact Assessments" (HRIA) in 10 "highest risk" markets (from human rights perspective) by 2025 as outlined in the PMI Sustainability Index.	Social & Community (External/Internal)	assessing human rights risks and impacts by conducting "Human Rights Impact Assessments and catering for the basic rights like wash, environment, water via action plans	1.3 Implement plan to achieve site water balance targets 1.7 Understand the site's water risks and opportunities 1.3 Gather water-related data for the site 1. 5 Catchment IWRA 1.6 Shared water challenges 4.3 Evaluate the stakeholders' consultation feedback 3.6 IMPLEMENT PLAN TO PROVIDE ACCESS TO SAFE DRINKING WATER	Suleman Gul/ Kulsoom	July, 2023	Dec-23	Jan-24	Direct	Engagement	Assessment completion and addition in integrated report 2023	TBC	On-Going	In terms of methodology, the HRIA consists of a preparation phase (desktop review) and is followed by a country visit where the consultant performs interviews with internal and external stakeholders. Then, based on the findings, an action plan is established to be implemented locally or even globally. Sahring fuse sessions with emloyees on human right awareness, online trainings and communication sharing	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA
54	✓	✓	✓	✓	Carry out projects and activities with Stakeholders, employees, community members and local authorities in order to work together towards a sustainable water management and consolidation of AWS outcomes at catchment-level & site level	Engage in water-related campaigns and activities with relevant stakeholders in order to mitigate, anticipate, raise awareness and increase understanding of shared water challenges and risks	To incoporporate the vulnerabilities, opportunities, risks & challenges in the AWS master plan	To address the vulnerabilities, opportunities, risks & challenges, best practices, feedbacks from stakeholders, third party consultation report , local RA , GAin the AWS master plan.	Technological, Social	Ensuring incorporation of all do to tasks in AWS master plan	1 Data Gathering 2 Commit & Plan 3 Implement 4 Evaluate 5 Communicate & disclose	AWS Team	Dec-22	Dec-25	Jul-24	Direct	Engagement	Follow up & completion of tasks	TBC	On-Going	Follow up & completion of tasks via weekly meetings, stakeholder enagagemnts	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA	Good water governance Good water quality status Safe Water, Sanitation and Hygiene Good water quality IWRA

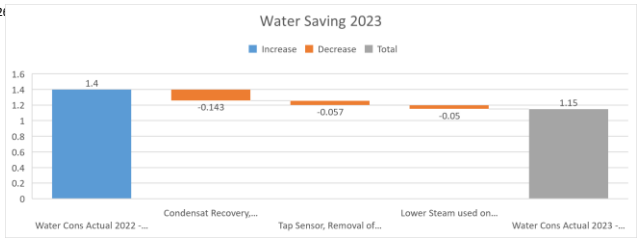
Risks	Priority (updated 2022 then 2023)	Impacts/Opportunities	Potential savings /value creation
Surface Water Contamination	**Moderate-High**	The impacts of rapid population growth and urbanization are leading to poor water quality: untreated domestic sewage, sediment and nutrients from agricultural, and industrial wastes flow PMPKL is located near severals important water-related area (IWRA), each of which present many risks for the ecosystem due especially to: - Pollution from industries, domestic users and agriculture (use of pesticidies) -Cutting of forests. - Illegal conversion of forest to agricultural land and illegal urbanisation - Trade and hunting of endemic species. PMPKL is located near these important surface water sources. In order to avoid contamination they execute: - Periodic and accurate maintenance of water-related infrastructure - Correct storage of hazardous substances during production processes - Water quality tests on the discharged waters & drinking water. - Undertakes joint projects with stakeholders for trash collection, contamination mitigation and waste prevention. - Tree plantation, Saplings provision to Own woodlot farmers Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adapt technological measures PMPKL has planned deep-dive studies and data gathering regarding catchment surface and ground water quality in order better understand and potentially mitigate water risks related to water quality	- Better understanding regarding catchment water quality and cooperation with catchment Stakeholders for data gathering - Active and shared actions and project with relevant stakeholders to raise awareness on water-related risks and mitigate them - Periodic measurements and monitoring of water quality parameters in order to respect legal compliance and optimum water quality - Prevention of water-born diseases and release of hazardous substances - Preservation of water-related ecosystems and environments - Safeguard for human health As per the evaluation: Cost saving done in land leveller & fuel wood project budgeted cost (KUSD- 40.42 and spent 39.41K USD, saving 1.01 K USD)
Ecosystem Degradation			
Access to Sanitation	**Moderate-High**	This risk is generally consistent: Very less households living in the area Swabi have access to sanitary toilets. Located in the same territory, PMPKL has the opportunity to implement actions and projects with the aim of raising awareness on the importance of having good sanitation: PMPKL has installed WASH structures in local villages of Mardan-Swabi.	Internal and joint campaign with relevant stakeholders, in order to raise awareness on WASH principles and the importance of a good water stewardship for the well-being of all. As per the WASH assessment conducted shows 100% drinking water improvement and sanitation in the catchment locality.
Flood Occurence	**Low**	PMPKL is not located in a flood hazard area, but is adjacent to vicinity to Indus river. The rainy season in the Pakistan has more and more above-normal rainfall, with monsoon and storm conditions prevailing, and which may last for several days and weeks. PMPKL has a very active Incident Comunication which frequantly informs internal employees on risky events and raise awareness on general flood risk related to its territory	- Joint actions with Stakeholders to mitigate shared water-related risk - Awareness amongst local population and Stakeholders on mitigation actions related to shared water challenges - Implementation of best practices in catchment territory. With the awareness session, emphases and people awareness will be made.
Projected Change in Flood Occurance	**Moderate-Low**		
Baseline water stress	**High**	PMPKL is localed in a high area of baseline water stress risk.	Awareness and sesibilization joint projects amongst catchment Stakeholders for better and shared water saving actions Water saving of 0.25 m3/ton achieved with water saving initiatives. Water consumption reduction 5906 m3.. 2022 vs 2023
Access to Safe Drinking Water	**Moderate-Low**	PMPKL is located in a sensitive territory due to recent extra-urbanization and population growth.	Awareness and sesibilization joint projects amongst catchment Stakeholders for better and shared water saving actions

water Cons	2022	2023	m3/ton 2022	m3/ton 2023		0.17
Jan - July	4196	3770	0.34	0.51	426	0.0577
Oct - Dec	2650	2650	0.22	0.36		
Season	10209	4731	0.84	0.64	1,443	0.20
Total Water Cons	17055	11,151	1.40	1.51		
Volume Total Usable - Ton	12,204	7380			1,443	0.1955

Water Cons Actual 2022 - m3/ton	1.4
Condensat Recovery, Optimization of Feed Water Tanks	-0.14
Tap Sensor, Removal of redundant Water Points, Locks for water Points, other	-0.06
Lower Steam used on Tobbaco	-0.05
Water Cons Actual 2023 - m3/ton	1.15

	2022	2023
Fixed Water Consumption - m3	6846	6420
Variable Water Consumption - m3	10209	4731
Total Cons - m3	17,055	11,151
Leaf Packed tonnage	12,204	7380
Fixed Water m3/ton	0.56	0.87
Variable Water m3/ton	0.84	0.64

42



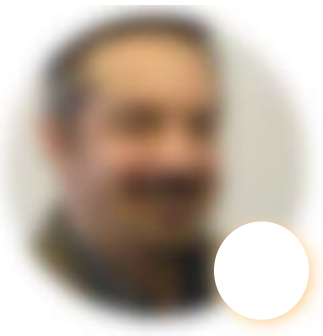
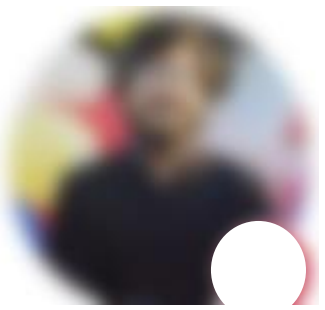
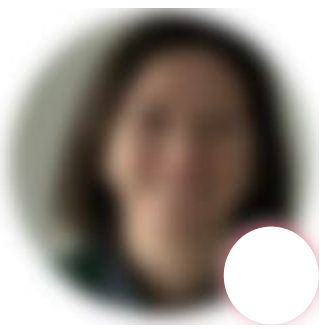
Cost saving done in land leveller & fuel wood project
budgeted cost (KUSD- 40.42 and spent 39.41K USD, saving 1.01 K USD)

Shared water challenges	Description	Actions	Relevance for stakeholders	Relevance for site	Priority
Surface Water Contamination	PMPKL is located in close proximity to several important water-related areas (IWRAs) that are protected by environmental national and local authorities.	PMPKL Mardan is implementing deep-dive studies and data gathering regarding catchment surface and ground water quality in order better understand and potentially mitigate water risks related to water quality PMPKL Mardan has contacted relevant authorities and industrial stakeholders in order to raise awareness on water-related catchment risks and challenges, and implement best practices related to mitigation of contamination events. PMPKL has planned to promote several actions (clean-up event-trash collection, bins installation, drinking water tests, filters installation, tree & flower planting, waste collection(hazardous/non hazardous) at Leaf locations, etc.) together with relevant stakeholders like Public health engineering PHED, Irrigation Department, Muncipal corporation TMA, local NGOs, Rescue 1122, EPA, Dragon fly NGO, IRSP NGO, WSSCM in order to mitigate pollution and ecosystem degradation. Saplings provision to Own woodlot farmers. Reduce water footprint based on established targets by employing process improvements, re-use and recycling activities and adapt technological measures Wate water treated plant is added in our master plan 2024. for planned activitoes PO are made.	Theme of concern for relevant environmental authorities and local stakeholders Opportunity to create a synergic and joint approach to water stewardship in the territory and in relavance to the risks & challenges identified.	PMPKL Mardan is a part of a relevant water demanding shed, located in close proximity to the Indus River PM Mardan is implementing the AWS strategy plan defined in view of the risks and challenges/opportunities identified from different sources (stakeholders, visists,3rd party consultation etc.) in order to mitigate its impact on the territory.	**Moderate-High**
Ecosystem Degradation					
Access to Sanitation	PMPKL is located in a sensitive territory due to recent extra-urbanization and population growth	PMPKL has engaged in actions and projects for ensuring access to WASH facilities amongst the local communities and contracted farmers PMPKL Mardan has also planned campaigns in order to raise awareness on the importance of sanitation and has also built latrines for local communities. WASH fcailities inside plant are available and further improved with time. New ladies common room with adjacent washroom was built. Sensor taps installed in washrooms for water saving and easily access of water. upgradation of workers washroom + ablution area, upgradation of management washroom. Awareness sessions are conducted at locations on WASH and local community & vulnerable group with engagemnet activities done. for activitoes/engagemnets PO are made. for activitoes/engagemnets PO are made.	WASH matters are relevant for all stakeholders in the catchment, especially the local communities, the local population and the authorities which may synergistically help increasing awareness.	PMPKL with the implementation of AWS best practices regarding WASH, might drive a change within is catchment area of reference. Its in line with the identofied R&O and challenges and AWS plan. PM Mardan is implementing the AWS strategy plan defined in view of the risks and challenges/opportunities identified from different sources (stakeholders, visists,3rd party consultation etc.) in order to mitigate its impact on the territory. for planned activitoes PO are made.	**Moderate-High**
Flood Occurrence, **Projected change in flood occurenece**	PMPKL falls within a low flood risk area and its located near local bodies	PMPKL has a very active Incident Communication which frequently informs all employees on risky events and raise awareness on general flood risk related to its territory. PMPKL is working with Rescue 1122 and is planning on arranging an awareness session on fllods, precautionary & safety measures and contagious diseases with in kind donations to be made so that cen be used by society. for activitoes/engagemnets PO are made.	- Joint actions with Stakeholders to mitigate shared water-related risk - Awareness amongst local population and Stakeholders on mitigation actions related to shared water challenges - Implementation of best practices in catchment territory	PMPKL with the implementation of AWS best practices regarding water sustainability might drive a change within is catchment area of reference. PM Mardan is implementing the AWS strategy plan defined in view of the risks and challenges/opportunities identified from different sources (stakeholders, visists,3rd party consultation etc.) in order to mitigate its impact on the territory. for planned activitoes PO are made.	**Low** **medium low**
Water Stress	PMPKL is localed in a high area of baseline water stress risk	PMPKL has engaged in various water saving projects at farm level, factory level and local community level where targets are set to optimize water foot print. Projects like water levellar mechaization, water meter installation, etc are all initiatives to sustain water usage. Moreover, awareness sessions to schools, farmers, local communities are also done in this regard. Also data gathering for water use ration and how to reduce it over the years. for activitoes/engagemnets PO are made.			**High**

Access to Safe Drinking Water	PMPKL is located in a sensitive territory due to recent extra-urbanization and population growth	PMPKL has engaged in actions and projects for ensuring access to WASH facilities amongst the local communities- farmers, buying stations, warehouses etc. PMPKL Mardan has also planned campaigns in order to raise awareness on the importance of good potable water quality and access to all. for activitoes/engagemnets PO are made.	WASH matters are relevant for all stakeholders in the catchment, especially the local communities, the local population and the authorities which may synergistically help increasing awareness	PMPKL with the implementation of AWS best practices regarding WASH, might drive a change within is catchment area of reference. Like the rain harvestor idea captured from WSSCM during PMPKL viist to their site. PMPKL has intstalled the rain harvestors on site and planned in catchment. PO made.	**Moderate-Low**

ALLIANCE FOR WATER STEWARDSHIP Journey
ORGANIZATION

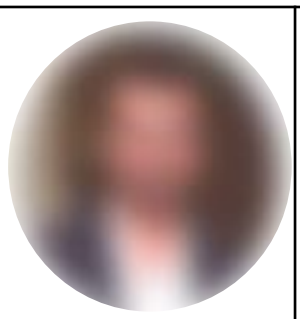
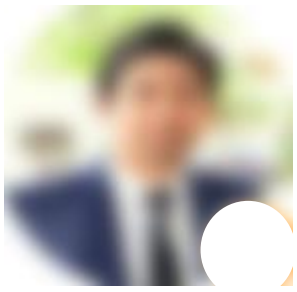
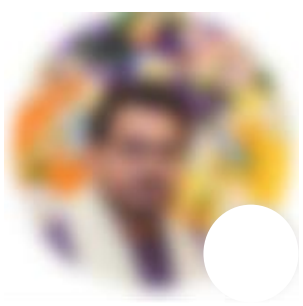
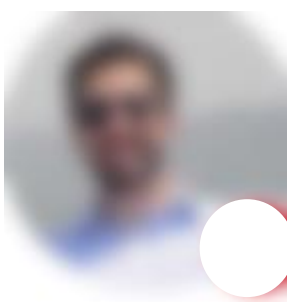
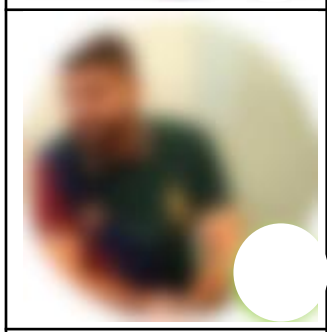
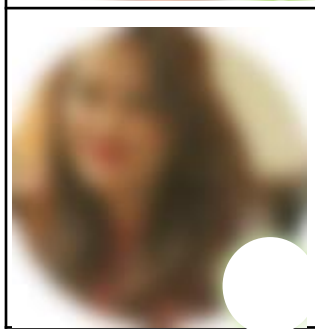
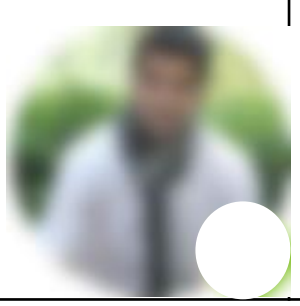
In line with our commitment for water stewardship, PMPKL Mardan has appointed a multi-disciplinary team to drive and support our AWS Journey.

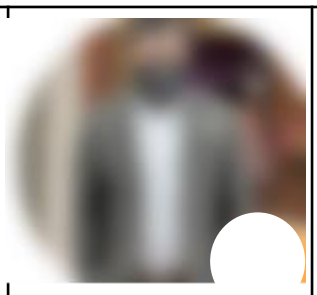
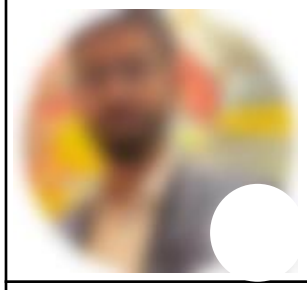
Project Sponsor	M. Irshad Khan Head of Leaf		Faisal Mushtaq Director Manufacturing, PMPKL	
PMI Buddy	Haseeb Ahmed Manager Sustainability			
Coach	Chiara Rizzi Manager Global AWS certification			
Consultant	Saera Kirmani External Consultant- Geoscience			

AWS Project Lead

Kulsoom Iftikhar
Project Lead

AWS Core Team Members

	Asghar Khan Boiler Engineer		M. Bilal Ahmad Manager Leaf, Processing
	Syed Muhammad Ali Manager Production		Abdul Waris Manager Maintenance
	Hussain Ali Sr Mgr Social Sustainability. LDR & Culture		Hassan Zahoor Procurement category lead
	Ahad Abdullah Manager Illicit, trade prevention, EA		Basit Tufail OPEN+ Deployment lead
	Kulsum Khan/ Ramsha Legal Affairs- Counsel		Waseem Ali Supervisor WPE

AWS Project Lead			
	Kulsoom Iftikhar **Project Lead**		
AWS Core Team Members			
	Arshad Zaman Supervisor warehousing & logistics, S&PD		M. Ikraam Warehouse executive, S&PD
	Hammad Shoaib GT, Production		Faiza Lodhi Manager Environment sustainability, SA
	Ammara Shahjahan Sustainable Agriculture		Hajira Khan Internal Communications Lead
	Sana Hashmi Company secretary, Ext Communications		Waqas Ali Labour Relations Executive

#PAKISTAN NOW

Water Related Roles & Responsibilities
PMPKL Mardan

Identification and Management of Legal and Other Requirements

#PAKISTAN NOW

PK-EHS-3L-0P17 EHS Management System

Position	Roles/ Responsibilities	Current Occupant of Position (22.08.2023)
Director Manufacturing	• Ensure there is established process and documented plan for all legislative and other regulatory requirements. • Ensures the provision of resources targeted towards compliance to legal and other requirements	Faisal Mushtaq
Sustainability Manager	• Ensure that this procedure is being implemented • Communicates with the Leadership Team the status of compliance through the Management Review	Kulsoom Iftikhar
Sustainability Specialist	• Identifies all applicable and relevant legal and other requirements related to the environment • Evaluates and monitors compliance to environment-related legal and other requirements together with the concerned personnel or department • Ensures implementation of this Procedure	Kulsoom Iftikhar
Employees/ Head of Departments	• Informs EHS of changes in processes, materials, or products that may impact compliance to legal and other requirements • Assist in the evaluation and monitoring of the compliance to legal and other requirements	M. Bilal Ahmad M. Shahid M. Nadeem Khan M. Bilal Anjum Waseem Ali Haseeb Ahmad Waqas Ali Harris Khan Khattak

Environmental Complaints Management

#PAKISTAN NOW

PK-EHS-3L-P-02 Environmental Management System

Entity/ Department	Key responsibilities	Current Occupant of Position (22.08.2023)
Director Manufacturing	Ensure that environmental complaints are addressed and allocate, if required.	Faisal Mushtaq
Sustainability Manager	Monitor environmental complaints and ensure that investigations, corrective and preventive actions are implemented. Notify internal and external parties on the nature of complaints and corrective and preventive actions taken. Liaise with Corporate affairs and Legal Departments regarding the complaint.	Haseeb Ahmed/ Kulsoom Iftikhar
Sustainability Specialist	Record the environmental complaint. Notify & Investigate with the relevant Line Management on the nature of the complaint .Coordinate and monitor the implementation of the corrective and preventive actions undertaken by the company.	Kulsoom Iftikhar
Line Management	Investigate with the EHS delegate and Implement the corrective and preventive actions to address the complaint.	All concerned line management
Corporate Affairs	Liaise with related government agency, if required.	Ahad Abdullah
Legal Department	Review notices and responses on the nature of the complaint.	Kulsum Khan/Ramsha

Water and Wastewater Non-conformity Management Procedure

#PAKISTAN NOW

3S-EHS-11 Water & waste water non-conformity procedure

Entity/ Department	Key responsibilities	Current Occupant of Position (22.08.2023)
Manufacturing Director	• Ensure water and waste water non-conformity program is in place.	Faisal Mushtaq
Sustainability Manager	• Ensure that a Water and Wastewater Non-conformity Management Procedure is developed and implemented. • Monitor the implementation and effectiveness of this procedure. • Select appropriate third party service provider to conduct the sampling and analysis of water and wastewater.	Haseeb Ahmad/Kulsoom Iftikhar
Department Managers	• Ensure that this procedure is being implemented. • Identify, develop and implement wastewater and water minimization programs with quantifiable objectives and time frame. • Review wastewater and water minimization program.	M. Bilal Ahmad M. Shahid M. Nadeem Khan M. Bilal Anjum Waseem Ali Haseeb Ahmad Waqas Ali Harris Khan Khattak
Sustainability Specialist	• Ensures that all regulatory requirements pertaining to water and wastewater are complied. • Maintain an inventory of water and wastewater sampling points in the facility. • Review results of analysis for any deviations to standards. • Guide the review team through the incident investigation process. • Validate the results of analysis. • Ensure compliance to water and wastewater related EHS permits, clearances and certificates • Provide the updated standards to be complied with for water and wastewater. • Liaise with relevant government bodies for permit requirements, regulatory updates, reports and other communications relating to water and wastewater.	Kulsoom Iftikhar

Water and Wastewater Non-conformity Management Procedure

#PAKISTAN NOW

3S-EHS-11 Water & waste water non-conformity procedure

Entity/ Department	Key responsibilities	Current Occupant of Position (22.08.2023)
Manager Maintenance	• Maintain an inventory of water and wastewater sampling points in the facility • Selection of the wastewater and water treatment manager service provider and ensure that they have the capability to comply with the set standards and requirements of the law and the contract. • Set and monitor the requirements for process water. • Ensure the proper treatment of water and wastewater prior to use or discharge. • Update the inventory for changes in the water or wastewater stream and communicate the changes appropriately. • Lead the investigation of non-conformities.	Abdul Waris
Water and Wastewater Management Service Provider	• Ensures that water and wastewater are tested according to the standards and requirements. • Maintain all internal testing and monitoring results • Ensure on-time submission of required reports and documentation. • Participate in any non-conformity incident investigation as necessary. • Implement corrective actions necessary to comply with the standards and requirements.	Badar Zaman- GeoWatt
Area Supervisor and Team Lead	• Ensures that this procedure is being implemented. • Ensures that wastewater and chemicals are disposed through the right channels, in coordination with Law and PMI requirements. • Ensure that all machines/equipment are operated and maintained properly. • Implement and monitor wastewater and water minimization programs. • Ensure that employees are informed and trained in wastewater and water minimization programs.	Syed Muhammad Ali Waseem Ali Arshad Zaman Abdul Waris Numair Saleem Kulsoom Iftikhar
Employee	• Implement and follow the wastewater and water minimization programs. • Inform the supervisor of any issues regarding the requirements of the procedure. • Suggest wastewater and water minimization programs.	

PDCA Sessions

- AWS Awareness for general population

Virtual training was conducted by PMPKL employees for team formation, Aws awareness, policy , benefits & its 5 outcomes.
- Multiple session were conducted in this regard in Dec 2022, Aug, 2023, Sep 2023 and Oct 2023

Session with Workers

- AWS Awareness for general population & Workers





Session Covered:
AWS and its 5 outcomes

- WASH
- Anti littering
- Keeping Environment & water areas clean
- Clean Water & healthy Life
- Stop open burning
- AWS Policy

Disclaimer: Pictures are blurred in view of the data privacy and confidentiality

Session with Workers

- AWS Awareness for general population & Workers






Session Covered:

- AWS and its 5 outcomes
- WASH
- Anti littering
- Keeping Environment & water areas clean
- Clean Water & healthy Life
- Stop open burning
- AWS Policy
- How to save water

Disclaimer: Pictures are blurred in view of the data privacy and confidentiality

Session with Workers

- AWS Awareness for general population & Workers

Session Covered:

- AWS and its 5 outcomes
- WASH
- Anti littering
- Keeping Environment & water areas clean
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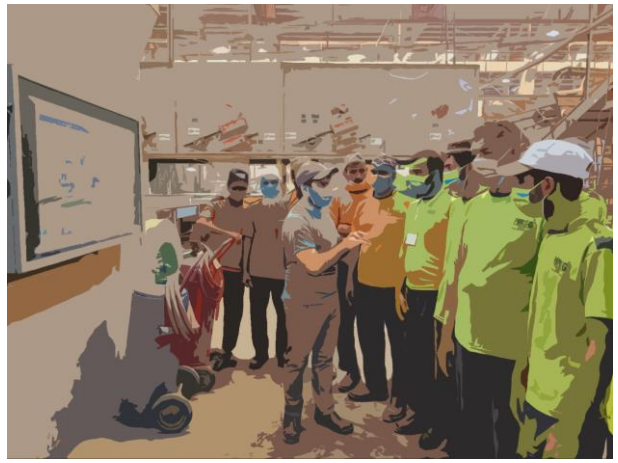
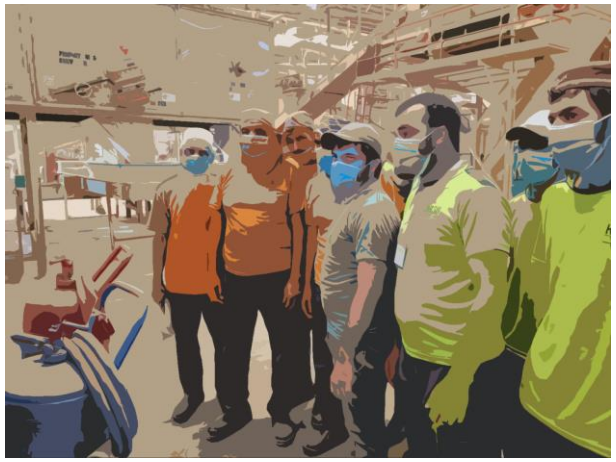
AWS Awareness Sessions

- AWS Awareness for general population & Workers



Session Covered:

- AWS and its 5 outcomes
- WASH
- Anti littering
- Keeping Environment & water areas clean
- Clean Water & healthy Life
- Stop open burning
- AWS Policy

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Session with Service Providers

- AWS Awareness for general population & Service Providers

Session Covered:
AWS and its 5 outcomes

- WASH
- Anti littering
- Keeping Environment & water areas clean
- Clean Water & healthy Life
- Stop open burning
- AWS Policy
- How to save water
- Water usage by service providers & mitigation measures

AWS Performance Update

- AWS performance Update, performance feedback from Stakeholders

AWS Performance Update (Social)

Clean Up Day

- Collection of hazardous & non-hazardous waste
- Proper disposal in compliance with applicable requirements

1562 KGs hazardous & 1450 KGs non-hazardous waste collected from farmers premises.

To ensure premises cleanliness, WASH and safe water quality, contributing in keeping water related areas clean

AWS Performance Update (Social)

Distributed 170,000 saplings to selected contracted farmers

Provision of saplings to contracted farmers for self-sufficiency to reduce forest cuttings

To ensure sustainable water balance, IWRA and good governance

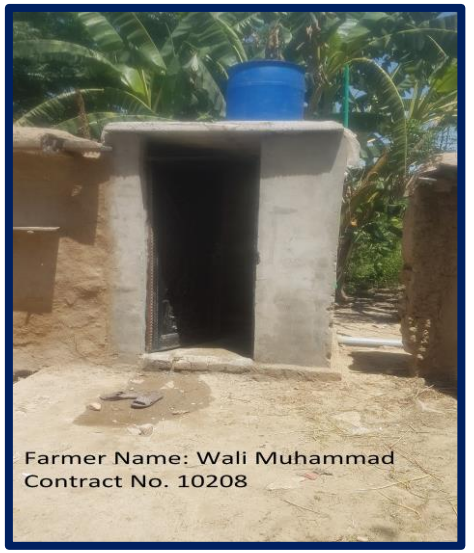
AWS Performance Update (Social)

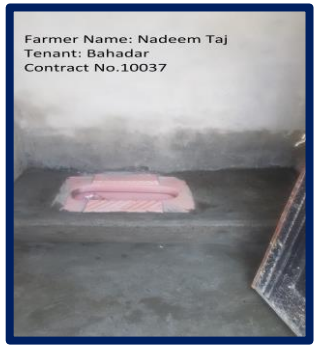
Water Quality Tests
- At different locations
- At local hospital

WASH at farmers premises
- Construction of washrooms
- Installation of commodes
- Installation of water tanks
- Data collection on WASH showing 100% drinking water availability & improved sanitation

To ensure water quality, good governance and WASH

Disclaimer: Some of the farmers are not contracted with us anymore but the facilities are still in use





AWS Performance Update (Social)

WASH at site

Upgradation of workers washroom

Upgradation of Office washrooms (Ongoing)

Upgradation of ablution area

New common room with attached washroom for ladies

To ensure good WASH at site

AWS Performance Update (Social)

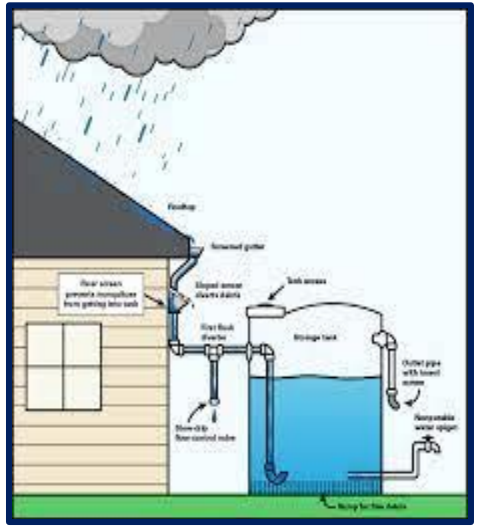
Engagements planned with stakeholders (Rescue 1122, PHED, EPA, local schools & local hospital)

- Awareness session on
  - Floods and safety measures
  - Spread of contagious diseases
  - Clean drinking water
  - Sustainable use of water
  - WASH

PMPKL contribution by donating:

- First-aid boxes, portable de-wash pump, life jackets
- PPEs (face masks, face shields, gloves, full body safety kit and aprons)
- Tree saplings
- Waste bins
- Washroom accessories
- Water filtration units & cooler
- Rain harvesters
- Anti-littering posters













AWS Performance Update (Technical)

- New operational well
- Plugging redundant connections
- Gemba walks
- Installation of new meters
- Condensate recovery
- Rain harvesters

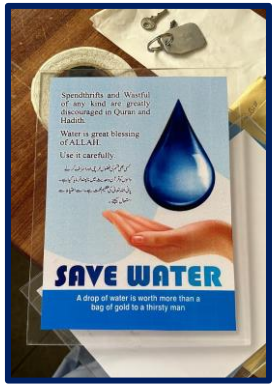
- To ensure sustainable water balance, IWRA, good governance, water quality & quantity, requirements under applicable laws, WASH







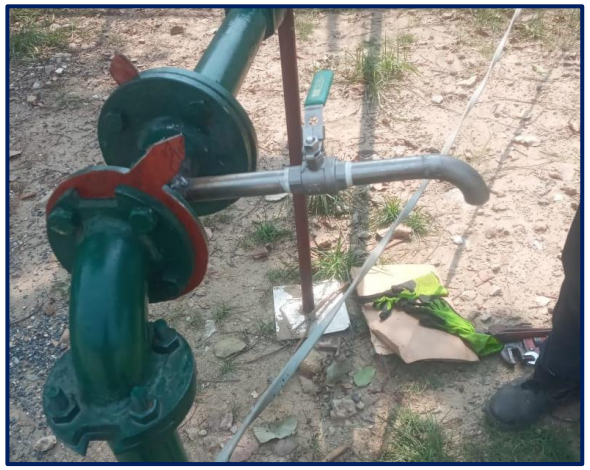




AWS Performance Update (Technical)

- Installation of food grade taps
- Installation of sensor taps
- Heat exchanger
- Installation of rain harvesters
- Upgradation of washrooms
- Water quality tests (new parameters & new area samples)

- To ensure sustainable water balance, good governance, water quality & quantity, requirements under applicable laws, WASH



Oil Spill Incident- Hydraulic Press at GLT Mardan

Corrective & Preventive Measures

S.NO	CA/PA
1	AM CIL for inspection of flanges- Done
2	AM CL for flange- Done
3	Bolts Tightening- Done
4	Capability building & training of third party technical team- In progress
5	Material of O-ring to be improved- Done
6	Visibility improvement in C shift by installation of cameras – In progress

Initial Problem Statement:

During operation, hydraulic oil leak was observed from hydraulic press section installed on roof top. Oil was spilled on roof and entered into rainwater channel on roof.

Description:

One of the flanges installed on 2” pressurized oil line got leaked and oil spilled on roof top. The oil spilled so it entered the rainwater drain channel, however it was a controlled spill as leaked oil was contained there and no water violation occurred i.e. oil spill didn’t reach the main drains and was contained there. The oil leakage was realized in morning due to low visibility in C shift (night shift) at roof.

Root Cause:

The O-rings were of poor material & purchased locally

CIL was not prioritized for Press due short period of season

3P worker trainings were not refreshed .

IPS summary and way forward:

- Inspection monitoring regime for press (CL+ CIL to be created)
- Training of technicians on critical equipment in every area
- Material of O-Ring to be improved to avoid material failure breakdowns.

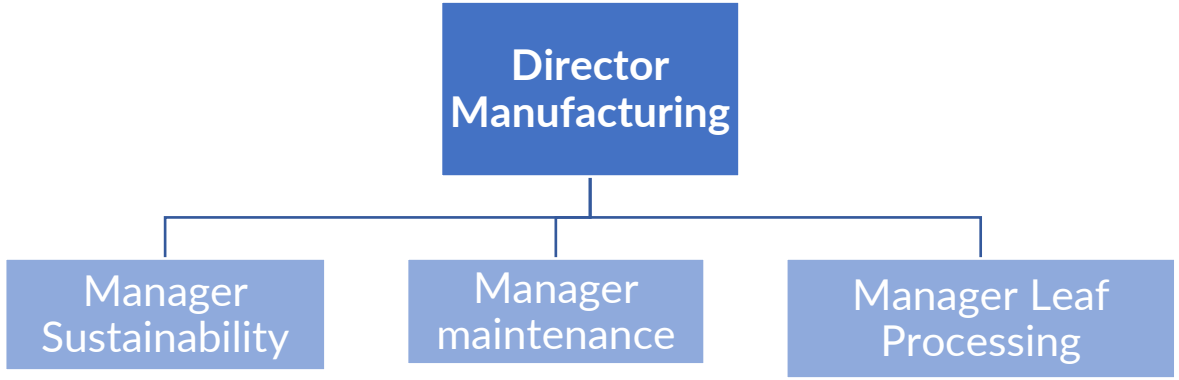
P.S: AWS requirement : 5.5.1, 5.5.2, 5.5.3 (disclosing the water related violations to stakeholders, relevant public agencies & corrective actions executed)

Site Water-related internal governance

Water-related governance Team charter:

At PMPKL's Mardan factory, water governance is an integral part of our business strategy. It's linked to PMI's global ambitions towards responsible water use and strong routine governance systems.

Below mentioned hierarchy is responsible & accountable for water-related governance, applicable Laws adherence with applicable laws and action planning.



Site Water-related internal governance org chart

Water KPIs & Governance at site

- At PMPKL's factory in Mardan, ***total use of water at site*** is monitored as a Key Performance Indicator (KPI).
- KPI data is reviewed with top site leadership i.e., Director Manufacturing on defined review frequencies.
- Improvement actions are tracked for efficient closure. (Corrective & Preventive actions taken as per need)

manufacturing OF THE future