

AWS Journey

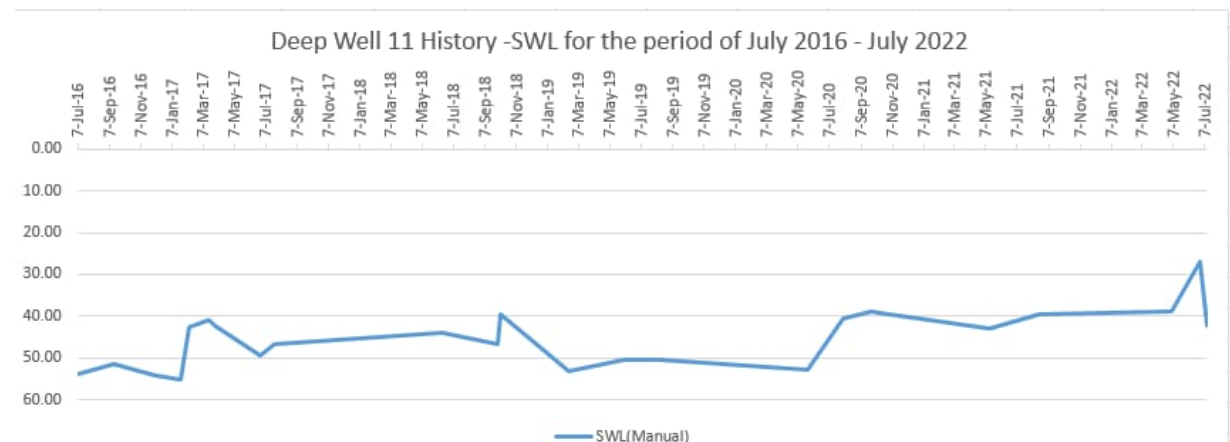
Nestlé Port Qasim Factory – 2019 - 2023



The Healthy Hydration Company™

Water Resources Background, Challenges & Actions

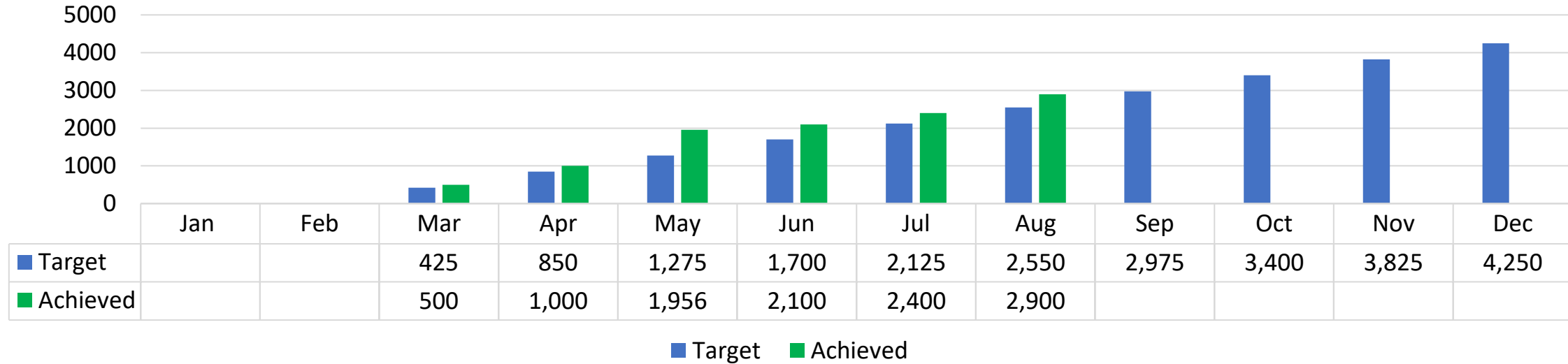
- PQ Factory exists 5 km away from sea
- Source of water is underground water (Deep wells-Depth 400 m)
- Being closer to Sea, underground water reservoirs contain Saline water which is not usable without industrial treatment
- Water Saving Projects are also done to continuously improve caring for environment which is 10th core business principle of Nestlé. This helps to slow down salinization which is shared water challenge.



Water Savings - PQF



Manufacturing Units: Water saving Target at 4100 m3



Key Water Saving Projects:

2008 – 2012: Reducing Operational losses on Fillers and Washer

2013: Detailed water map was done followed by GPI exercise

2014: Optimization of CIP, Backwash & RO flushing Sequences

2015: New 10 μ pre-filter + GFS tank installation

2016: Installation of Recovery RO-Saved 28 Mio Lit/annum and DMAIC on HOD Filler Losses

2017: Reduction in Retail Line Diversions via new ozone injection point and Recovery RO Water Usage in GFS tank

2018: Recovery of Water from market Returned leak bottles

2019: Increase in RO Global Recovery from 85.7% to 90% via raw water feed conductivity improvement and shifting to DDCCD CIPs for backline

2020: Optimization of Filler and Washer operational losses (increase from baseline due to decrease in RO recovery to maintain wastewater compliance)

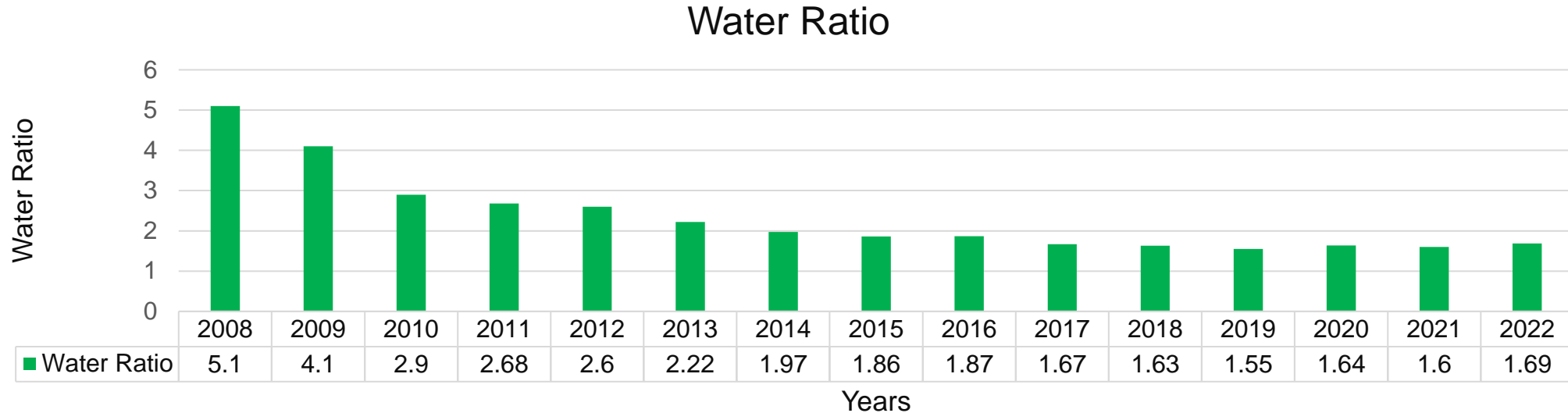
2021: Installation of Effluent Management system to restore RO recovery up to 90%

2022: Reduction in HOD Bottles Manual Washing Consumption

2023: Reduction in Retail and HOD Overfilling to fully utilize Recovery RO



Water Ratio Improvement - PQF



Key Water Saving Projects:

2008 – 2012: Reducing Operational losses on Fillers and Washer

2013: Detailed water map was done followed by GPI exercise

2014: Optimization of CIP, Backwash & RO flushing Sequences

2015: New 10 μ pre-filter + GFS tank installation

2016: Installation of Recovery RO-Saved 28 Mio Lit/annum and DMAIC on HOD Filler Losses

2017: Reduction in Retail Line Diversions via new ozone injection point and Recovery RO Water Usage in GFS tank

2018: Recovery of Water from market Returned leak bottles

2019: Increase in RO Global Recovery from 85.7% to 90% via raw water feed conductivity improvement and shifting to DDCCD CIPs for backline

2020: Optimization of Filler and Washer operational losses (increase from baseline due to decrease in RO recovery to maintain wastewater compliance)

2021: Installation of Effluent Management system to restore RO recovery up to 90%

2022: Reduction in HOD Bottles Manual Washing Consumption

2023: Reduction in Retail and HOD Overfilling to fully utilize Recovery RO



Nestlé Pakistan Water Plan – 04th October 2017



AWS Kick Off Meeting – 28th May 2018

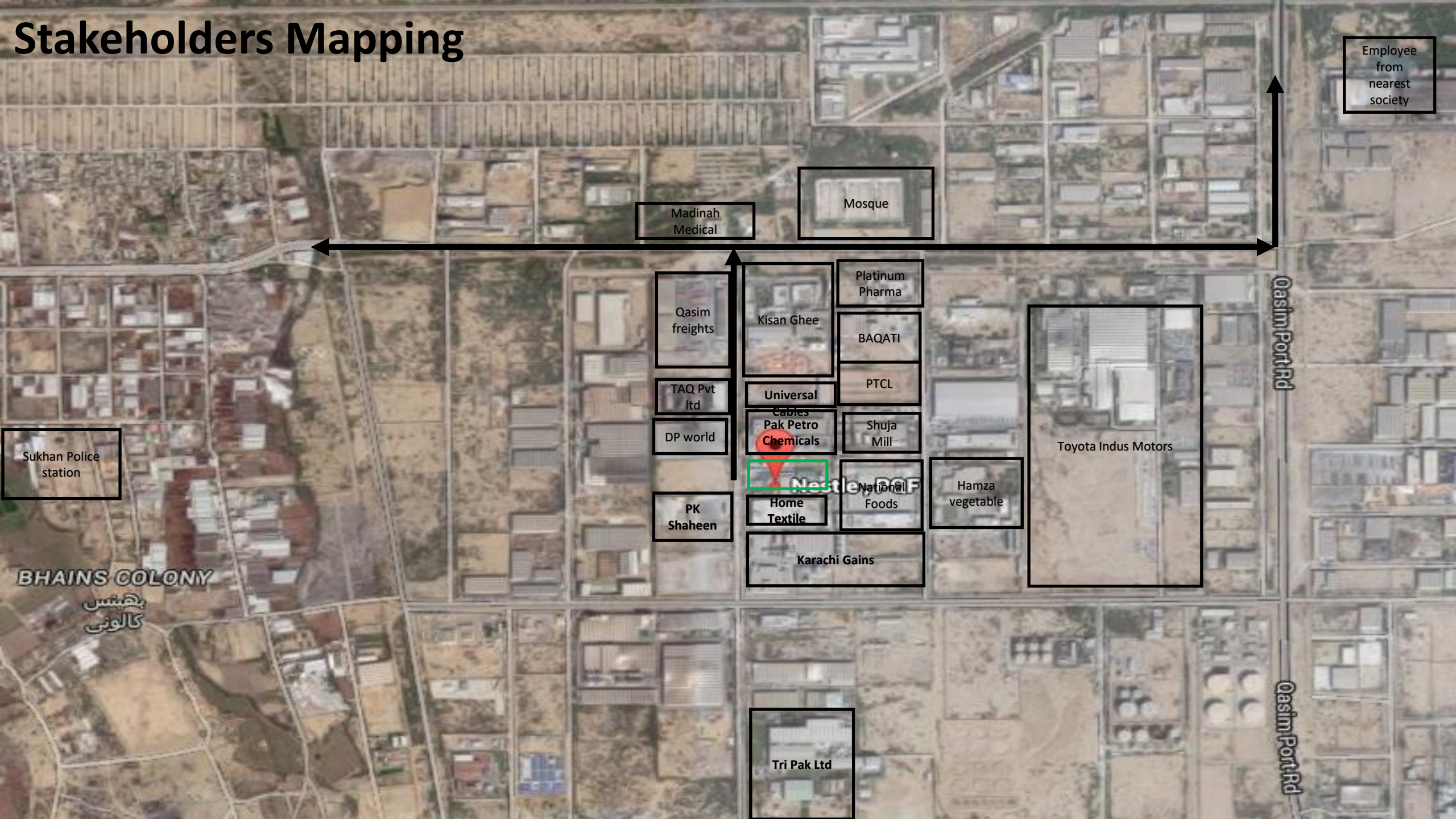


AWS Kick Off Meeting



Dinner With Journalists

Stakeholders Mapping



Stakeholder Interviews – 2019-20



Shuja Mill (sufi oil)



Commisioner Karachi-Iftikhar shallwani



Water Treatment operator-Nestle



Universal Cables



Pak petro chemicals



Port Qasim Authority



Stakeholder Interviews – 2019-20



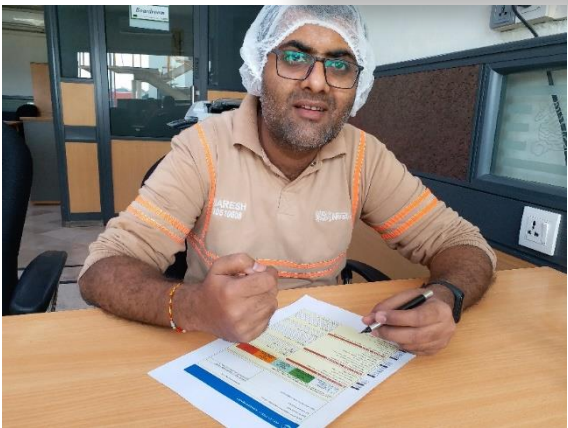
National Foods



Faisalabad Oil Refinery (Kisan Ghee)



Home Care textile



Employees



Pak shaheen



Key Opinion Leaders Visit – 29th January 2019

Information session



Laboratory and testing



Water treatment and filtration



Filling & packaging area



Key Opinion Leaders Visit – 05th March 2019



Information session



Laboratory and testing



Filling & Packaging area



Deep well extraction



Key Opinion Leaders Visit – November 2019

Information session



Laboratory and testing



Injection Molding

Relations with Community - 2020



Commissioner Karachi at Nestlé Event



Meeting with Employees



Meeting with Neighboring Industries



Meeting with Neighboring Industries

Tree Plantation In Collaboration With Authorities Under Clean Green Pakistan Initiative



Port Qasim Authority

- Mr. Muhammad Siddique
(Director Environment)
- Mr. Mirza Azhar Iqbal
(Manager Environment)
- Mr. Sham Lal Sharma
(Deputy Manager VEYB)
- Mr. Rashid Mustafa
(Sample Collector)
- Mr. Zeeshan Bari
(Boom Operator)

Sindh EPA

- Mr. Muhammad Siddique
(Inspector)
- Mr. Muhammad Siddique
(Inspector)
- Mr. Muhammad Siddique
(Inspector)

Tree Plantation In Collaboration With Factory Neighbors Under Clean Green Pakistan Initiative



Tree Plantation Activity was conducted (dated: 18th March, 2019) in collaboration with Mr. Muhammad Ikram Naizi (Manager HR/IR & Admin, Hamza Vegetable Oil Refinery Ghee & Mills) where 200 Trees planted in surroundings of their company. They gave commitment to give water to trees & also take care in future.

Nestle Employees also engaged voluntarily with full passion & planted their trees in that area.

Employees Engagement & Involvement



Employees Engagement & Involvement



Nestlé Port Qasim Factory has planted total 10,000 trees in 2019 with employees, neighboring industries and authorities, trees growth is also being monitored via audits.

World Water day Celebration - 22nd March 2019



WWD Celebration with Employees, Neighboring School Kids & Neighboring Industries



Information session – Presentation on Caring for water & AWS



Poster Competition



Cake Cutting



Tree Plantation



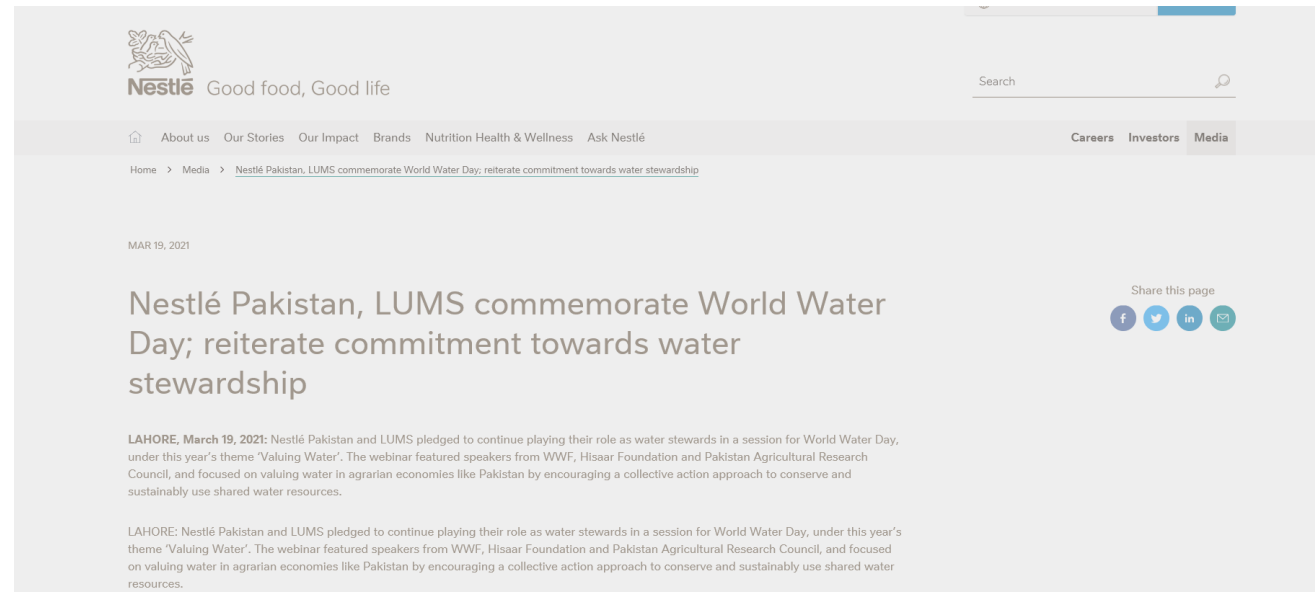
Poem Competition

Beach Cleaning at Sea View Karachi– 05th Feb & 08th June 2019



<https://www.nestle.pk/media/news/nestle-pakistan-lums-commemorate-world-water-day-reiterate-commitment-towards-water>

World water day celebration in factory as well as in LUMS to re-iterate commitment towards water stewardship with key opinion leaders.



Water Awareness Session with Community and Neighboring Industries



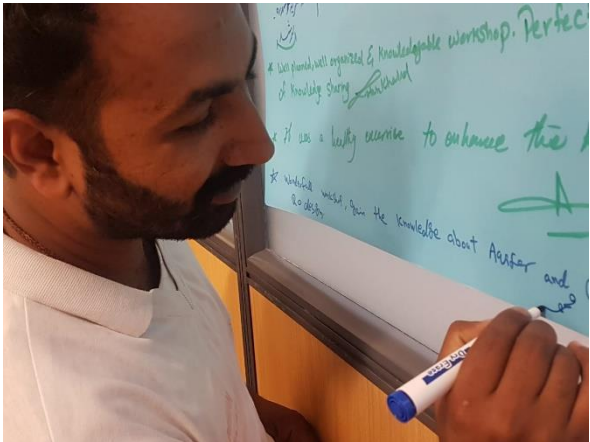
AWS Awareness Session & Water Resource Training For Employees



AWS Awareness Session for Water Resources Champions across Market



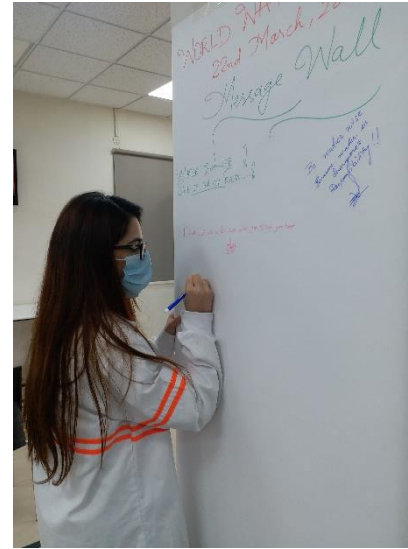
Live Bore Hole Drilling Experience



Excellently positive feedback was received from all participants for workshop. Involvement and enthusiasm towards learning was evident.



World Water Day Celebration – 22nd March 2021



Awareness session with team on water saving projects and AWS



Tree Plantation with Neighboring Industries – 2021



Tree Plantation activity was conducted in 2021 at:

- Indigo Pvt Ltd. : 500 trees
- Nissan Ghandhara: 1400 trees
- National Forum for health and environment :1000trees

Total **2900** trees were planted in 2021

Stakeholder Interviews – 2022



National Foods



Pak Shaheen Cargo



Home Care textile



Sukhan Police Station

Employees

Stakeholder Interviews – 2022



Hamza Vegetable Oil & Ghee (Sufi oil)



Baqati



Madinah Medical Centre



Universal Cables



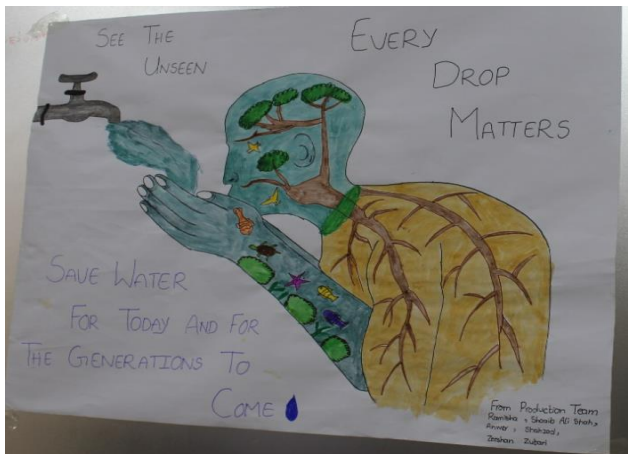
Pak petro chemicals

World Water Day Celebration 2022

- Organized a connect session with employees on Water Pledge, C4W-Pakistan and AWS Standard
- Water Pledge video of Technical manager and BEO displayed and shared messages with team on importance of internally throughout the day.
- Leadership team shared messages with employees on importance of water in day-to-day life



World Water Week - 2022



Tree Plantation with Neighboring Industry – 2022



Beach Cleaning at Sea View Karachi - 2022



World Water Week Celebration

Port Qasim Factory from (20th to 24th Aug)



World Water Week Celebration

Port Qasim Factory from (20th to 24th Aug)



World Water Week Celebration

Port Qasim Factory from (20th to 24th Aug)



Connect session with External Stakeholders



Connect session with External stakeholders (i.e. Neighboring industries, Authorities representatives and KWSB) and internal stakeholders (employees) was conducted at site to promote the water stewardship.



Major Catchment Projects by Nestle

High Irrigation Efficiency System (HIES)- Nestle Pakistan Limited

Nestle has installed 3 drip irrigation plant in Sindh region which help farmers in water conservation and increase crop yield.

