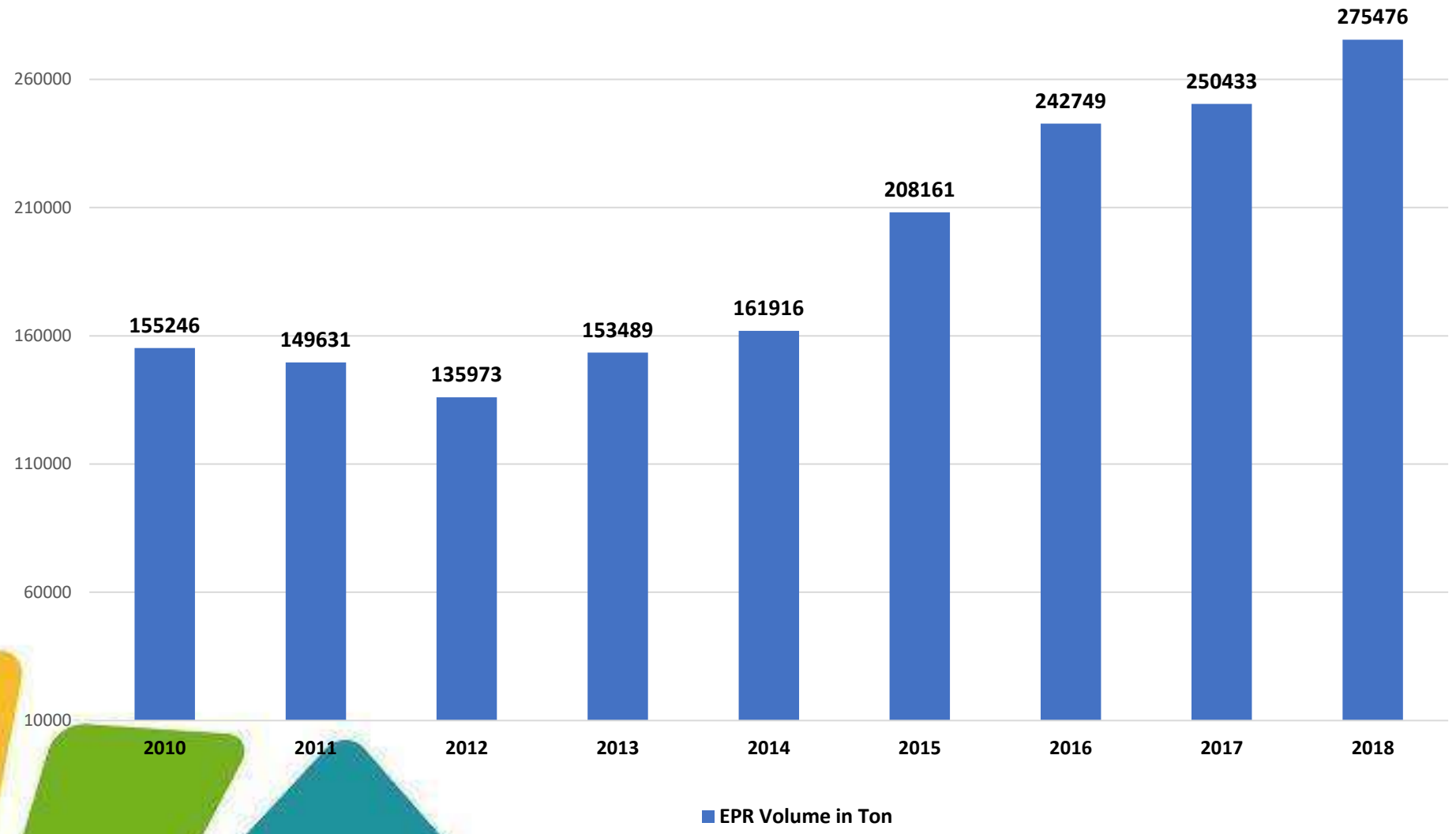
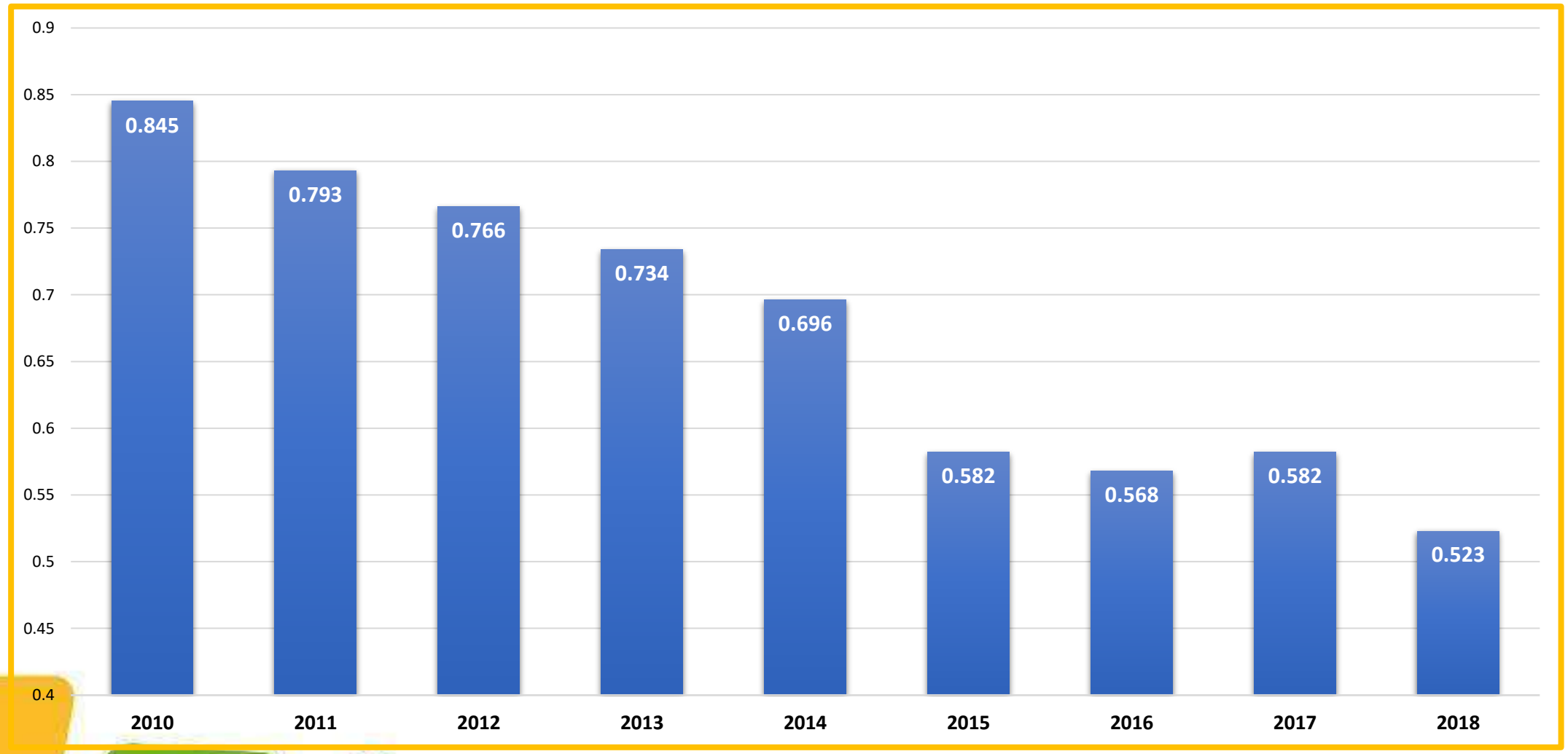
Hindustan Unilever Ltd, PONDY

WATER PILLAR

VOLUME TREND



WATER CONSUMPTION TREND :: KL / TON



WATER CONSERVATION MEASURES

Sl. No.	Description	Saving KLD	Timeline
1	ETP Treated Water is passed through two stage Reverse Osmosis Plant. The good output from the R.O. plant is then used as Feed Water for Medium Pressure Boiler. The reject water is evaporated using solar power or steam, if required.	90	Completed
2	RO Backwash water – used for Toilet Flushing & Gardening	32	Completed
3	Steam Condensate from plants collected in common tank.Recycling for Cooling Tower make-up & Boiler Feed	25	Completed
4	All hand wash water taps in Canteen, Wash rooms & Plant hygiene stations are changed to push type or sensor activated taps which ensures almost 50% reduction in water consumption.	12	Completed

WATER CONSERVATION MEASURES

Sl. No.	Description	Saving KLD	Timeline
5	Liquid plant condensate recovered and reused in Sodal plant	7	Completed
6	Fire hydrant pipes leakage has been arrested & underground fire hydrant lines have been rerouted to above the ground at wherever possible.	6	90% Completed ; will be over by Sep 2018
7	DM plant regeneration waste water used for Boiler Ash cooling	3	Completed
8	Installation of Sea Water RO to generate reusable Water from RO rejects	6	Completed

WATER BALANCE

WATER BALANCE SHEET

S.NO	Requirement	Qty in KLD	Yield from industrial bore well	Qty In KLD	
	Industrial Purpose				
1	Process water	208	Bore well P-03-49-01-03789/Mi1	380	
2	Cooling Water	167			
3	Boiler Water	135			
	Total (A)	**510**	**Total**	**380**	
	Domestic purpose		**Recovery from Process**	**Qty In KLD**	**Used For purpose**
1	Canteen	21	Water Recycle from ETP	78	To Boiler
2	Toilet	19	Condensate water usage in cooling tower	30	DFA Plant
3	Drinking Water	5	RO water Back wash	24	Garden/ Toilet
	Total (B)	**45**	Recover from Condensate	24	Boiler/Process
			RO water usage in cooling water	19	to reduce the blow down
	Daily water Consumption (A+B)	**555**	Total recovery water	**175**	
Daily water consumed			**Total water requirement**		
380 KL			**Raw water**	**Recovery**	**= Total water requirement**
			380	**175**	**555**

WATER RECHARGE IN FACTORY

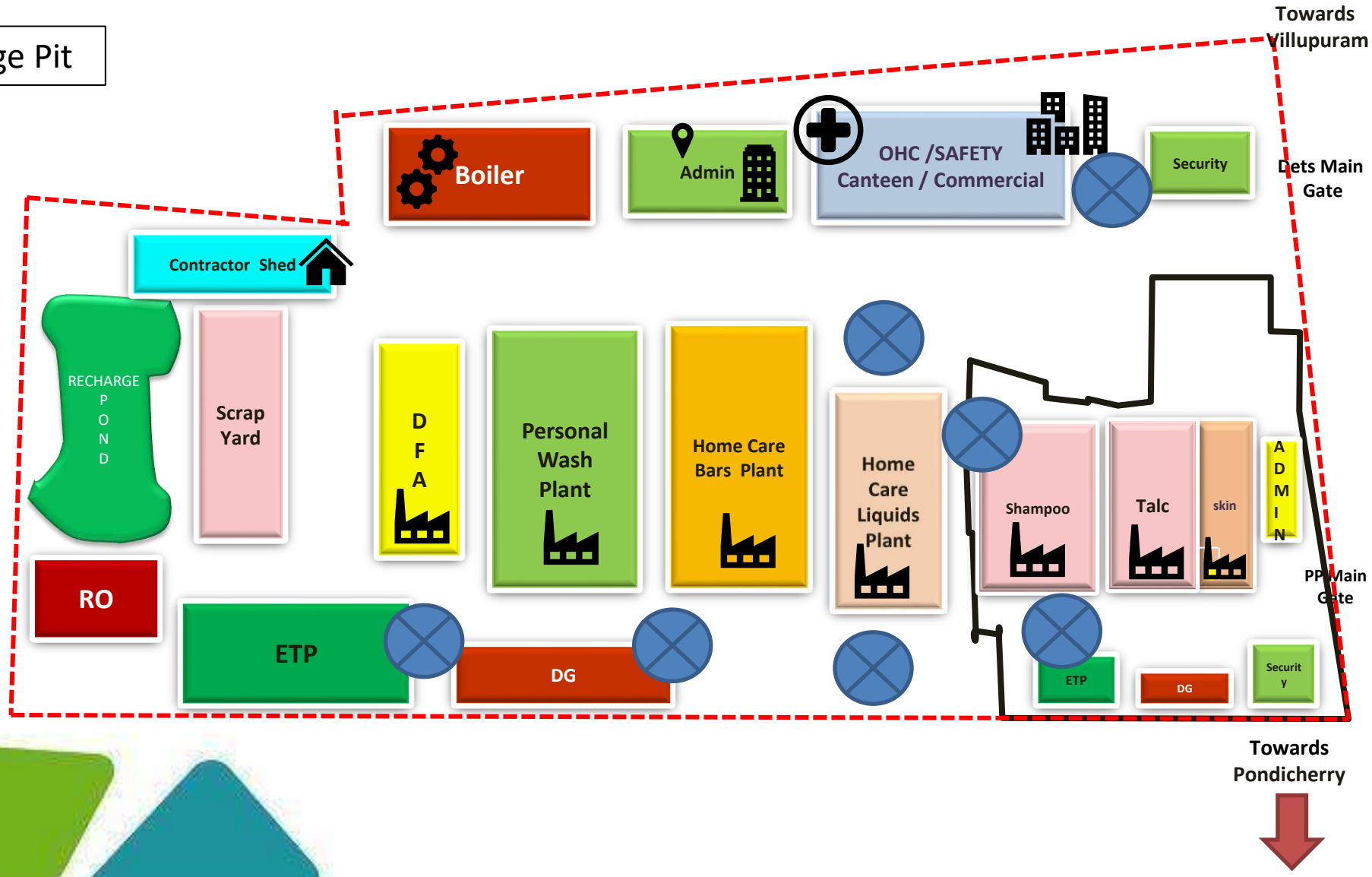
Year	Area (Sq.m)	Average Rain fall (METER)	Run off Coefficient	Quantity of rain water harvested in KL/Year	Qty of water consumed in the plant	Qty of water percolation over consumption in %
2017	100113	1.450	0.8	116131	133925	87%

Water harvesting Pits :: Total 7 Nos

Quantity of Rain Water Harvested = Area * Average Rain fall * Run off Coefficient

RECHARGE MAP

Recharge Pit



Rain Water Harvesting

- Constructed 7 infiltration wells inside the factory.
- Average of 6000 lit./day percolation capacity per Infiltration well.

- Pond area 3740 SQM
- Average depth 1.7 M
- Connected to storm water drain on both sides
- Pond capacity 6400 CUM

WATER PILLAR :: CSR INITIATIVES

- Rs.104 Lacs invested
- 26 Ponds Completed
- Working closely with communities
- Total of 30 Ponds renovation identified
- 10Lakhs KL recharged/Annum,3x factory water requirement

THANKS