



THEME : CLEAN WATER FOR ALL

SDG GOAL 6 : CLEAN WATER & SANITATION

6



Sustainable Development Goal (SDG) 6 talks about Ensuring availability and the sustainable management of water and sanitation for all. Clean, accessible water for all is an essential part of the world we want to live in.

There is sufficient fresh water on the planet to achieve this. But due to bad economics or poor infrastructure, every year millions of people, most of them children, die from diseases associated with inadequate water supply, sanitation and hygiene.

Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition.

By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water. Water and sanitation-related diseases remain among the major causes of death in children under five; more than 800 children die every day from diarrheal diseases linked to poor hygiene. Proper water and sanitation is a key foundation for achieving

the Sustainable Development Goals, including good health and gender equality.

By managing our water sustainably, we are also able to better manage our production of food and energy and contribute to decent work and economic growth. Moreover, we can preserve our water ecosystems, their biodiversity, and take action on climate change.

India's Water and Sanitation Crisis

- India is the second most populous country in the world, with more than 1 billion citizens. Roughly half of India's population, a staggering 569 million, practice open defecation.
- The World Bank estimates that 21 percent of communicable diseases in India are linked to unsafe water and the lack of hygiene practices. Further, more than 500 children under the age of five die each day from diarrhea in India alone.
- With its strong microfinance sector and extensive need for improved water and sanitation solutions, India provides a great opportunity for Water.org to scale our WaterCredit solution. Monitor Deloitte estimates that the rural sanitation market in India is worth US \$25 billion.

Source : <https://water.org/our-impact/india/>

Source : <http://www.un.org/sustainabledevelopment/water-and-sanitation/>

Introduction to Water Journey At MSSSPL



MSSSPL has always contributed towards water conservation and has driven various important projects to provide clean water thereby creating a linkage to Sustainable Developmental Goal - 6, which talks about clean water for all, sustainable management of water & Sanitation for all.

The company worked in order to provide employees continued access to hygienic and safe drinking water. We are also continuously monitoring and enhancing the quality of drinking water through an upgrade of existing systems. Our persistent efforts have borne fruit and we have been able to reduce river water withdrawal for industrial top up from 3.86

m/t for 2013-14 to 2.34 m/t for 2016-17.

Our company has adopted the triple approach of consumption reduction, conservation and recycling to steadily reduce the fresh water consumption over the years.

Our journey began in 2008 with various efforts towards water conservation, and we have made remarkable progress since then.

**- Mr. Sourav Chakrabarti
Mentor : Water team**

WASH



WASH stands for 'Water, Sanitation and Hygiene', three interrelated sectors that represent key Public Health and Human Rights issues that are of special interest in a developing country like ours. A large percent of our population continues to face issues of availability and access to clean water and proper sanitation facilities, and lack of awareness of sanitation best practices. Systematic and scientifically planned WASH projects have the potential to improve life expectancy, promote gender equality, and assist in socio-economic development and poverty reduction. Thus it forms an integral component of national and international development policies and frameworks, including the Sustainable Development Goals (SDGs).

As an organization that employs

and provides housing facilities to many employees, and uses water in crucial cooling processes, **MSSSPL has a special interest in WASH. We aim to secure appropriate access to safe water, sanitation and hygiene at the workplace for all employees**, in all premises under our control within three years. To achieve this aim we have planned a wide variety of activities that include WASH awareness and training activities, employment of water saving technologies, ensuring the availability of personal hygiene related items, and developing an SOP for cleaning, recharging and disinfection of drinking water stations. To initiate these activities we will carry out a baseline assessment using the WASH Self-Assessment tool promoted by the World Business Council for Sustainable Development.

**- Ms. Ipshita Rawat
Business Excellence Cell**





WATER REDUCTION



Our water reduction journey has been managed and executed through excellent team work by arresting leakages and sewages throughout the plant. The team consists of a core team and functional team and focus exclusively on water management. Our water management policy aims at achieving a 'Lean Water Footprint' and developing 'Sustainable Water Resources'. The policy also lays down the target action plan that prioritizes the following :

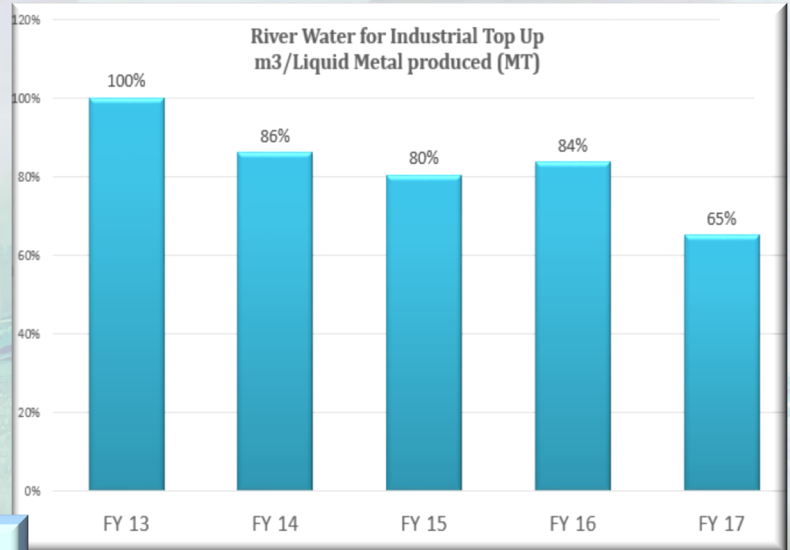
- Water conservation at source
- Zero discharge outside the plant premises
- Rainwater harvesting and water accounting

Our journey towards reduced consumption has been deliberate and rewarding. We conducted a Water Audit to understand water use pattern, leakages and waste; following which we built an internal check

Targets

Supply of drinking water as per ISO 10500
Achieve water reduction of 50% from the baseline year of 2013

dam for rainwater harvesting and ground water recharge.



- Mr. P. N. Gawade
Mechanical Maintenance Department

INTRODUCTION TO STAND BY PUMP

Results of initiatives

- Achieved required head of 35 meter
- It is being used for daily 4 hours



Team Members

- Mr. Sourav Chakrabarti (Mentor)
- Mr. Sandeep Jadhav
- Mr. Prabhakar Gawade
- Mr. Pramod Jadhav
- Mr. Praveen Deshmukh
- Mr. Jayesh Mhatre
- Mr. Juikar
- Mr. Vishal Gupta

Our team observed that there was only one pump in operation for the supply of drinking water to the overhead tank through a filter. In this scenario there was a risk of the water supply getting disrupted due to a breakdown of the pump or motor. Due to mismatch between pump head and required head energy consumed was high. Moreover there was also a threat of snakes at the pump location.

To tackle all these problems, the team thought of using a spare pump which was scrapped through waste to wealth concept. The pump was overhauled and its impellers were trimmed to achieve required head. The pump is now installed outside pump house for easy access.



Benefits from the project

- ⇒ Current drawn is reduced from 125 Amps (old pump) to 55 Amps (Spare pump).
- ⇒ As a result units (KWH) reduced from 81 to 35.
- ⇒ Achieved Savings of units/Hr - 46 (184 Units/Day - 4hrs Operation)

- Mr. Sandeep Jadhav
Mechanical Maintenance Department



SEWAGE TREATMENT PLANT



We understand that recycling of water is the need of hour and can play a vital role in reducing dependence on fresh water resources.

	Target	Actual
Reduce river water lift for industrial top up (m3/T)	2.33	2.34
% Reuse of STP treated water		18%

We reuse grey water from our Sewage Treatment Plant for industrial use and gardening, while using rain water for industrial top up, and have set targets to reduce industrial lift and consumption volumes. WRI's Aqueduct tool helps us map our water risk and source vulnerabilities, and contribute to our local community by supplying filtered water to the residential township housing our staff. Our water team is dedicated towards water conservation. Through theme based monthly flyers we are creating awareness among our employees about water conservation and water management within operations.

Our towards water roadmap includes planned targets for two key parameters; reduction of river water lift for industrial top up and increasing the reuse of treated water for industrial and gardening purposes. This year we have been successful in achieving our targeted water intensity and achieved 18% reuse of treated STP water.

- Mr. Pramod Jadhav
Mechanical Maintenance Department

The best way to predict the future is to create it.....

Water saving by using waste MS pipe



The Water Team observed a continuous over-flow of water from the blooming furnace return trench which caused water wastage and also extra liftment of water from river. Our daily water intake had increased drastically due to the above mentioned problem. The basic reason for water over-flow was that we were pumping extra water in the trench beyond its rated designed capacity.

The team decided to divert the extra water of trench directly to the main cold well sump. For this task 280 meters of pipe was required. After discussion within the team it was decided to use waste pipes from within the plant.



Before



After

We used different sizes of pipes to meet our requirement and our project was successfully completed in the month of November 2016."

Overall savings are as below :

- **Water saved 150 m3/day**
- **Energy saved 689 Unit/day**

- Mr. Sandeep Jadhav
Mechanical Maintenance Department

Quiz time :

70% of our atmospheric oxygen (nearly 3 out of 4 breathes you take anywhere on the planet) is due to
1. Rainforests 2. Boreal forest 3. Photosynthesizing ocean organisms 4. None of these

(Be the first one to SMS the answer @ 7720091891 & get a prize for the same.)



BLOG : YEAR OF LIVING SUSTAINABLY



The 17 Sustainable Development Goals have been adopted by all UN Member States. This is a great initiative, but now what?

Governments will be busy for the next 15 years working to achieve the goals, but that doesn't mean that all the work falls on them. The private sector, civil society organizations

and regular people can all help accelerate the achievement of the SDGs. But sometimes it is not that easy to know where to start. There are 17 goals after all, each one with different targets and indicators.

In fact, the question we get asked most frequently is: how can I help?

We want to make it easier for you to do your part. We don't

want you to feel like ending poverty, tackling climate change and reducing inequality is something only policymakers can do. We don't want you to think it is impossible to achieve – it is all doable.

This is why we have started the **Year of Living Sustainably**, a space where we will share tips on how to lead a sustainable lifestyle. Many of our tips are simple and you may already be doing them. Others will require you to change or adopt new habits. But you don't have to turn your life upside-down to be sustainable. You don't have to do everything at once. We want you to understand that change starts with you and your involvement matters.

Your small actions can have a big impact!

To know more please refer to below mentioned link : <http://www.un.org/sustainabledevelopment/yols/>

Employees With Sustainable Lifestyle



Sustainability may sound like a complicated concept to implement within our homes. But on an everyday basis, knowingly or unknowingly, we conduct many activities that can contribute towards sustainability. As an individual we can contribute in many ways towards sustainability by sorting our waste and disposing it properly, becoming more efficient with our errands, practice minimalism, reduce & reuse plastic, use water resources efficiently etc.

There are small ways in which we can contribute towards sustainability.

There is only one corner of the universe you can be certain of improving, and that is your own self. So you have to begin there, not outside and not with other people. That comes afterwards, when you've worked on your own corner. Aldous Huxley, Time Must Have a Stop

My family at home uses stale drinking water for sweeping floor or to water plants in our house. We have implemented a waste

management system wherein we segregate waste in 3 bins with one for biodegradable waste (or wet waste), 2nd for non-biodegradable waste like plastic bags, cartons and 3rd for metals, glass, plastic containers and we dispose them appropriately. I donate my old clothes, footwear and books to the needy. Every year we make a goal of planting a particular number of trees in our locality. These are few things my family and I implement which are small but crucial for the environment.

The challenges before us as responsible individuals are immense. To succeed, we must realize that while small actions can seem trivial, they are actually critical.

**- Ms. Sunetra Rane
Business Excellence Cell**

Human Right to Water & Sanitation

Access to water and sanitation are recognized by the United Nations as human rights, reflecting the fundamental nature of these basics in every person's life.

Lack of access to safe, sufficient and affordable water, sanitation and hygiene facilities has a devastating effect on the health, dignity and prosperity of billions of people, and has significant consequences for the realization of other human rights.

People are rights-holders and States are duty-bearers of providing water and sanitation services. Rights-holders can claim their rights and duty-bearers must guarantee the rights to water and sanitation equally and without discrimination.