

**ADDRESS BY THIRU BANWARILAL PUROHIT, HON'BLE GOVERNOR OF
TAMIL NADU AT THE GRADUATION CEREMONY OF THE CHENNAI POWER
AND DESALINATION TRAINING INSTITUTE AT HOTEL GREEN PARK,
VADAPALANI, CHENNAI ON 25.09.2019 AT 5.00 P.M**

Anaivarukkum Maalai Vanakkam

Thiru. A. Mohamed Sultan,
Chairman of Power Tech Group of Companies

Justice K.N. Basha,
Former Judge,
Madras High Court

Dr. A. Kalanidhi,
Former Vice Chancellor of Anna University

Dr. A. Kanagaraj,
Chairman,
Jaya Group of Educational Institutions

Distinguished Invitees

Ladies & Gentlemen

I am happy to be here at the Graduation Ceremony of the Chennai Power and Desalination Training Institute. It is always a pleasure to be amongst intelligent young professionals who are progressive and creative. The fact that all of you from Sudan have chosen to come to Chennai for training speaks volumes of the technological prowess of Chennai and the close ties between India and Sudan.

You have completed a course on desalination a relevant and useful subject of study for all mankind.

The United Nations' Food and Agricultural Organization estimates that by 2025, 1.9 billion people will live in countries or regions with absolute water scarcity, and two-thirds of the world population could be under water stress conditions.

By 2040, it is predicted that 33 countries are likely to face extremely high water stress - including 15 in the Middle East, most of Northern Africa, Pakistan, Turkey, Afghanistan and Spain. Many - including India, China, Southern Africa, USA and Australia - will face high water stress.

According to World Health Organization (WHO) 2.1 billion people live without safe water at home. One in four primary schools have no drinking water service, with pupils using unprotected sources or going thirsty. More than 700 children under five years of age die every day from diarrhoea linked to unsafe water and poor sanitation.

Around four billion people - nearly two-thirds of the world's population - experience severe water scarcity during at least one month of the year. 700

million people worldwide could be displaced by intense water scarcity by 2030.

In response to increasing water scarcity, over the last 30 years desalination has evolved into a viable alternative source of water. It allows us to tap non-traditional water resources with great potential to provide a sustainable, drought-proof water supply.

Desalination provides only around 1 percent of the world's drinking water, but this percentage is growing every year. At the end of 2015, there were approximately 18,000 desalination plants worldwide, with a total installed production capacity of 86.55 million cubic meter /day or 22,870 million gallons per day (MGD). Around 44% of this capacity is located in Middle East and North Africa.

There are two main types of desalination

The first is by the using Reverse Osmosis membrane – In this technique pressurized Sea water is passed through RO membranes and almost 50%of water comes out as drinking water. The cost of this process is about 5.2 paise /liter

The other technique is MSF - Multi stage flashing which is a process by which sea water is evaporated using the steam produced by thermal power plants. In this technique heating of sea water produce, water vapour which is cooled and the cooled vapour become drinking water. This technology is operationally cheaper than the RO system though the capital investment that is required is more. The technology is mainly adopted in most of the gulf countries.

In most of the countries, whatever be the type of plant the desalination facility is located inside the power plant since the power requirements are very high and needed continuously.

The Government of Tamil Nadu with a long term vision started the Nemmeli water plant in 2005 has a capacity of 10 crore liters per day. Thereafter a Minjur desalination plant was started in 2009 which produces 10 crore liters per day.

A contract has been awarded to Expand the Nemmeli water plant to produce another 15 crore litres per day to augment the water supply. There are also proposals to Establish Desalination water plants in other Parts of Tamil Nadu where water scarcity is acute. Above all saving the existing rain water is of

great importance and hence Rain Harvesting is implemented strictly in Tamil Nadu.

Advocating the sustainable management of freshwater resources, World Water Day is celebrated every year on March 22nd. The theme for World Water Day 2019 was 'Leaving no one behind'. This is an adaptation of the central promise of the 2030 Agenda for Sustainable Development.

There are some easy ways to conserve water

1. Avoid Showering, for even a five minutes shower can consume up to 37 litres of water. Instead fill up a bucket to have your bath.

2. Limit your brushing session. You waste upto 15 litres of precious water by letting the water run the whole time you're brushing. It isn't that difficult to

close the tap except when you need to rinse your mouth.

3. Flushing your toilet every time you use it means flushing up to 18 litres of water per flush. Make this simpler by using a bucket of water instead.

4. Avoid keeping the kitchen tap open for cleaning vegetables and food items. However if you're obsessed with hygiene, and only feel better when you wash them under running water, then at least collect that water and use it to water your plants.

5. Cooking also uses a lot of water, especially when you boil or steam food items. Reuse that water within the house for it is healthy.

At a Micro Level, every house hold should harvest rain water and the water from bath room and

kitchen should be recycled for use for the toilets and the garden. Encourage the planting of trees. More greenery brings more water.

This day is a special day for all the graduating students. I convey my warm greetings and best wishes to all of you and your family members on this happy occasion. Having been equipped with academic qualifications and armed with the training that institution has given you, you are fully prepared to overcome the challenges that you may encounter. Step out with strength; lead from the front; conduct yourself with dignity, grace and discipline. The world is yours.

The Chennai Power and Desalination Plants Training Institute which is a CEA (Central Electricity Authority) recognized Institute imparts training in

various Desalination Techniques like Seawater Reverse Osmosis (SWRO), Multi Effect Desalination, Multistage Flashing, etc., for the personnel working in the Power and Desalination sector.

As a part of vision of our Honourable Prime Minister “Make in India”, this Institute has developed an integrated software and hardware to test the Safety valve. This costs only is 50% of an imported kit and is hence very economical.

I am sure that with the untiring efforts of the well wishers of the institute, and the dedicated contributions of the faculty members and the office bearers, the status and esteem of the institute will rise further to attain the highest levels of eminence.

I extend my best wishes and greetings to the management of the Chennai Power and Desalination

Training Institute and applaud their contributions.
May they be greeted with success in all their
endeavours.

Nandri ... Vanakkam...

Jai Tamil Nadu....

Jai Hind....