



## NATURE FOR WATER

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#### 1. BACKGROUND

n addition to being a life enabling resource, water is also essential for creating jobs and supporting economic, social, and human development. However, the value of water is mostly underestimated and often water is used in an insensitive manner. Inefficient water management practices, rising population, increasing pollution and environment degradation has led to over exploitation of water resources and acute shortage of water. As one of the many endeavours to raise awareness about water and related aspects; 22<sup>nd</sup> March has been designated by the United Nations as the World Water Day (WWD).

This day was formally proposed in Agenda 21 of the 1992 'United Nations Conference on Environment and Development' in Rio de Janeiro, Brazil. The proposal was accepted in the conference. In the following year, 1993, World Water Day was celebrated for the first time; and since then, 22<sup>nd</sup> March each year has been an international observance day for Water. This day is meant to inspire people around the world to learn more about water-related issues and take action to make a difference. Each year, a new theme is given for the World Water Day celebration; the theme for 2018 is 'Nature for Water' implying that the answer to address water issues is in the Nature.



# 2. WORLD WATER DAY AND WATER SUPPLY DEPARTMENT

ater Supply Department (WSD), Government of Gujarat celebrates this day each year across the state through various programmes/activities to raise awareness and encourage the community to take action. For 2018, WSD decided to hold events at state, district and village level to celebrate the World Water Day and engage stakeholders at different levels to collectively contribute towards water sector. One entire week, starting from 22/03/2018 till 28/03/2018, had been dedicated for celebrations at district and village level.

At state level the Water Supply
Department in collaboration with the
Forests and Environment Department,
Government of Gujarat organized a
large scale event on the World Water
Day. This event was inaugurated by
Shri Vijaybhai Rupani, Hon'ble Chief
Minister of Gujarat and Shri Parbatbhai
Patel, Hon'ble Minister of State,
Irrigation, Water Supply (Independent
Charge). The state level event had
various components, like: Pani Samiti
award ceremony; launching of dual

flush campaign and felicitation of water ambassadors. The session wise details are given in the following section.

An exhibition was also set up at the event venue. Stalls of the Water Supply Department and that of Gujarat Ecological Commission gave insights on nexus of water and environment as well as about their work and projects. Sanitary ware companies Cera, Jaquar, Kajaria and Sunsilk Ceramic Pvt. Ltd (Morbi Ceramic Association) had also put up stalls in the exhibition, showcasing their water saving products (like auto closing taps, dual-flush toilets etc). The Water Supply Department had also arranged a unique stall on social media-cum-photo booth. This stall was put up to encourage participants to join Water and Sanitation Management Organization (WASMO) on the social media platform. The photo booth added a creative element to the exhibition; participants enthusiastically clicked photographs with the different placards (having messages) created for the stall.

### 3. INAUGURAL SESSION

hri Vijaybhai Rupani, Hon'ble Chief Minister of Gujarat and Shri Parbatbhai Patel, Hon'ble Minister of State, Irrigation, Water Supply (Independent Charge) inaugurated the event. Shri Arvid Aggarwal, Additional Chief Secretary, Forest & Environment Department; Shri Lochan Sehra, Addl. CEO, GUDM; Shri K. C. Mistry, Member Secretary, GPCB; and Shri A. B. Gor, Chief Executive Authority, AUDA joined for the inaugural session. The three important components of the inaugural session are as follows:



#### 3.1. Felicitation of Water Ambassadors

As an effort to encourage students to take part in water conservation practices, it was decided to felicitate inspiring Water Ambassador of each district during the World Water Day celebration (either at state or district level event). These Water Ambassadors are the students who

presented an outstanding work during Water Budgeting Campaign of WSD.

To prepare children as the change agents and cheer leaders for water conservation at community level, campaign "Gharna Pani Nu Budget" was developed and implemented by WSD. This campaign specifically dealt with estimating household water budget. With the help of Education

department 16 lakh students (of 22,277 schools) from class 6<sup>th</sup> to 8<sup>th</sup> were involved in this campaign. Children participated by estimating the water budget of their household as a part of their Diwali Break assignment. Schools assessed the assignments and selected the best project works. Students (at village level) who had an outstanding performance were felicitated as the "Water Ambassadors" on Children's Day (14/11/2017).

District Water and Sanitation Units (DWSUs) and DPOs then selected the most inspiring Water Ambassador of their respective districts and nominated their names for World Water Day event. Of all the names received, three Water Ambassadors (of nearby districts) were selected to be felicitated by the Hon'ble Chief Minister during the state level event;

Sr. No.	Name of Student	School, Village, Block & District	Standard
1	Divya Dineshbhai Chaudhari	Dhanap Primary School, Gandhinagar Block, Gandhinagar Dist.	8 <sup>th</sup>
2	Noman I. Momin	Telav Primary School, Sanand Block, Ahmedabad Dist.	8 <sup>th</sup>
3	Desai Dharmi Baldevbhai	Gandhi Sundarlal Primary School, Patan Block, Patan Dist.	8 <sup>th</sup>

the names of these three Water Ambassadors are as follows:

A short summary about the three water ambassadors was displayed on the screen while the students were awarded with a certificate and a kit. Water Ambassador - Noman Momin, class 8th student of Telav Primary School (Ahmedabad District) addressed the gathering and expressed his views on the need to conserve water. After the event, Noman and the other two Water Ambassadors enthusiastically interacted with media and other participants.

#### 3.2 Felicitation of Pani Samitis

WASMO works with the concept of decentralization and it delegates power to the community through Pani Samiti (Village Level Water and Sanitation Committee). Pani Samitis (PSs) are the building blocks of community managed water supply system. Efforts and work of Pani Samitis are recognized by WASMO on regular basis through various awards/schemes. WASMO also emphasizes on participation of women in Pani Samitis and encourages women to take part in all stages/phases of planning, implementing, and management of 'in-village water supply schemes'.

Since World Water Day is meant to inspire & motivate people, therefore, it was decided to recognize and reward Pani Samitis under two categories, namely: (1) Pani Samitis having outstanding performance in operation and maintenance (O&M) of their village water supply scheme'; and (2) Pani Samitis having only women as members i.e. they are 100% Women Pani Samitis. A total of 2199 Pani Samitis were selected to be facilitated

during World Water Day Celebration (either at state or district level). Out of these, 66 Pani Samitis (33 each under both the categories) were given the reward during the state level event in Gandhinagar. 8 Pani Samitis were felicitated by the Hon'ble Chief Minister; these were top 4 (i.e. highest prize receiving) Pani Samitis under O&M category and Four 100% Women PSs. Details of these 8 Pani Samitis are as under:

Pani Samiti details for distribution of O & M Incentive Grants					
Sr. No.	District Name	Taluka Name	Village Name	Chair Person Name	O&M Incentive Grants (in Rs.)
1	Kachchh	Anjar	Meghapar Kumbharadi	Bhojubhai Rajabhia Boriya	1,901,000
2	Kheda	Mahemdabad	Khatraj	Dipeekabne Jeegnesbhai Chauhan	893,737
3	Arvalli	Bayad	Sathamba	Solanki Gajendrakumari Ruturajsinh	701,949
4	Surendranagar	Muli	Sarala	Lataben Rajeshbhai Patel	658,671
Details of Pani Samiti covered under Mukhya Mantri Mahila Pani Samiti Protsahan Yojana					
	Details of Pani	Samiti covered ur	nder Mukhya Mantri Mahi	la Pani Samiti Protsahan Y	'ojana
Sr. No.	Details of Pani District Name	Samiti covered ur Taluka Name	nder Mukhya Mantri Mahi Village Name	la Pani Samiti Protsahan Y Mahila Pani Samiti Chair Person Name	ojana Incentive Grants (In Rs.)
<b>Sr. No.</b>			-	Mahila Pani Samiti	Incentive Grants
	District Name	Taluka Name	Village Name	Mahila Pani Samiti Chair Person Name Smt Savibhaben	Incentive Grants (In Rs.)
1	<b>District Name</b> Junagadh	<b>Taluka Name</b> Vanthali	Village Name  Nagadiya	Mahila Pani Samiti Chair Person Name  Smt Savibhaben Hiteshbhai Sanganee  Payalben Muljeebhai	Incentive Grants (In Rs.)

The O&M award is given to Pani Samitis that have properly functioned and managed the 'in-village water supply scheme' for at least one year as well as regularly collected water tariff from the community. A total of 2049 Pani Samitis were rewarded in this category across the state, out of which 33 (one from each district) were felicitated at the state level event. The prize money for each Pani Samiti under this category is 10% of the total cost of the scheme of their respective village; and the prize money is given in the form of fixed deposit (FD) which matures after 3 years. The total money disbursed under this category is around Rs 25.64 crores.

For 100% Women Pani Samitis, a reward of Rs.50,000/- is given. A total of 150 Pani Samitis were awarded across the state, out of which 33 were felicitated at the state level event. The combined reward money (i.e. for all the 2199 winning Pani Samitis) given this year was around Rs.26.39 crores. The details are given in annexes as mentioned below:

Annexure 1: District wise number of Pani Samitis felicitated with O&M Reward

Annexure 2: District wise number of PSs felicitated under 100% Women PS Category

Annexure 3: Details of Pani Samitis felicitated at the State level event



## 3.3 Launching of Dual-Flush Campaign

Water consumption in toilets is the second highest in the total household water consumption, especially in urban areas. On an average, in India, as high as 30 liters of water is used in toilets per person per day. Whereas, water-efficient toilets can reduce the collective pressure on limited water supplies and the amount of waste flowing to sewage treatment plants (in urban areas). Dual Flush is an interactive water saving design for a toilet; it includes half flush for disposing liquid waste and a full flush for disposing solid waste. To address this, Water Supply Department in collaboration with Urban

**Development and Urban Housing** Department is pursuing endeavors to make dual-flush toilets mandatory in Gujarat to reduce water wastage in toilets. During the state level event, the Dual Flush Campaign was launched by the Hon'ble Chief Minister. A live demo of three types of flush systems, namely: flush cock/ valve (this uses 15 litre/flush); single flush (uses 6 lts/flush); and dual flush (uses 6 lts to flush solid waste and 3 lts to flush liquid waste) was conducted to explain the participants about the quantity of water saved via dual flush system. Additionally, an animated documentary was showcased that illustrated efficacy of dual flush in curbing water wastage.



## 3.4 Summary of Inaugural Addresses

Gist of the addresses delivered by dignitaries during the inaugural session is presented below as per the sequence of occurance:

▶ **Dr. J. P. Gupta**, IAS, Principal Secretary, Water Supply Department welcomed the dignitaries, Pani Samiti members, media personnel, WSD staff and commenced the event. He presented the opening remarks by emphasizing the concept "Jal-e-Jivan" and said that presence of water on Earth makes life possible on it. To this he added that cultures (civilizations) have always thrived in regions that are near water sources. Talking about the present scenario he pointed that water



is a concern for all the sections of the society and the coming generation may face uncertainty for water availability. Talking about the significance of 22<sup>nd</sup> March, Dr Gupta said that there are two important things about this day, first, it is the World Water Day and second, it is close to summer equinox (i.e. duration of day & night is almost equal). Dr. Gupta further added that this gives us a message to maintain equity between availability and use of water.

Principal Secretary said that in order to increase water availability we need to think about recharging water resources and enhancing the forests and catchment areas (rivers/ponds) as well as adopt rooftop rainwater harvesting. He explained to the gathering that increase in population and urbanization leads to increased demand of water supply; and mentioned that we would certainly face water scarcity if we continue to use water in a thoughtless way. Dr. Gupta urged the participants to bring efficiency in water consumption and use water judiciously. He believed that the message for the day is to increase water recharging which in turn will increase water availability and he reiterated that it is crucial to wisely use water be it in toilet, agriculture or industry. He wrapped up his talk by assuring the audience that the state government has made a resolution to provide adequate water to all the regions of Gujarat.

#### ► Shri Arvind Agrawal, IAS,

Additional Chief Secretary, Forests and Environment Department was the next speaker. In his address, Mr. Agrawal talked about the motive of designating a day for 'water'. He said that World Water Day reminds us to not just recognize various issues pertaining to water but also contemplate and identify plausible solutions to tackle these issues. While explaining the importance of water, he pointed that all the major civilizations which flourished in history were built near some river. To this he added that even today people aspire to live near a water body and therefore, value of areas near water bodies is usually higher than other places.

While talking about the interconnection of forests and water, Mr.



Agrawal mentioned about the significance of 'wetlands'. Wetlands are marshes or swamps and are considered as a type of water body. He talked about the ecological services that wetlands provide, like: flourishing ground for biodiversity; flood protection and such others. Besides this, he also gave insights about legal arrangement and Supreme Court orders pertaining to wetland conservation.

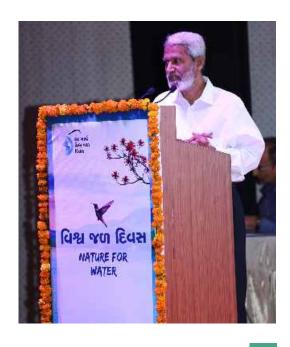
While discussing about sewage generation and its treatment, Mr. Agrawal mentioned about the judgment passed by the Hon'ble Supreme Court on February 22, 2017 directing all Municipal Corporations and Municipalities to treat and recycle sewage. He mentioned that Gujarat is ahead in treatment of both domestic as well as industrial waste water; with 33 CETPs, Gujarat has a capacity to treat 656 MLD of industrial waste water. He informed hat Guiarat has a significant share of India's total Common Effluent Treatment Plants (CETPs) that treat industrial waste water. He also talked about how sewage water is recycled for industrial purpose in cities like Surat, Anjar, Gandhinagar and Gandhidham.

Mr. Arvind Agrawal also spoke about the different themes of World Water Day of each year and said that water is a matter of concern for all; he added that all stakeholders (government & civil society) need to come together to plan for efficient water management. Mr. Agrawal was delighted to see a large number of women Pani Samiti members in the audience and said that they are the main pillar of this mission. He concluded by saying that all the in-line departments: Forest and Environment Department, Water Supply Department and Urban Development Department will provide all the needed support to the Government.

- ➤ Shri A. M. Mankad, IAS, Chief Executive Officer, Water and Sanitation Management Organisation (WASMO) gave insights on Pani Samitis of the state. He familiarized the audience with some outstanding facts about the Pani Samitis & Water Supply Status of Gujarat. These details are as under:
- o Gujarat has 17,452 Pani Samitis (PS).
- o These PSs have as many as 2,05,913 members; out of these 1,02,127 are women.
- 780 PSs have only women as members i.e. they are 100% Women Pani Samitis.
- o 7, 904 Pani Samits are headed by a woman.
- o A total of 19,554 schemes amounting to Rs. 2,430 crore have been approved. Out of these, 16,629 schemes have been completed and the remaining 1,691 schemes are in progress.
- o In rural area, 77.49% households have tap connectivity. Gujarat stands second at national level

after Sikkim for having the highest percentage of tap connectivity at household level.

Shri Mankad informed the gathering that villages with 0 to 25% tap connections (at household level) were taken at priority in current year; and as result there are just 912 villages across Gujarat that now fall under this category. He also explained the concept of facilitating Pani Samitis under the "Operation & Maintenance" category and its eligibility criteria. Further, he added that the O&M award programme started in 2006-07 and till 2017 a total of 6,009 Pani Samitis have been the recipients of this award; wherein Rs. 55.33 crore have been disbursed. For the year 2017-18, he said that as many as 2,059 Pani Samitis will receive this award and the total prize money is Rs. 25.64 crore. His address was followed by felicitation of eight Pani Samiti by the Ho'ble Chief Minister.



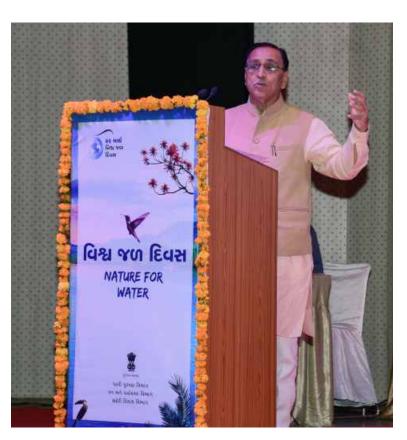
▶ Shri Parbatbhai Patel. Hon'ble Minister of State, Irrigation, Water Supply (Independent Charge) extended his greetings to all the dignitaries and participants of the event. He said that in the olden days people did not have to worry about water or ask the government to make necessary arrangements because natural water resources could meet the demand. He continued saying that the rise in population and anthropogenic factors have deteriorated natural water resources. Shri Paratbhai Patel recalled that the Hon'ble Prime Minister of India and former Chief Minister of Gujarat, Shri Narendrabhai Modi recognized the weakening status of natural resources and established one of its kind 'Climate Change Department' in Gujarat to tackle environmental problems.



An inspiring incident from the life of Mahatma Gandhi was quoted by Shri Parabatbhai Patel; he said that once Gandhi ji brought half a bucket of water from Sabarmati to his ashram, upon being asked why did he get such a small quantity of water although the river has so much of it, Gandhi ji replied "every individual has a right on this river and everyone should be able to use its water, therefore, I got just half a bucket of water". With this example Hon'ble Minister urged the participants to use water in a judicious way. He also talked about how women are directly linked with water and the associated drudgery because water collection has historically been assigned as a task to the women folk. He added that earlier people had to make several trips to the water source to fulfill the domestic water demand and were cautions about its value, however, now when water is readily available at household level, water is often wasted at a large scale.

He elucidated to the gathering about the need to save water and said that our ancestors always believed that they will not have water in future if all the available water is used in an inconsiderate manner; he added that now we have forgotten this concept and do not even blink an eye when water is wasted by non-stop pumping of ground water or leakage of tap. Shri Parbatbhi Patel motivated the participants to take up the responsibility to reduce wastage of water (mend leakages, close taps), conserve water at domestic level, harvest rain water and guard water which is a precious gift of nature.

► Shri Vijaybhai Rupani, Hon'ble Chief Minister, Government of Gujarat presented the key note address during the event. He mentioned that both Forests and Water are a symbol of Nature; incidentally 21<sup>st</sup> March is celebrated as the International day of Forests and March 22<sup>nd</sup> is the World Water Day. He added that our culture teaches us to value not just our fellow human beings but also our surroundings, in fact elements like water, air, sun and others are also accepted as a form of God. He recited the famous quote "Rahiman Pani rakhiye, Pani bin Sab Sun. Pani Gaye na ubre Moti, Manush, Chun"; which translates to "Rahiman asks to save water, because without water neither pearl (wealth) will form nor mankind will survive". Hon'ble Chief Minister



talked about the miniscule quantity of fresh water available on Earth and for the need to use this water wisely. He explained the concepts of 'reduce', 'reuse', 'recycle', and 'recharge' to the participants.

The Hon'ble Chief Minister spoke about the time when Gujarat had separated from Maharshtra and the uncertainty that people had about Gujarat's development as it is a water scarce region. Continuing ahead he said that the entrepreneurship spirit of its people took Gujarat forward. Speaking about his experience of Rajkot and Saurashtra, he recalled that how water was brought through tankers and trains. Adding to this, he said that water has now been made available but it needs to be sustained and spoke about the significance of developing reliable sources, efficient distribution (with least water losses) and conservation of water (saving each drop). He congratulated the Water Supply Department and Irrigation Department for taking water to areas facing water scarcity like Kachchh, Suarashtra, and North Gujarat. He reiterated the importance of Narmada water and that of Sardar Sarovar Dam as more than half of Gujarat is dependent on it.

The Hon'ble Chief Minister elucidated that Government's responsibility is to create sources and to make provisions for water infrastructure whereas the responsibility of other stakeholders (water users, institutions) is to provide

support for the maintenance of the system. He added that the collective endeavors to save water will help us to tackle water shortage. Hon'ble CM also talked about complete unavailability of water in Cape Town and reminded the audience to treat water as a blessing of God so that a situation like Cape Town does not arise in Gujarat. Talking about the current year, he informed that all the four states (MP, Rajasthan, Gujarat and Maharashtra) that use Narmada water will receive just 50% of the usual water allotted to them. But he also gave assurance that Government of Gujarat will provide adequate water for drinking and other uses to the people of Gujarat and appealed the audience to ensure there is no wastage of water.

The Hon'ble Chief Minister praised the work of Water Ambassadors and Pani Samiti Members. While speaking about the endeavours of Water Supply Department he expressed happiness

that safe surface water provided by WSD has reduced the cases of kidney stone in Saurashtra and that of other illness due to chemical contamination (in North Gujarat). He also stated Government of Gujarat is planning to make the state "Hand-Pump free" in the next year and reliable surface water will be provided to each hamlet. Hon'ble CM talked about various positive developments pertaining to water sector: 1) approval of Gujarat's first desalination plant having a capacity of 100 MLD that would purify (desalinate) sea water (near Maliya); 2) sanitary ware companies will provide support by reducing the price of retrofitting single flush toilets with dual flush system; and 3) decision to construct a dam at Badbhut (near Bharuch) to refrain fresh water from going into the sea. He wrapped up the session by reiterating the fact that water cannot be created it can only be conserved and requested the participants to conserve water.

### 4. PLENARY I

he plenary was organized to provide insights on water reuse and waste water technology to the participants of the event. This session commenced with a talk by Shri Shabbudin Rathod. He is a famous Gujarati scholar, writer, teacher and humorist. This octogenarian's unique style of presenting normal day-today activities with an element of humor is highly appreciated. The audience engaged in his talk with great eagerness



and enthusiasm. Post his talk, the next address was by Prof. Mona Iyer, Faculty of Planning, CEPT University.



**4.1 Prof. Mona lyer's** presentation was on reusing treated waste water for various purposes. She elucidated the concept with a number of case studies of different countries/cities that reuse water. One such case study was that of Namibia (South Africa), where they treat waste water to a very high standard and it is reused for drinking purpose. Her talk was backed up with graphs and illustrative maps, like: severity of water scarcity in different regions of the world; quantity of waste water treated by each country and such others. While speaking about India's water scarcity, Prof. Iyer mentioned that even India has a few intervention of reusing waste water; however, these initiatives are usually

of small scale and are not recognized formally. She added that a number of industries in India successfully treat and reuse their industrial waste water; however, her presentation on that day focused on recycling and reuse of domestic waste water.

The professor from CEPT said that her study also considered reuse of treated water by developed and developing nations; and the study shows that the developed nations significantly use treated water whereas the developing nations use a mix of fresh and treated water. She explained that the Middle East countries are at the top with respect to 'per capita use of treated water'; moreover, these countries (Dubai, Kuwait) also rank highest for utilizing treated water for a number of times than using fresh ground/surface water.

Moving ahead she talked about use of untreated domestic waste water in agriculture/farm lands in India either directly or indirectly. Indirect use of waste water happens when a Municipality releases untreated sewage in river and villages downstream use water from that river. Waste water is used in farms because it has high organic matter which acts like fertilizer for the crops; however, waste water from bigger cities have higher quantity of soap & detergent and therefore, farmers often use this water in the ratio of 1:2 with fresh water. She informed the gathering that Gujarat has the highest number of proposals for treating waste water for reuse. Prof. Mona Iyer mentioned that Surat, Vadodra, Anand, Rajkot, Nakhtrana and other places currently use un-treated waste water for irrigation purpose. Further, she said that we must now encourage the use of treated waste water in order to evade the negative effects of using untreated water. She discussed the case study of Miroli (a village near Ahmedbad). Miroli has a farmers committee and since last 50 years its entire farming is based on waste water; however in the last ten years they changed the methodology of using waste water all 3 times in a week to 2 times (waste water) and for the 3rd time they use fresh water. She concluded by saying that to attain water security we will have to let go of the idea of 'disposal' and embrace the concept of waste water treatment, recycle and reuse in a holistic way.

4.2 Shri Amit Shah, Environment Engineer, Arvind Industries spoke about waste water treatment technology adopted by the Arvind Group. He informed the audience that manufacturing of a single pair of jeans requires as much as 9,000 to 10,000 liters of water. Since Arvind Industries is the largest manufacturer of denim in the world it recognizes the impact of denim manufacturing on environment especially on water resources and has initiated a number of endeavors to reduce its environmental impacts.



These initiatives were discussed in detail by Shri Amit Shah. He gave details about the effluent treatment plant at their main factory site (in Santej), this effluent treatment plant has a capacity of 70 MLD and was established in 1995 for Zero Liquid Discharge (ZLD); 92% of 1,70,00,000 liters of water is recycled every day at this plant. Besides this Arvind's set up at Santej also utilizes 5MLD of treated sewage water for the industrial use.

Similarly, their Ankur textile set-up also utilizes 1.5 MLD of sewage water (which they treat for consumption).

Mr. Shah talked about Arvind Envisol, an initiative of Arvind Group to enhance effluent treatment (industrial and sewage waste water treatment) so that it may be used for various purposes like landscaping, flushing, industry etc. Arvind Envisol was established in 2011; and so far it has developed 22 patterns to treat waste water. Further, he said that Arvind Envisol has completed 60 major projects and is currently treating 100 MLD. He emphasized the points raised by Prof. Iyer about the approaching water crisis and the need to recycle water. He familiarized the audience with different water treatment technologies. One such technology is MVRE which was created by Arvind (1996); through this patented technology waste water is vaporized and its BOD is brought to zero. He added that water purified/treated through this technology is fit for drinking purpose. He ended the session by saying "where there is water, there is waste water" i.e. 80 to 95% of water consumed becomes waste water and therefore, it is crucial to reuse the waste water to protect the sources of fresh water.

# 5. CONCLUSION OF STATE LEVEL EVENT

Shri Tushar Dholakia, IAS, Member Secretary, GWSSB presented the concluding remarks. He requested the Pani Samiti members to be vigilant about water being drawn from canals. He explained about massive quantity of water loss due to theft and illegal water lifting from canals. Shri Dholakia advised the participants to take care of their village ponds. Additionally, he gave assurance to the Pani Samiti members about Water Supply Department's support for providing financial as well as procedural assistance to fill village ponds from canal water. He also discussed about agricultural practices that lead to water wastage (like: water from paddy fields is often drained and never reused). While emphasizing the role of community in water sector he

requested the participants not to indulge in unethical practices for taking water. He elucidated by giving an example that tail end villages suffer from water shortage when people illegally take water from drinking water pipelines/network for irrigation.

Vote of thanks was presented by Shri Prakash Shah, Chief Engineer, WASMO. He thanked the Hon'ble Chief Minister, Hon'ble Minister of State, Irrigation, Water Supply (Independent Charge), dignitaries as well as media personnel, NGO representatives and sanitary ware manufactures for their valuable time and participation. Shri Shah also expressed gratitude towards all the Pani Samiti Members who travelled long distances to take part in this event.





# 6. WORLD WATER DAY CELEBRATION AT DISTRICT LEVEL

At district level a week long World Water Day celebrations were held starting from March 22, 2018 till March 28, 2018. A district wise summary of events and activities held during to commemorate this week is given in the following table:

	District Name		Activities Conducted	
Sr. No.		Name of Activity Conducted	Short Brief of the Activity	Stakeholders Involved in Each Activity
		Rally by Community Members	Rally was organized to generate awareness on water conservation techniques and effective usage of water at domestic level	1. Bibipura(Daskroi) 2. Gibpura (Sanand) 3. Rasam (Bawala) 4. Sadara (Mandal) 5. Chandranagar (Viramgam)
1	Ahmedabad	Essay, Quiz Competition & Water Budgeting Programme	Awareness on water conservation and water budgeting among school children & teachers	Students, Teachers of the above mentioned villages
		Women Empowerment Programme	Awareness on effective water usage	Five Mahila Pani Samitis Members of Daskroi Taluka
		Sanitation Programme	Cleanliness drive: near the water bodies	Aforementioned villages
2	Amreli	Drawing Competition, Rally	Awareness on water conservation, judicious water use and water quality.	Primary School Students of the following villages: Savarkundla 1. Krishnanagar (S.K.) 2. Giniya (S.K.) 3. Bagoya (S.K.) 4. Vadali (Rajula) 5. Zanzarda (Rajula) 6. Luvara (S.K.) 7. Charodiya (Rajula)
		District Level Workshop	Based on the WWD theme (Nature for water) with an objective to raise awareness on water conservation and budgeting	32 Pani Samiti Members of 10 Talukas of the Districts
		School Rally; Programme on hand washing	Awareness generation on significance of hand washing, water usage	Primary School students and community of the following villages:
		Gram Shabha	Information shared about water quality	1. Ajupura (Anand) 2. Sadanapura (Anand)
3	Anand	Sanitation Programme	Cleanliness drive: near the water bodies	3. Ravdapura (Anand) 4. Pansora (Umreth)
	Allallu	Award Distribution Programme	Award distribution.     Awareness generation on water conservation and effective utilization of water	5. Panaj (Petlad) 6. Runaj (Sojitra) 7. Dhuvaran (Khambhat) 8. Jahaj (Khambhat) 9. Khedasa (Borsad) 10. Umlav (Aanklaw)

Sr. No.	District Name	Name of Activity Conducted	Short Brief of the Activity	Stakeholders Involved in Each Activity
		Women Empowerment	Training; Poster distribution to raise awareness on water conservation	150 Women PS Members of 6 Talukas
4	Aravalli	Taluka Level Workshop	Training on: Water Quality Testing; Water borne diseases and sanitation	Pani Samiti Members of Bayad Taluka
		Mahila Puraskar Programme	Women Empowerment Programme by Reliance Foundation	Women Pani Samitis Members of Meghraj Taluka
		O & M Workshop	Information shared on O & M;     Award distribution to 100% Women Pani Samitis	150 Pani Samiti members of 10 Talukas
_		Gram Shabha	Awareness regarding efficient consumption of water	Pani Samiti Members
5	Bharuch	Rally, IEC Material Distribution	IEC Material distribution;     Rally: with a message to conserve water	Primary School Students and Teachers
6	Bhavnagar	Sanitation Programme and Rally	<ul> <li>Village &amp; School Cleanliness drive;</li> <li>Rally; and</li> <li>Information shared on Waste Water Treatment</li> </ul>	Primary School Students and Teachers
	Dilavilagai	District Level Workshop	Workshop on the theme "Water conservation and reducing water wastage" was organized	Pani Samiti members, village community
	Chhota Udepur	District Level Training	Training on WASMO Schemes & Hand-pump repairing techniques	Pani Samiti Members, Talati, Sarpanch, students and teacher of the following talukas:
7		Taluka Level Workshop	Training on Hand-pump repairing techniques	1. Kwant 2. Bodeli 3. Jetpur 4. Sankheda
		School Rally & Awareness Programme	Awareness programme regarding effective use of water	
		Sanitation Programme	Cleanliness drive: Village, School and existing water bodies	Pani Samiti Members and Community members of 8 villages of Khambhadia Taluka
8	Devbhoomi Dwarka	Gram Shabha, Pani Samiti Meeting	Information shared about effective use of water	villages of Khambhadia Taluka
		District Level Workshop	With an objective to bring awareness about water distribution system and water treatment	
		Village Level Water Campaign	Identification of leakages and training was imparted to repair the leakages	Pani Samiti Members, Primary School Students teacher and
		Gram Shabha	Village level meeting to raise awareness on water quality and sanitation.     Use of AV material: showcasing short films	community members of the following villages:  1. Ramnagar  2. Palsana  3. Dhanot
9	Gandhinagar	Sanitation Programme	Village level cleanliness drive near water sources by students and Pani Samiti members	4. Bileshwarpura 5. Raipur 6. Sargasan 7. Mansa
		Inter village rally, Essay Writing and Drawing competition	Rally theme: Save water and significance of sanitation; IEC Material was distributed	8. Khadat
			,	

Sr. No.	District Name	Name of Activity Conducted	Short Brief of the Activity	Stakeholders Involved in Each Activity	
			District Level Award Distribution Programme	Motivation through award distribution programme	100% Women Pani Samitis
			L	O & M Incentive to Pani Samitis	
10	Gir Somnath	Essay Writing, Rally	With the aim to bring awareness on optimum use of water.	Primary school students, teachers and Pani Samiti members of the below mentioned villages:  1. Khirdhar (Talala)  2. Gundala (Talala)  3. Thareli (Sutrapada)  4. Nakhada (Sutrapada)  5. Umba (Veravad)  6. Moraj (Veravad)  7. Amodra (Una)	
11	Jamnagar	District Level Awareness Programme	Programme to raise awareness on efficient water management, optimum use of water and waste water reduction	Pani Samiti Members	
12	Junagadh	Taluka Level Workshop	A workshop was organized to convey the message to save water and motivate the participants to take concrete actions as well as inspire others.	Programmes in following talukas: 1. Mangroad 2. Kesod 3. Maliya Talatis and local elected members participated in the programme	
		Village Level Activities	Information on water borne diseases and water conservation techniques was shared with the community.     Village cleanliness programme	Primary School Students, teachers, Pani Samiti Members of following talukas were engaged: 1. Junagadh 2. Kesod 3. Vanthali	
		District Level Activities	Award distribution, Training and workshop organized on various aspects of water and sanitation	Pani Samiti members, Primary school Students teacher and other community members of the following villages were engaged:	
13	Kachchh (Part - 1)	Village Level Activities	Water Ambassador felicitation.     Cleanliness Programme for school and village.     Water Quality Testing activities     School level competition and IEC Material distribution	1. Bandiya (Abdasa) 2. Sukhpar(Bhuj) 3. Cundi (Bhuj) 4. Godpar (Bhuj) 5. Jiyapar (Nakhatrana) 6. Naranpara (Mandvi) 7. Padampar(Mandvi)	
	Kachchh (Part - 2)	District Level Programme	Information was shared about WASMO schemes; Importance of women's participation in planning and implementation of schemes; Detailed description regarding O&M. Activity by WASMO Staff for repairing source leakages	Total 92 members of 19 villages from 6 Talukas of the District participated	
		District Level Award Distribution Programme	Motivation through award distribution programme	O & M Incentive to Pani Samitis; 100% Women Pani Samitis	
14	Morbi	Rally and awareness activities	School rally;     Water use efficiency campaign and awareness programme	Students, teachers and village community members	

Sr. No.	District Name	Name of Activity Conducted	Short Brief of the Activity	Stakeholders Involved in Each Activity
		School Competition / Class cleanliness	Essay writing competition;     Classroom cleaning programme	Total 756 students and teachers of the villages
45	Navasvi	Gram Sabha, Water Quality Testing and Cleanliness Programme	Village Cleaning Programme by Pani Samiti members; and Water quality testing programme	Total 146 members of 20 Pani Samitis were engaged
15	Navsari	Meeting with Irrigation Department	For deepening and de-silting village ponds a meeting with the Irrigation Department and Pani Samitis was organized	Pani Samiti members of 41 villages
		O & M Incentive Award Distribution	Motivation through award distribution programme	Pani Samitis members, WASMO Staffs
		School Competition / Class cleanliness	Essay writing competition, Classroom cleaning programme, School Rally, Drama Programme	Pani Samiti members, Primary Schools students, teachers and other community members of the following villages:
16	Panchmahal	Gram Shabha, Sanitation Programme	Pani Samiti Meetings, Village Cleaning Programme, Women Meetings, Cleanliness drive for existing water sources	1. Kotda (Godhra) 2. Motal (Godhra) 3. Katol (Kalol) 4. Gopipura (Halol) 5. Bhanpura (Jambughoda) 6. Bhanpura (Dhodhamba) 7. Salia (Morva)
		School Competition, rally and Water Ambessador facilitation	Essay writing, Drawing Competition and Student rally to bring awareness on water related issues; Information was shared on water quality and testing techniques;     Felicitation of Water Ambassador	Primary school students and Teachers of Rajvadala, Navagam and Rupavati Villages of Rajkot District
17	Rajkot	Training for 100% Women Members Pani Samiti	Training and incentive grant distribution	Women Pani Samitis Members
		Training and distribution of O & M incentive	O & M incentive distribution among the selected Pani Samitis	Pani Samiti members
		Sanitation Programme and Training on water conservation through prevention of leakage	Cleanliness programme at village level and leakage prevention training	Village Community members
		School Competition and Students rally	Essay Writing and Drawing competition at village level Primary Schools;     Rally by school students to raise awareness on various issues of water and for adoption efficient water consumption practices	Primary School Students and Teachers of the following villages: 1. Boria (Prantij) 2. Timbakampa (Talod) 3. Jethipura (Idar) 4. Daramali (Idar) 5. Rampur(Idar) 6. Navarampur(Idar) 7. Kodreli (Idar)
18	Sabarkantha	Award Felicitation Programme	Motivation through award distribution programme ( O & M incentive and 100% Women Pani Samitis)	Pani Samitis members of the following villages 1. Pogalu 2. Piludra 3. Vartolkampa 4. Vadgamda 5. Nava Rampur
		Sanitation Programme	Cleanliness programme for Village, Water Sources and components of Water Supply System	Village Communities and WASMO Staff of the aforementioned villages

Sr. No.	District Name	Name of Activity Conducted	Short Brief of the Activity	Stakeholders Involved in Each Activity
		School level competition and Rally	Essay Writing and Elocution competition;     Rally by school children to raise awareness on efficient water usage	Primary school students and Teachers
19	Surat	Gram Shabha and Training	<ul> <li>Training on identification of leakages and its repairing;</li> <li>IEC Material distribution; and</li> <li>Sanitation programme</li> </ul>	Pani Samiti members and Village community members
		District Level Workshop	Award felicitation programme;     Information on efficient water consumption was shared	Pani Samiti members
		School Competition and Students rally	<ul> <li>Elocution and Drawing competition;</li> <li>Students rally to raise awareness for water conservation</li> </ul>	Primary school students teachers, and Pani Samiti members of the following villages:
20	Тарі	Gram Shabha, Sanitation Programme and Training Programme	<ul> <li>Cleanliness drive for the village and water sources;</li> <li>Training for Identification and prevention of leakage</li> </ul>	1. Ghata (Vyara) 2. Algat (Valod) 3. Ghanchikuva (Songadh) 4. Juni thuti (Utchhal) 5. Parchuli
		School Level Competition	Essay writing and Drawing competition;     Felicitation of Water Ambassador	Primary school students teachers, and Pani Samiti members
21	Valsad	Gram Shabha	<ul> <li>Village level meeting for bringing awareness about water quality and sanitation;</li> <li>Women Pani Samiti Meeting on the theme of World Water Day</li> </ul>	Pani Samiti members

### 7. WAY FORWARD

ollowing the stride, Water Supply Department has launched a campaign about efficient use of water and water conservation. For this campaign, mass media and social media have been employed at a large scale. The campaign focuses on optimum usage of water in various domestic activities like brushing, toilet flushing, cleaning of utensils and such others. Special radio jingles were created and are being widely broadcasted. Radio Jockey endorsement for the campaign and interviews of the Hon'ble Chief Minister, senior officers, Pani Samiti members, water ambassadors (school

children) and WSD staff are also being broadcasted. Advertising through cinema theatres, newspapers and TV spots has also been adopted in the strategy. The dual flush campaign launched during the state level event of World Water Day has also moved ahead with multi-pronged approach. A proposal has been made for inclusion of regulation in the GDCR to make dual button cistern (dual flush toilets) mandatory for new constructions. Extensive awareness generation is being carried out for the consumers and stakeholders mapping for adoption of dual flush toilets is also under progress.

## 8. ANNEXURE

Annexure 1 District Wise Number of Pani Samitis felicitated with O&M Reward

Sr. No.	District	No. of Pani Samiti	O&M(Amt. in Rs.)
1	Ahmedabad	74	11096333.00
2	Amreli	31	6347033.79
3	Anand	50	7208000.00
4	Arvalli	181	14148541.00
5	Banaskantha	251	31782729.00
6	Bharuch	73	10143771.00
7	Botad	28	3272962.00
8	Bhavnagar	25	3021193.00
9	Chhota udepur	82	5167505.80
10	Dahod	34	4036200.00
11	Dangs	35	4564173.00
12	Dwarka	31	4754420.00
13	Gandhinagar	21	4119436.00
14	Gir Somanth	26	4102506.30
15	Jamnagar	42	6248816.00

Sr. No.	District	No. of Pani Samiti	O&M(Amt. in Rs.)
16	Junagadh	120	20726930.90
17	Kachchh	22	5897893.92
18	Kheda	103	15757296.00
19	Mahisagar	57	6388427.70
20	Mehsana	84	8358996.90
21	Morbi	1	94763.00
22	Narmada	40	2799587.00
23	Navsari	26	2299903.70
24	P'mahal	16	1111109.00
25	Patan	175	13992441.00
26	Porbandar	6	1164569.00
27	Rajkot	9	2256697.00
28	Sabarkantha	82	11802885.00
29	Surat	40	7444455.00
30	S'nagar	37	5197610.00
31	Тарі	70	11715407.40
32	Vadodara	145	16243520.00
33	Valsad	32	3228142.00
	Total	2049	256494254.20

Sr. No.	District	No. of Pani Samiti	Amount (in Rs.)
1	Ahmedabad	3	150000
2	Amreli	2	100000
3	Anand	5	250000
4	Arvalli	6	300000
5	Banaskantha	4	200000
6	Bharuch	7	350000
7	Botad	2	100000
8	Bhavnagar	3	150000
9	Chhota udepur	7	350000
10	Dahod	3	150000
11	Dangs	6	300000
12	Dwarka	4	200000
13	Gandhinagar	5	250000
14	Gir Somanth	6	300000
15	Jamnagar	4	200000
16	Junagadh	6	300000
17	Kachchh	6	300000

Sr. No.	District	No. of Pani Samiti	Amount (in Rs.)
18	Kheda	6	300000
19	Mahisagar	7	350000
20	Mehsana	3	150000
21	Morbi	3	150000
22	Narmada	3	150000
23	Navsari	1	50000
24	P'mahal	6	300000
25	Patan	5	250000
26	Porbandar	1	50000
27	Rajkot	3	150000
28	Sabarkantha	6	300000
29	Surat	6	300000
30	S'nagar	1	50000
31	Тарі	6	300000
32	Vadodara	7	350000
33	Valsad	7	350000
	Total	150	7500000

#### Annexure 3 Details of Pani Samitis felicitated at the State level Event

#### Details of Pani Samiti for incentive O&M and 100% Women Pani Samiti during World Water Day Celebration

Sr. No.	District Name	Scheme Name	Taluka Name	Pani Samiti/ Village Name	Amount
1	Ahmedabad	O & M	Duskroi	Nandje	472,185
		100% Women's Committee	Duskroi	Gertpur	50,000
	Amreli	O & M	Khambha	Khambha	1,493,045
2		100% Women's Committee	Rajula	Babriyadhar	50,000
2	Anand	O & M	Anand	Rawalpura	354,000
3		100% Women's Committee	Ankalav	Bhetasi-Vata	50,000
4	Arvalli	100% Women's Committee	Bayad	Jhankhariya	50,000
5	Banaskantha	O & M	Lakhni	Kherola	464,152
6	Bharuch	O & M	Bharuch	Palej	522,342
6		100% Women's Committee	Bharucha	Haldar	50,000
7	Bhavnagar	O & M	Palitana	Moti Paniyani	216,798
7		100% Women's Committee	Gariyadhar	Bela	50,000
0	Botad	O & M	Dadhada	Ghoghasamdi	194,538
8		100% Women's Committee	Dadhada	Janda	50,000
0	Chhota Udepur	O & M	Bodeli	Tandalaja	483,947
9		100% Women's Committee	Sankheda	Bahdarpur	50,000
10	Dahod	O & M	Zalod	Kaligam Gujjar	82,500
11	Dang	O & M	Subeer	Garkhadi	224,500
10	Devbhumi Dwarka	O & M	Kalyanpur	Gaga	396,972
12		100% Women's Committee	Khambhaliya	Madhupur	50,000

Sr. No.	District Name	Scheme Name	Taluka Name	Pani Samiti/ Village Name	Amount
13	Gandhinagar	O & M	Kalol	Santej	692,451
		100% Women's Committee	Mansa	Prempura Veda	50,000
14	Gir Somnath	O & M	Talala	Rampra	360,665
		100% Women's Committee	Gir Gadhada	Bhiyal	50,000
15	Jamnagar	O & M	Jamnagar	Nava Nagna	447,806
		100% Women's Committee	Dhrola	Goleta	50,000
16	Jungadh	O & M	Manavadar	Nakra	285,405
17	Kachchh	100% Women's Committee	Nakhatrana	Verasalpar	50,000
18	Kheda	100% Women's Committee	Nadiyad	Shurasamal	50,000
10	Mahisagar	O & M	Lunavada	Chhapadi	184,698
19		100% Women's Committee	Balashinor	Dolat Porda	50,000
20	Mahesana	O & M	Vadanagar	Jaskapra	274,125
		100% Women's Committee	Vishanagar	Kuvasana	50,000
	Morbi	O & M	Morbi	Geedach	94,762
21		100% Women's Committee	Halvad	Shukhapar'	50,000
	Narmada	O & M	Garoodeswar	Mithivav	158,775
22		100% Women's Committee	Garoodeswar	Nava Vadhpua (Haripra)	50,000
23	Navsari	O & M	Gandevi	Vegam	197,027
		100% Women's Committee	Gandevi	Machhiyavasan	50,000
24	Panchamahal	O & M	Kalol	Derol Station	196,000
		100% Women's Committee	Ghoghamba	Rayanna Muvada	50,000

Sr. No.	District Name	Scheme Name	Taluka Name	Pani Samiti/ Village Name	Amount
25	Patan	O & M	Patan	Sander	524,891
		100% Women's Committee	Radhanpur	Dholakda	50,000
26	Porbandar	O & M	Porbandar	Chikasa	102,954
		100% Women's Committee	Kutiyana	Mandava	50,000
27	Rajkot	O & M	Paddhari	Movaiya	411,357
27		100% Women's Committee	Jamkandona	Bandhiya	50,000
0.0	Sabarkantha	O & M	Idar	Maniyor	598,246
28		100% Women's Committee	Idar	Daramli	50,000
	Surat	O & M	Bardoli	Mota	903,027
29		100% Women's Committee	Palsana	Barasadi	50,000
30	Surendrangar	100% Women's Committee	Dasada	Ambala	50,000
0.1	Тарі	O & M	Vyara	Khodatalav	300,352
31		100% Women's Committee	Valod	Adhyapor	50,000
	Vadodara	O & M	Vadodara	Anagadh	630,804
32		100% Women's Committee	Padra	Madapur	50,000
22	Valsad	O & M	Umargam	Sanjan	423,929
33		100% Women's Committee	Dharampur	Sondar	50,000
		11,692,253			
		1,450,000			
	Total				13,142,253







# GLIMPSES OF THE STATE LEVEL EVENT

















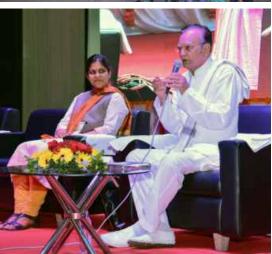






















# GLIMPSES OF THE DISTRICT LEVEL CELEBRATION

















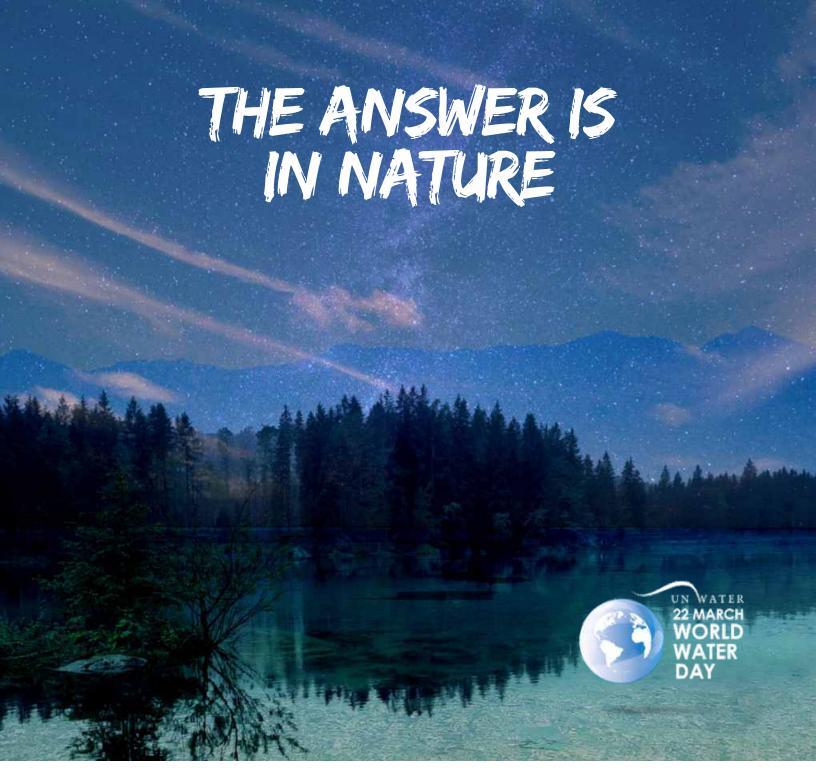


















#### **Water Supply Department**

Government of Gujarat Gandhinagar