



One Year of Jal Shakti 2019 - 20

JAL SHAKTI - JAN SHAKTI

Making Water Everyone's Business



Ministry of Jal Shakti
Government of India
May, 2020

आपो हिष्ठा मयोभुवस्ता न ऊर्जे दधातन।

महे रणाय चक्षसे॥1॥

यो वः शिवतमो रसस्तस्य भाजयतेह नः।

उशतीरिव मातरः॥2॥

(ऋग्वेद संहिता-10.9.1-2)

जल आनंद का स्रोत है, ऊर्जा का भंडार है।

कल्याणकारी है॥

पवित्र करने वाला है।

और माँ की तरह पोषक तथा जीवनदाता है॥

Water is the source of
happiness, energy, health and piety,
and is life giving as mother!



Shri Narendra Modi
Prime Minister of India

“ ... I declare from the Red Fort today that in the days to come, we will take forward the Jal Jeevan Mission. The Central and State Governments will jointly work on this **Jal Jeevan Mission**. We have promised to spend more than **Rs. 3.50 Lakh Crores** on this Mission in the coming years... ”

(Independence Day address of Prime Minister from Red Fort on 15th Aug, 2019)

“ The implementation of this Mission is in the hands of community, all members of the village are to come together to implement this Mission . . . decisions on route of water pipeline, water harvesting, operation and maintenance will be made by people themselves and our sisters have a very important role to play... ”

(Prime Minister's address at Bundelkhand on 29th Feb, 2020)



Shri Gajendra Singh Shekhawat
Hon'ble Minister of Jal Shakti

“ Let’s innovate together, deflect a little from the routine and conventional thinking, and help each other out to fight against all odds. Let’s come together to create a synergy for saving water, thereby saving life and in turn, saving our planet.”

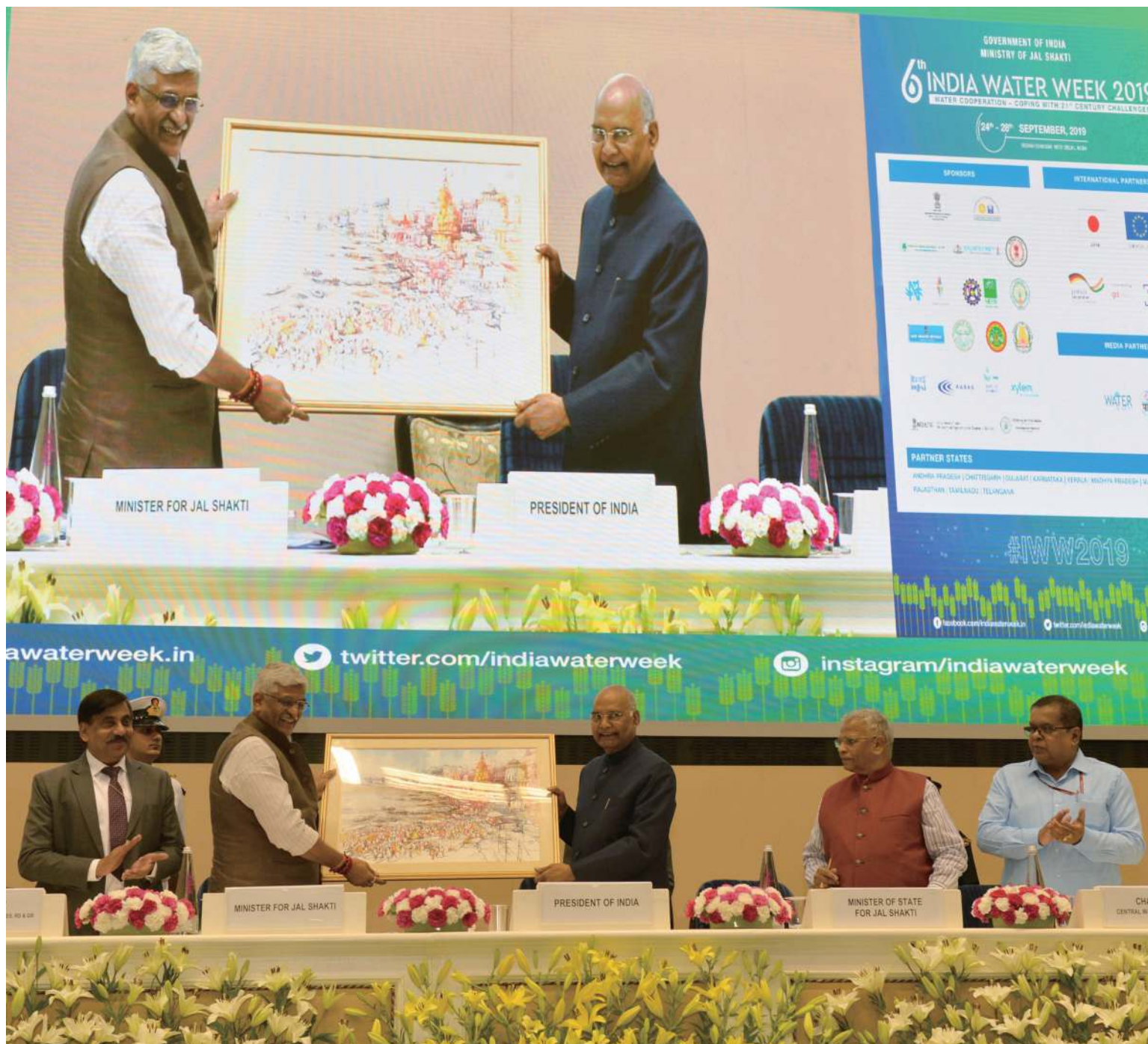


Shri Rattan Lal Kataria
Hon'ble Minister of State (Jal Shakti)

“ A reformed approach to the water supply sector, the Jal Jeevan Mission has been designed to incorporate an integrated approach with end-to-end measures: from supply to reuse and recharge. Like the Swachh Bharat Mission, this programme will work as a Jan Andolan.”

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Hon'ble President and Minister of Jal Shakti at India Water Week

Overview

First Year of Jal Shakti



Hon'ble President, Vice-President, Prime Minister, Home Minister and Minister of Jal Shakti at the Governor's Conference 2019 - Session on Jal Jeevan Mission

Water Security for India's Prosperity

Water is the elixir and energy of life. As a key resource for human civilization, for human life, for our economy and agriculture, for every aspect of our existence, water and its conservation have inevitably had a central place in the Indian ethos, and in customs and culture. Water and water access are key not just to country's economic development but to socio-economic equity and gender justice.

The Government led by Prime Minister Narendra Modi has accorded highest priority to water and has been working on water management in a holistic manner. As part of this endeavour an integrated ministry – the Ministry of Jal Shakti – dealing with all aspects of water was formed as soon as the Government was sworn in on 30th May, 2019. It brought various Departments and Ministries, broadly dealing with water resources and water supply, under a single umbrella. Demand and supply, quality and

access – water in all its manifestations is finally being treated as a composite whole.

Water plays a vital role in the economic development of the country. It is important that water is managed optimally and efficiently because water scarcity can have a negative impact that, in the case of India, may be the equivalent of six per cent of GDP. The calculation is fairly straightforward. Industrial activity accounts for 30 per cent of GDP and by 2030 will require four times the volume of water it uses today. This makes better water

“ For a nation of 137 Crore people, assured availability of potable water to all is the key goal of this newly formed ministry of Jal Shakti. To achieve this goal by 2024, Prime Minister announced Jal Jeevan Mission – Har Ghar Jal on 15th August, 2019 while addressing the Nation on Independence Day from the ramparts of Red Fort.”

management overall – especially better water management in agriculture – crucial.

As such, an integrated approach to water management will improve surface and groundwater availability; reverse the depletion of the water table; improve efficiency in water-use; improve service delivery in terms of provision of potable water to every household; address water quality issues; and help in sustaining the hard-won ODF status achieved in villages through the Swachh Bharat Mission.

The Government's emphasis is on micro-planning at the grassroots for integrated water management so as to ensure water security to all. Noteworthy initiatives that have commenced include the rejuvenation of India's largest river system – the Ganga river system. Almost 40 per cent of India's population is dependent on river Ganga. Strenuous efforts are being made for the rejuvenation and basin-wide management of the Ganga river system from both the quantity and quality perspective.

For a nation of 137 Crore people, assured availability of potable water to all is the key goal of this newly formed Ministry of Jal Shakti. To achieve this goal by 2024, Prime Minister announced Jal Jeevan Mission – Har Ghar Jal on 15th August, 2019 while addressing the Nation on Independence Day from the ramparts of Red Fort. This transformational Jal Jeevan Mission, under implementation in partnership with States, has an outlay of Rs 3.60 lakh Crore, to provide a functional household tap connection to

every household by 2024 ensuring potable water supply at household level in adequate quantity, of prescribed quality, on regular and long-term basis for 19 Crore rural households.

Under Jal Jeevan Mission, related initiatives involve improving water management through measurement and leveraging of emerging technologies like IoT-based sensor monitoring systems; developing the concept of water utilities for 'water as a service' so as to bring in efficiency, accompanied by village-level management by Gram Panchayat or its sub-committee / Paani Samiti that may decide and levy service delivery charges to encourage judicious use. The thrust is on enabling greater participation and involvement of local communities in planning, management, operation and maintenance and making water 'everyone's business'.

Jal Jeevan Mission is not a top-down managed government programme; it is a **pan-India people's movement on water**.

As part of this new water consciousness, Jal Shakti Abhiyan, an intensive time-bound, mission-mode water conservation campaign built on citizen participation, was implemented from July to December 2019 in two phases. It covered 256 water-stressed districts across the country.

To make water everyone's business, Atal Bhujal Yojana (or simply Atal Jal) is a groundwater management scheme launched by Prime Minister Narendra Modi on 25 December 2019, the 95th birth anniversary of

former Prime Minister Atal Bihari Vajpayee. The purpose of the scheme is to improve groundwater management through community participation, and is key to sustaining the investments made through the Jal Jeevan Mission.

The Namami Gange programme is an integrated conservation mission that was designated as a Flagship Programme by the Union Government in June, 2014. It has a budget outlay of Rs. 20,000 Crore to accomplish the twin objectives of effective abatement of pollution, and conservation and rejuvenation of the Ganga which is the lifeline of northern and eastern India.

The National Aquifer Mapping Programme is the world's biggest programme of its kind. It envisages formulation of aquifer management plans to facilitate sustainable development of groundwater. So far over a million square kilometres have been mapped, and another 1.5 million sq km will be mapped in the near future. Concept of water use efficiency is being promoted in a big way in all aspects of water use and management. A number of new technologies related to water treatment, purification, reuse, etc. are being promoted.

The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), which prioritized completion of long pending irrigation project, is being implemented with the vision of ensuring 'Har Khet ko Pani' (Water for every field) and improving water-use efficiency as encapsulated in the idea of 'More Crop Per



Secretary, Department of Drinking Water & Sanitation on World Toilet Day, 2019

Drop'. It seeks to offer an end-to-end solution involving source creation, distribution, management, field application and extension activities. There is a special focus on micro-irrigation that is using drip and sprinkler irrigation to enhance water-use efficiency.

Ministry of Jal Shakti is supporting the construction of Polavaram multi-purpose project, which is being built on river Godavari.

There has been a special focus on ensuring the safety and better management of dams and water storage infrastructure. India is third in the world in the list of countries by number of large dams in the country. Rehabilitation work has been completed on 200 dams under the Dam Rehabilitation and

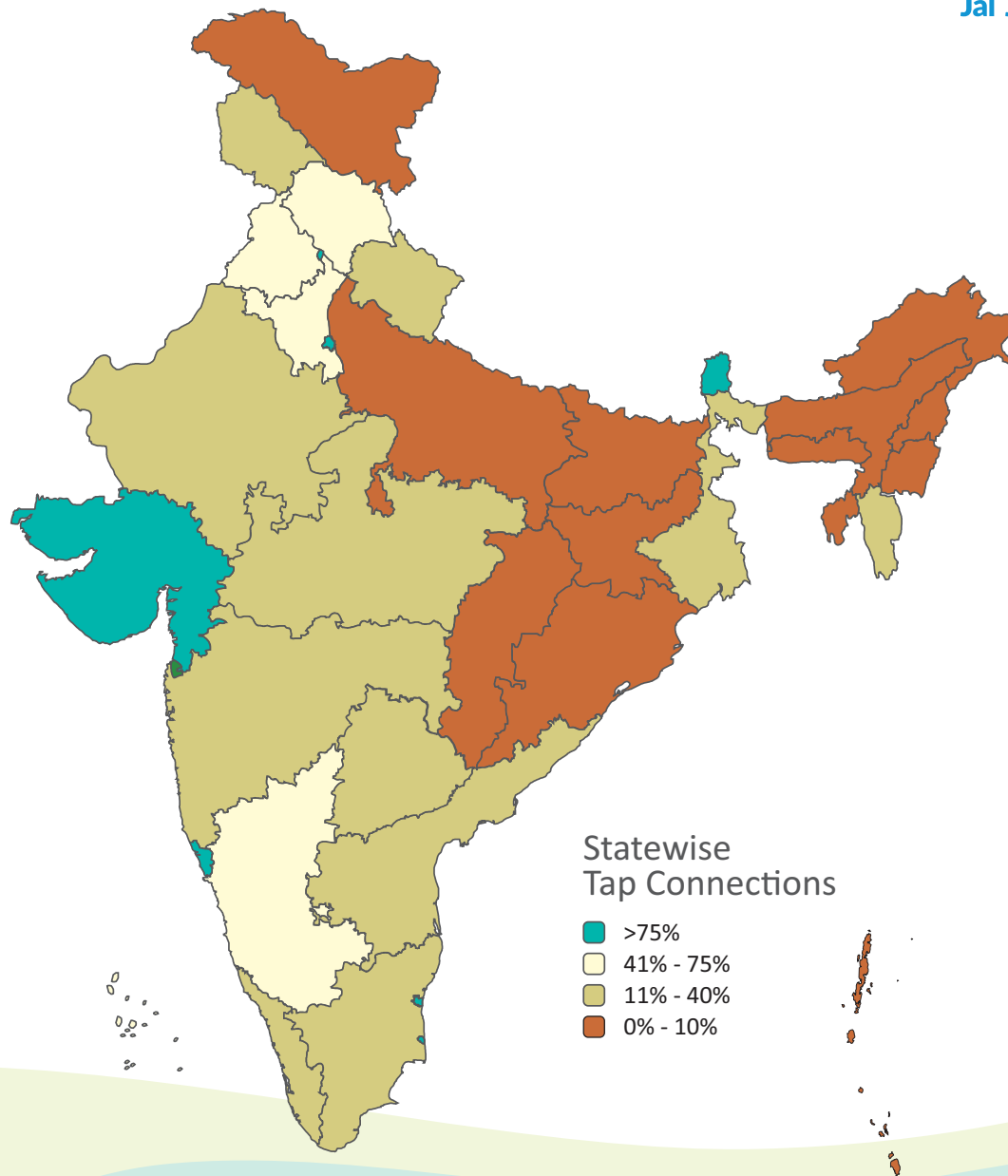
Improvement Programme (DRIP). **DHARMA** (Dam Health and Rehabilitation Monitoring Application) has been developed and this system is helping in monitoring the health of dams better.

For robust water governance, besides the legal and policy framework, Ministry of Jal Shakti has a well charted institutional network in place. It has several agencies, institutions and autonomous bodies to work on several water related issues in a coherent manner. There are currently two attached offices, seven subordinate offices and 12 autonomous bodies functioning under the aegis of Ministry of Jal Shakti.



Har Ghar Jal
Jal Jeevan Mission

Status of household tap connections (as on 01.04.2019)



Programmes of Jal Shakti

Jal Jeevan Mission



Har Ghar Jal
Jal Jeevan Mission



Prime Minister releases Operational Guidelines of Jal Jeevan Mission

Jal Jeevan Mission: Har Ghar Jal

[Functional Household Tap Connection (FHTC) to every household by 2024]

In his address to the nation on Independence Day–2019, Hon'ble Prime Minister of India announced Jal Jeevan Mission (JJM) to be implemented in partnership with States, to provide functional household tap connection to every household by 2024. Prime Minister has given a call to make water everyone's business – a Jan Andolan.

The mission aims at improving the lives of rural people and reduce the drudgery of women, especially girls by providing safe water within the household premises. It is to ensure that every rural woman and her household receive adequate quantity of potable water on regular and long-term basis.

An outlay of Rs. 3.60 Lakh Crore was subsequently made for this mission with

Central share is Rs. 2.08 Lakh Crore and Rs. 1.52 Lakh Crore to be borne by States. A country-wide revalidation exercise of households and status of tap water supply was also taken up. As on 1.4.2019, out of 18.93 Crore rural households in the country, 3.23 Crore households are having tap connections and remaining 15.70 Crore households are to be provided with tap connections;

“ The mission aims at improving the lives of rural people and reduce drudgery of women, especially girls by providing safe water within the household premises.”

Salient Features:

- Emphasis is on 'service delivery' rather creating infrastructure;
- Gram Panchayat and / or its sub-committee, i.e. Village Water & Sanitation Committee (VWSC) / Paani Samiti or user group to plan, implement, manage, operate and maintain their own water supply system;
- SHGs / community-based organizations / NGOs involved as Implementation Support Agencies to enhance community's capacity to implement the mission making JJM, truly a 'people's movement';
- Safe water to be ensured in water quality-affected areas on priority. Other priority areas are water scarce areas, Aspirational districts, SC / ST majority villages / habitations, villages under Sansad Adarsh Gram Yojna (SAGY), and PVTG habitations;
- Villagers to be skilled as masons, plumbers, electricians, fitters, etc. so as to ensure long-term maintenance of water supply systems;
- In order to instill the 'sense of ownership' among the community, communities to contribute 5% of the capital cost in cash / kind / labour in villages of hilly and forested areas / NE and Himalayan States and villages having more than 50% SC and



State Ministers' Conference on Jal Jeevan Mission



Governor's Conference - 2019 held at Rashtrapati Bhavan

/or ST population; for other areas, the community contribution is 10% of the capital cost;

- GPs/ VWSCs / Paani Samitis to be provided 10% of the 'in-village infrastructure' cost as performance incentive after completion of the scheme and successful demonstration of O&M;
- Strengthening and setting-up of water quality testing laboratories at State,

district and block levels to monitor quality of water supply and open them to public;

- Five persons, preferably women, in every village to be trained to check quality of water supply using simple ready-to-use test kits;
- Public Financial Management System is mandatory to be used for all financial transactions to ensure transparency as well as tracking of funds;

“ Five persons, preferably women, in every village to be trained to check quality of water supply using simple ready-to-use test kits. ”

“ Public Financial Management System is mandatory to be used for all financial transactions to ensure transparency as well as tracking of funds. ”

- Ministry of Jal Shakti set up Integrated Management Information System (IMIS) for monitoring of physical and financial progress and the same is linked with dash board.
- Rashtriya Jal Jeevan Kosh (RJK) has been set up to mobilize and accept contributions / donations from various sources towards achieving the goal of JJM;
- In 2019-20, 71 Lakh people in Arsenic contaminated areas and 5.35 Lakh people in Fluoride contaminated areas, were provided with safe drinking water;
- A session on Jal Jeevan Mission was held during the 50th Conference of Governors held on 23rd and 24th of November 2019.
- Detailed Operational Guidelines of Jal Jeevan Mission were released by Hon'ble Prime Minister of India in December 2019.
- Tableaux of Jal Jeevan Mission, was awarded the first prize in India's Republic Day Parade-2020.
- As a futuristic approach, States are to pilot 'Sensor based IoT solution' to monitor regularity of water supply, quantity and quality of water. This will enhance decision making and performance of water supply utilities;

Progress

- In 2019-20, Rs. 10,000.66 Crore was provided and during 2020-21, provision of Rs. 23,500 Crore has been made;
- In 2019-20, 84.84 lakh households provided with tap connections; Now daily 1 lakh families are being given tap connections;



National Conference on Drinking Water Quality held on 7th Feb 2020



“ In 2019-20, 84.84 lakh households provided with tap connections; Now daily 1 lakh families are being given tap connections. ”

Functional Household Tap Connections provided under Jal Jeevan Mission



Community Meeting under Jal Jeevan Mission



Functional Household Tap Connections in Arunachal Pradesh under JJM

“ Gram Panchayat / its sub-committee, i.e. Village Water & Sanitation Committee Paani Samiti or user group to plan, implement, manage, operate and maintain their own water supply system.”



Training workshop in Junagadh, Gujarat



Gram Sabha meeting for Jal Jeevan Mission in Puducherry



Jal Jeevan Mission work in Aluvaguda, Kalahandi, Odisha

Programmes of Jal Shakti

Jal Shakti Abhiyan



In his 'Mann Ki Baat' address in June 2019, the Prime Minister made a clarion call to the people of India to come together and launch a 'Jan – andolan' for water conservation, which led to the launch of the Jal Shakti Abhiyan in July 2019.

“ Jal Shakti Abhiyan is an intensive time-bound, mission-mode water conservation campaign built on citizen participation to accelerate water conservation across the country.....The movement towards water conservation has to take place at the grassroots level..... it cannot become a mere Government programme...”

Narendra Modi
Prime Minister

“ Led by the Minister of Jal Shakti, officers, groundwater experts and scientists from the GOI worked together with state and district officials in India's most water-stressed districts for water conservation and water resource management. ”

Intervention Areas



Water conservation and rainwater harvesting



Renovation of traditional and other water bodies/tanks



Reuse and recharge structures



Watershed development



Intensive afforestation

- To address the problems of ground water depletion and to promote water conservation activities, Jal Shakti Abhiyan was launched in 2019 as an intensive campaign in the whole country involving the citizens;



Jal Shakti Abhiyan- Address by Shri Aamir Khan, 2nd Aug 2019



Jal Shakti Abhiyan – Minister of Jal Shakti with Shri Sadhguru, 28th Jan 2020 at Vigyan Bhawan

“ These water conservation efforts were also supplemented with special interventions including the development of block and district water conservation plans, and the promotion of efficient water use for irrigation and better choice of crops through Krishi Vigyan Kendras. ”

- JSA was run in two phases:
 - ▶ **Phase 1** started from 1st July till 30th September 2019 for all States and Union Territories; and
 - ▶ **Phase 2** started from 1st October till 30th November 2019 for States and Union Territories which receive the retreating monsoon (Andhra Pradesh, Karnataka, Puducherry and Tamil Nadu); The campaign witnessed teams of officers from the Central Government working with district administrations in 1,592 water stressed blocks in 256 districts, out of which 23 districts are *aspirational* districts;



Human chain to Create Awareness for Jal Shakti Abhiyan at Tiruvannamalai District, Tamil Nadu

“ A national-level JSA monitoring dashboard was developed that showed the progress of the States against key JSA interventions and communications activities.”

- Led by the Minister of Jal Shakti, officers, groundwater experts and scientists from the Government of India worked together with state and district officials in India's most water-stressed districts for water conservation and water resource management by focusing on the accelerated implementation of the following five target interventions.
 - i.) water conservation and rainwater harvesting,
 - ii.) renovation of traditional and other water bodies / tanks,
 - iii.) reuse and recharge of bore well structures,
 - iv.) watershed development, and
 - v.) intensive afforestation.
- These water conservation efforts were also supplemented with special interventions including the development of block and district water conservation plans, and the promotion of efficient water use for irrigation and better choice of crops through Krishi Vigyan Kendras;
- A national-level JSA monitoring dashboard was developed that showed the progress of the States against key JSA interventions and communications activities;



Community-led step well rejuvenation in Jalore, Rajasthan



Chorha GP, Latehar, Jharkhand community builds a check dam

- As part of monitoring, the following four parameters were identified for monitoring pre and post the interventions:
 - i.) Increase in the groundwater level in feet / meter
 - ii.) Increase in the surface water storage capacity in cubic meters
 - iii.) Increase in the soil moisture in farmlands in % (i.e. % of quantum of water in a cubic meter of soil) and
 - iv.) Increase in the area covered with plantation in hectares and the number of saplings planted under afforestation activities
- The JSA manifested into a large-scale campaign which involved mass mobilization of different groups of people, which included school students, college students, swachhagrahi's, Self Help Groups, Panchayati Raj Institution members, youth groups (NSS / NYKS / NCC), defence personnel, ex-servicemen and pensioners among various others.

“ The JSA manifested into a large-scale campaign which involved mass mobilization of different groups of people. ”

Programmes of Jal Shakti

Swachh Bharat Mission



PM Modi receives Global Goalkeeper Award for Swachh Bharat Abhiyan, 25th Sept 2019

“ ..Have we ever felt pain, knowing that even today our mothers and sisters have to resort to open defecation? Isn't the dignity of women our collective national responsibility? I will, therefore, launch the Swachh Bharat Mission on 2nd October and, within four years, we will take this Mission to new heights. There is something I want to start today itself – that all schools in the country should have toilets, with separate toilets for girls.. ”

Independence Day address of Prime Minister, 2019

- Swachh Bharat Mission, the world's largest sanitation and behavior change program achieved a historic milestone when all States and UTs of India declared themselves open defecation free (ODF);
- The Prime Minister of India dedicated a Swachh and open defecation free India to Mahatma Gandhi on his 150th birth Anniversary on 2nd October, 2019 at a grand ceremony organized at Sabarmati riverfront, Ahmedabad;
- More than 20,000 Swachhagrahi's, Gram Pradhans participated in the event. State Secretaries in-charge of Rural Sanitation, Mission Directors, State Coordinators, Media Persons, Development Partners, etc. attended the event;
- The SBM-G has achieved what no other sanitation program anywhere in the world has ever managed to achieve. India went from having sanitation coverage of under 40% in 2014 to achieving universal sanitation coverage in just five years;
- Over 10.5 Crore toilets were constructed and more than 60 Crore people have changed their behavior of open defecation. More than 6 lakh villages declared themselves ODF;
- On 24th September 2019, Bill and Melinda Gates presented Prime Minister Narendra Modi with the prestigious Global Goalkeepers Award at a ceremony in New York, in recognition of his prioritization and leadership on sanitation as a national priority, directly contributing to the global progress towards Sustainable Development Goal 6 through the Swachh Bharat Mission. India contributed to reducing the global open defecation burden by over 50%.

“The world is amazed by our success today. Today the whole world is rewarding us for this and is paying us respect. But I have a greater satisfaction than any statistics, any praise, or any honour when I see girls going to school without any worries. I am satisfied that Crores of mothers and sisters are now free from an unbearable pain of waiting for darkness.”

Prime Minister's address to the nation on the occasion of 150th birth anniversary of Mahatma Gandhi, 2nd October, 2019



Swachh Mahotsav 2019 and presentation of SBM-G Behaviour Change Communication handbook to Hon'ble President of India



Hon'ble President of India with Minister of Jal Shakti at Swachh Mahotsav, 6th Sept 2019

“ The Ten-Year strategy entails the road forward for the mission including its strategy on promoting usage, ensuring sustainability of interventions and road for solid and liquid waste management. ”

ODF to ODF Plus: Swachh Bharat Mission Phase 2

- With the key objective of SBM (G) Phase-I attained, the Government of India renewed its commitment to further enhance the sanitation and hygiene status in rural areas. In order to chart out the path for the future of sanitation in India, DDWS prepared the ten-year Rural Sanitation Strategy 2019-2029, which was launched by the Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat on 27th September, 2019;
- The Ten-Year strategy entails the road forward for the mission including its strategy on promoting usage, ensuring sustainability of interventions and road for solid and liquid waste management. This formed the basis for the envisioning of the SBM Phase 2.



Over 1000 Students took Swachhta Pledge, 1st Sept 2019, Pakhwada period



Secretary DDWS with school children



NCC Cadets in Swachhta Rally

Swachh Bharat Grameen Phase 2

- Swachh Bharat Mission (Grameen) commenced on 19.02.2020 phase-II focuses on sustaining Open Defecation Free (ODF) behavior and ensuring Solid and Liquid Waste Management (SLWM) in all villages of India, i.e. moving from ODF to ODF-Plus;
- The Mission will work to ensure that no one is left out without access to a toilet, and will continue to promote behavioral change activities to ensure continued toilet usage. On SLWM, the Mission will focus on four key areas:
 - i.) Bio-degradable solid waste management;
 - i.) Plastic waste management;
 - ii.) Grey-water management; and
 - iii.) Faecal sludge management.
- SBM(G) Phase-II is being implemented from 2020-21 to 2024-25 in mission mode with a total outlay of Rs. 1,40,881 Crore;
- There will be a novel model of convergence between different verticals of financing and various schemes of Central and State governments. Apart from budgetary allocations from this department, remaining funds will be dovetailed from 15th Finance Commission, MGNREGS and revenue generation models with local entrepreneurship, particularly for SLWM.



PM Modi during launch of Garbage Segregation Program, 11th Sept 2019, Mathura, Uttar Pradesh



Programmes of Jal Shakti

Namami Gange



Ganga has been part of collective consciousness of India and can easily be considered the most revered river not only in India but also the world. It is not only the center of faith of people, but also the source of their sustenance and critically important for economy, food security and livelihood. It is difficult to imagine India without Ganga. As a representation of India's identity and culture it was important to

ensure the river is restored to its clean and pristine glory. Namami Gange programme is an integrated Ganga conservation mission with a vision to restore the wholesomeness of the Ganga River by ensuring Aviral Dhara and Nirmal Dhara, and maintaining geo-hydrological and ecological integrity of the river. Under the Namami Gange Programme, 313 projects have been sanctioned so far at a total cost of Rs 28,966 Crore.

The multiple interventions of this comprehensive mission can be broadly categorized as pollution abatement, ecological restoration & flow improvement; Strengthening people-river connect including socio-cultural & economic aspects and a broad set of activities related to research, latest technology, scientific mapping, etc., to develop Ganga Knowledge Center. National Mission for Clean Ganga (NMCG) has

At a glance.....

Total 313 projects sanctioned so far -
Total cost of Rs. 28,966 crores

122 projects completed and balance are under execution

21 new projects sanctioned during last one year

34 projects completed during last one year



developed a comprehensive approach to champion the challenges posed to Ganga through different sectors, namely, wastewater management, solid waste management, industrial pollution, river front development, biodiversity conservation, afforestation, river management planning and wetland conservation. The mission for Ganga rejuvenation has got further diversified and

mainstreamed into the basin management with the Hon'ble Prime Minister, Shri Narendra Modi emphasizing, during the meeting of the National Ganga Council in Kanpur, Uttar Pradesh on 14th December, 2019, that Namami Gange should lead and transform into a sustainable and viable economic development model “**Arth Ganga**” to integrate people in the basin with Ganga rejuvenation.



PM Modi chairing the National Ganga Council Meeting at Kanpur, Uttar Pradesh on 14th Dec 2019

“ Public participation is largely responsible for the unprecedented improvement in the water of river Ganga in the last 5-6 years. The sense of faith and responsibility of the people towards Maa Ganga is at an unprecedented level today. On the occasion of Kumbh last year, the devotees expressed satisfaction over the cleanliness of the river Ganga. This sense of appreciation in the country and abroad stems from the contribution of the public in keeping the river clean.”

Narendra Modi
Prime Minister



Gangetic Dolphin

Pollution Abatement (Nirmal Ganga)

- Additional sewage treatment capacity of 176 MLD created by completing 14 projects.
- 250 MLD untreated sewage discharge into Ganga prevented by improving capacity utilization.
- Major sewerage projects in Uttarakhand completed. Haridwar, Rishikesh and Muni-Ki-Reti have now enough STP capacity up to year 2035.
- First STP on innovative HAM model of PPP completed in Haridwar.
- Prayagraj sewerage network project in core city completed.
- More than 100 years old Sisamau Nala (140 MLD) fully tapped and other sewerage Project at Kanpur operationalized.
- Construction of CETP at Kanpur started to solve long standing challenges of pollution from tanneries pollution.
- Sewerage projects in Bithoor, Ayodhya, Vrindavan, Haridwar, Rishikesh, Karanprayag, Nandprayag, Srinagarand Sahibganj completed

“ India is moving at a quick pace in cleaning its rivers. The Ganga, which is India's lifeline, has become polluted in several parts. The Namami Gange is changing this historical wrong.”

Narendra Modi
Prime Minister



Improvement in Water quality

- Dissolved Oxygen (DO) improved & meets standard throughout length of Ganga.
- BOD levels improved at 42 locations.



The Great Ganga Run at New Delhi

Ecology and Flow (Aviral Ganga)

- Early implementation of mandating minimum flow ensured from 15th Dec 2019 through modified Environmental Flow Notification.
- Wetland Conservation Project for 226 Wetlands within 10Km of Ganga in UP, 06 new RAMSAR Sites in UP notified. Special toolkit developed for protection & conservation of Urban Wetland prepared.
- Fisheries Conservation initiatives: Fresh Water fish catch in 2019-20 more than doubled from 579.27 Tons (2018-19) to 1,170.75 Tons in 2019-20 (CIFRI, Barrackpore).
- Biodiversity Baseline Survey of River Ganga completed; Increasing trend of sighting of aquatic animal, Strong community connect (Ganga Prahari)
- Medicinal Plantation, Afforestation along Ganga.
- Small River Rejuvenation through District Ganga Committee
- Organic farming along the banks of the river Ganga, Uttarakhand (78,700 ha) and Uttar Pradesh (45,780 ha)

People-River Connect (Jan Ganga)

- Active engagement with community through multiple channels- Ganga Vichar Manch, Ganga Prahari, ex-Servicemen, NYKS-Ganga Doots, NCC, NSS etc.
- **Ganga Aamantran Abhiyan:** Largest social outreach program through adventure sports (Rafting from Devprayag to Ganga Sagar, 35 days, 2500Km).
- **Ganga Quest 2020:** Innovative online Quiz connecting school / college students and others with Ganga ensuring creative engagement during lockdown. Overwhelming response with more than 11.5 lakh participants.
- **Great Ganga Run:** Enthusiastic participation of about 20,000 persons.
- **Ganga Utsav:** Multiple activity program engaging Students & Youth through river cinemas, quiz, storytelling, ecological learning games, etc.
- 24 Ghats & 09 crematoria completed (Total 138 ghats & 38 crematoria).
- Regular Namami Ganga Cleanathon on river banks.
- As a part of COVID-19 management, stakeholders of NMCG like Ganga Vichar Manch, Ganga Prahari and NYK Sangathan. Ganga Mitra created awareness among the masses in the Ganga Basin.



His Majesty King Carl XVI Gustaf of Sweden at Namami Gange Pavillion



Rafting as part of Clean Ganga campaign

Policy, Research & Technology (Gyan Ganga)

- **LiDAR mapping** of 10Km both sides of Ganga started for high resolution DEM.
- Special project for development of new paradigm for River City Planning initiated.
- **Aquifer mapping** by heli-survey of a paleo-channel from Kausambi to Kanpur.
- **Cultural mapping** of entire length of Ganga for natural, built and intangible heritage through INTACH.
- India-EU water partnership and German collaboration for River Basin management, E-flow assessment and Policy for Reuse of treated wastewater.
- His Majesty King Carl XVI Gustaf of Sweden visited the Namami Gange pavilion at World Water Week, Stockholm, Sweden and appreciated the comprehensive nature and momentum of the Mission followed by visit to Namami Gange Projects in Haridwar.



Ganga Aarti attended by Hon'ble President of India and Chief Minister of Uttar Pradesh



Home Minister and Minister of Jal Shakti along with Minister of State at Ganga Aamantran Abhiyan



Dakshineswar Kali Temple, North 24 Parganas, West Bengal

An Ode to River Ganga – The lifeline of India



Varanasi Ghat



LakshmanJhula, Rishikesh

An Ode to River Ganga – The lifeline of India



Uttarkashi in the lap of Mother Ganga



Yoga at Patna River Front



Holy River Ganga

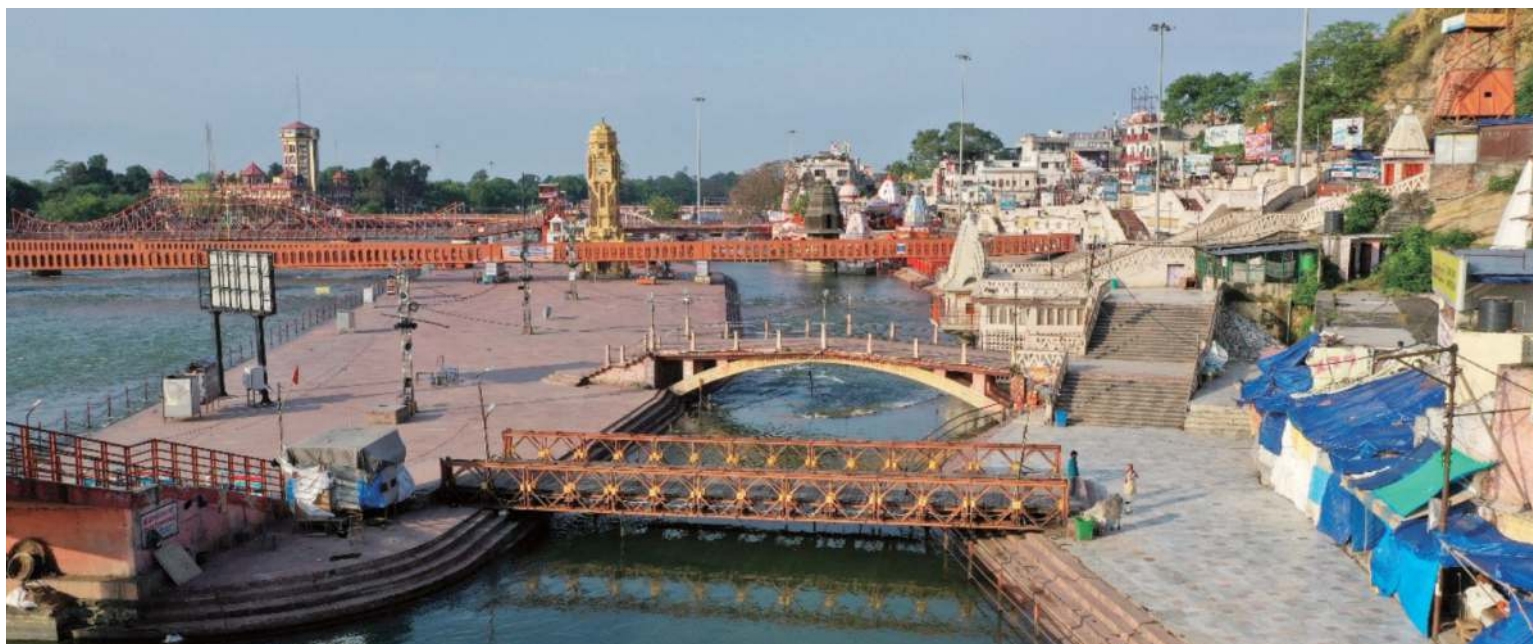


Sangam, Prayagraj



River Front Development at Chandi Ghat, Haridwar to Ganga Sagar;
Reception and interaction at Mirzapur

An Ode to River Ganga – The lifeline of India



Har Ki Paudi Haridwar



Ganga Aamantran Abhiyan (Devaprayag to Ganga Sagat); Reception and interaction at Mirzapur



More than 100 years old 140 MLD Sisamau Nala- single largest source of sewage discharge into Ganga at Kanpur successfully tapped and diverted for sewage treatment plants (Visit of PM after meeting of NGC)

Programmes of Jal Shakti

Pradhan Mantri Krishi Sinchayee Yojana

Accelerated Irrigation Benefits Programme (PMKSY-AIBP)



“...The farmers have land, if they get water they can create miracles. This is the strength the farmers of this country have and therefore we have stressed on water management, irrigation and water conservation. How to use each and every drop of water, how to increase utilization of water, per drop-more crop, Micro-irrigation- we are emphasizing on it. More than 90 irrigation schemes were lying incomplete. We have resolved to first complete these projects and lakhs of people will benefit..”

Narendra Modi
Prime Minister

The Hon'ble Prime Minister in his Independence Day address to the Nation from the ramparts of Red Fort in 2016 stated that:

PMKSY-AIBP

- Since its inception in 1996-97, 297 Irrigation / Multi-Purpose Projects have been included for funding under Accelerated Irrigation Benefits Programme (AIBP) of the Government of India. Of these, 143 projects were completed and 5 projects were foreclosed as on 31.03.2015.
- One of the major reasons for the projects to remain incomplete was inadequate provision of Central and State Share funds. As a result, large amount of funds spent on these projects were locked up and the benefits envisaged at the time of formulation of the projects could not be achieved. This was a cause for concern and initiative was required at the national level to remedy the situation.
- The umbrella scheme of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched by the Government of India during 2015-16, with an overarching vision to ensure access to some means of protective irrigation for all agricultural farms in the country, and to produce '*per drop more crop*'. The objective of the Scheme is to lead to substantial increase in agricultural production and productivity thereby enhancing farm income.
- PMKSY had four components viz.
 - i.) Accelerated Irrigation Benefits Programme (AIBP) [Implementation by Department of Water Resources, River Development & Ganga Rejuvenation];
 - ii.) Har Khet Ko Pani (HKKP) [Implementation by Department of Water Resources, River Development & Ganga Rejuvenation];
 - iii.) Per Drop More Crop [Implementation by Department of Agricultural Cooperation & Farmers Welfare]; and
 - iv.) Watershed Development [Implementation by Department of Land Resources]
- Government of India in July 2016 approved completion of 99 long pending AIBP projects (and 7 phases) including their Command Area Development & Water Management (CADWM) works under PMKSY in a Mission Mode. Completion of these projects would create an additional irrigation potential of 34.64 Lakh hectare.



Irrigated Farm

“ The progress of the projects in physical as well as financial terms is monitored through the field units of Central Water Commission. Third party monitoring through PMU-PMKSY is also being carried out. ”

Innovation / initiatives under the scheme

- The arrangement of funds for Central share / Assistance (CA) through NABARD made as year-wise requirements that would be paid back in 15 years' time. Further, the State Governments can also borrow funds from NABARD for the State Share, if required.
- In respect of State Share, interest subvention is being provided by the Central Government so that overall interest rate for State Share comes to about 6% so as to make it attractive for the States and encourage them to raise requisite State share for early completion of projects.
- The progress of the projects in physical as well as financial terms is monitored through the field units of Central Water Commission. Third party monitoring through PMU-PMKSY is also being carried out.

- Online Management Information System (MIS) has been developed for monitoring of the projects. A nodal officer for each of the 99 priority projects has been identified who updates the physical and financial progress of the project regularly in the MIS.
- GIS based application has been developed for geo-tagging of project components. Remote Sensing Techniques have been used for digitization of the canal network of the projects. Further, the cropped area estimation in the command of 99 priority projects is being carried out annually through remote sensing.
- To resolve the issue of Land Acquisition (LA) and increase water conveyance efficiency, use of Underground Pipeline (UGPL) has been actively promoted. Guidelines for Planning and Design of Piped Irrigation Network were released by this Ministry in July 2017. By adopting UGPL, LA in 6,200 hectares and 4,920 hectares has been avoided by the States of Odisha and Maharashtra respectively. Cost saving thereof is Rs. 1,500 Crore approximately.
- Pari-passu implementation of Command area development works in the commands of these projects is envisaged to ensure that the Irrigation potential created could be utilized by the farmers. New Guidelines bringing focus on Participatory Irrigation Management (PIM) have been brought out. Further, transfer of control and management of irrigation system to the Water Users' Association (WUA) has been made necessary condition for the acceptance of CADWM completion.

“ During 2016-17 to 2019-20, additional irrigation potential of 21.33 Lakh hectares has been created through these projects. ”

Status/ Progress of Works

- Out of 99 projects and 7 phases (Total-106), 44 projects have been completed so far. Out of the remaining projects, 24 projects have achieved physical progress of more than 90% and are on the verge of completion.
- During 2016-17 to 2019-20, additional irrigation potential of 21.33 Lakh hectares has been created through these projects.
- Out of these 99 projects and 7 phases (Total- 106), 59 projects benefit Drought prone areas in various States of the Country. During 2016-17 to 2019-20, additional potential of 12.57 Lakh ha has been created through these projects.
- Success of PMKSY can be gauged from the fact that against an average rate of completion of 7 AIBP projects per year up to March 2016, the rate of completion of the projects under PMKSY has increased to more than 11 projects per year. And, against an average rate of Irrigation Potential Creation (IPC) of 4.5 Lakh Ha per year under AIBP prior to March 2016, the IPC under PMKSY has increased to more than 5.30 Lakh Ha per year.

Programmes of Jal Shakti

Atal Bhujal Yojana



- Ground water has played an important role in increasing food and agricultural production, providing safe drinking water and facilitating industrial development in India.
- The government has recognized the potential of community led ground water management to ensure the long-term sustainability of ground water in the

country. By bringing focus on demand side management of ground water, the Atal Bhujal Yojana is a major paradigm shift in ground water management. Launched by the Hon'ble Prime Minister on 25.12.2019, the five-year Scheme, with an estimated expenditure of Rs. 6,000 Crore, is being implemented from 1st April, 2020.

“ तीव्रता से गहरे हो रहे जल संकट से लड़ने के लिए, हमारे पास एकजुट होने के अलावा कोई विकल्प नहीं है। ”

Sh. Atal Bihari Vajpayee, the then Prime Minister



Prime Minister launching the Atal Bhujal Yojana



Minister of Jal Shakti at the launch of Atal Bhujal Yojana

- The scheme envisages improved source sustainability for the Jal Jeevan Mission, positive contribution to the Governments' goal of doubling farmers' income and inculcating behavioural changes in the community to facilitate optimal water use.
- The scheme is being taken up in 8,353 water stressed Gram Panchayats in 78 districts of seven states, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. This unique scheme will contribute significantly towards the water and food security of the country.

The Scheme has two components:

- ▶ **Institutional Strengthening & Capacity Building component:** for strengthening institutional arrangements by providing strong data base, scientific approach and community participation in the States to enable them in sustainable management of ground water resources, and
- ▶ **Incentive Component:** for incentivizing the States for convergence amongst various schemes of the Central and State Governments and achievement of results as a measure of ground water management.

- Preparatory activities for the scheme are in an advanced stage. Program Guidelines have been issued. The Memorandum of Agreement (MoA) to be signed with the States has been shared and concurred to by the States.
- Most of the participating States have put in place the institutional mechanism for implementation of the scheme and are going ahead with other processes such as engagement of experts, selection of program implementation partners etc.

Water Governance

Agencies and Institutions



Brahmaputra Board Meeting

Given the scale of challenges the country faces, Ministry of Jal Shakti has in place strong institutional mechanisms for holistic water governance and review all issues related to water in a more inclusive way with close coordination between agencies and delineation of specific roles.

At present, the agencies and institutions under Ministry of Jal Shakti include two attached offices – Central Water Commission and

Central Soil and Materials Research Station, eight subordinate offices - Central Ground Water Board, Central Water and Power Research Station, National Water Informatics Center (NWIC), Ganga Flood Control Commission, Farakka Barrage Project, Sardar Sarovar Construction Advisory Committee, Bansagar Control Board and Upper Yamuna River Board, twelve Registered Societies / Autonomous Bodies / Statutory Bodies etc. Viz. National Mission for Clean Ganga, National

Water Mission, National Institute of Hydrology, National Water Development Agency, North Eastern Regional Institute of Water and Land Management, Narmada Control Authority, Brahmaputra Board, Betwa River Board, Tungabhadra Board, Krishna River Management Board, Godavari River Management Board and Polavaram Project Authority and two public sector enterprises- WAPCOS Limited and National Projects Construction Corporation Limited.

Central Water Commission (CWC)

CWC with its headquarters at New Delhi is a premier technical organization in the field of Water Resources in the country since 1945. The Commission is entrusted with the general responsibility of initiating, coordinating and furthering, in consultation with the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country for the purpose of Irrigation, Flood Control, Drinking Water Supply and Hydro Power Development. Key achievements in 2019-20 include:

- Provision of design consultancy to various State Governments for 85 projects spread across 22 Indian States and 9 from Foreign Countries.
- Release of the **National Register of Large Dams (NRLD)** was with details of 5,334 constructed large dams and 411 under construction large dams, in June, 2019.
- **Inter-State River Water Disputes (Amendment) Bill, 2019** to amend the existing ISRWD Act, 1956 introduced in Lok Sabha and passed on 31.07.2019. (Website: www.cwc.gov.in)

Central Soil and Material Research Station

CSMRS is a premier organization in the country dealing with the field and laboratory investigations, and research in the areas of geotechnical engineering and civil engineering materials, particularly for construction of river valley projects and safety evaluation of existing dams. The Research

Station is also involved in quality control of construction for various river valley projects.

The spheres of activities of the Research Station are covered under the three main disciplines namely Soil, Rock and Concrete. The core areas are Soil Mechanics, Rockfill Technology, Geo-synthetics, Soil Dynamics, Rock Engineering, Engineering Geophysics, Geotechnical Instrumentation, Concrete Technology, Concrete Diagnostics and Numerical Modeling.

(Website: www.csmrs.gov.in)

Central Ground Water Board (CWGB)

Central Ground Water Board (CGWB) is entrusted with the responsibilities of providing scientific inputs for management, exploration, monitoring, assessment, augmentation and regulation of ground water resources of the country based on principles of economic and ecological efficiency and equity. The data generated from various studies taken up by CGWB provide a scientific base for water resource planning by stakeholders. Besides advising states and other user agencies on planning and management of ground water resources, Central Ground Water Board also provides technical know-how for scientific and sustainable exploration, development and management of India's ground water resources. (Website: www.cgwb.gov.in) In 2019-20, some of its key milestones include the below.

- National Aquifer Mapping and Management Program (NAQUIM): During the year 2019-20, Aquifer maps and management plans for 2.2 Lakh sqkm

area have been prepared covering various parts of the country. So far, under the NAQUIM programme, area of 13 lakh km² has been mapped out of the total 24.8 lakh km² area identified;

- Aquifer Rejuvenation and water conservation: Innovative artificial recharge techniques for aquifer rejuvenation has been carried out in *aspirational* districts of the States of Maharashtra, Telengana and Andhra Pradesh. Conservation & Recharge Intervention in convergence with MGNERGS have also been taken up in several states for rainwater harvesting and artificial recharge;
- Conducted 399 Public Interaction programs (PIPs) on NAQUIM, 183 Mass Awareness Programme on Rainwater Harvesting;
- Groundwater Resources: The National Compilation on "Dynamic Ground Water Resources of India, 2017" was approved on 11th July 2019;
- Uranium analysis for the country: During 2019-20, nearly 14,000 groundwater samples were collected and analyzed by CGWB for uranium content;
- Resource book for Jaldots: A training resource manual titled "Empowering village communities for a sustainable water future- A resource book for Jaldots" prepared by Central Ground Water Board in collaboration with MARVI;
- Revised guidelines for ground water irrigation component circulated for the irrigation scheme under PMKSY-GW.

Central Water and Power Research Station

Central Water and Power Research Station (CWPRS), Pune an apex Research and Development institution in the field of hydraulics and allied research in the water and power sector has continued to serve the needs of the nation for more than 100 years by catering to the research and development needs for evolving safe and economical planning and design of Water Resources Structures, River engineering, Hydropower generation, and Ports and Water ways projects fulfilling the mandate of '**Service to the Nation through Research**'. CWPRS has offered its services to a number of projects in the neighbouring countries viz., Bangladesh, Bhutan, Afghanistan, Myanmar, Nepal, Singapore, etc., as well as countries in Middle East.
(Website: www.cwprs.gov.in)

Ganga Flood Control Commission

Ganga Flood Control Commission (GFCC) was established in 1972 with its Headquarter at Patna. The Commission has been assigned the following tasks: Preparation and Updation of comprehensive plans for flood management of the river systems in the Ganga basin, Phasing/sequencing of programme of implementation of works included in the basin-wise plans, Providing technical guidance to the Ganga Basin States, namely, West Bengal, Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Chhattisgarh, Madhya Pradesh, Delhi, Haryana, Himachal Pradesh and Rajasthan on Flood Management.
(Website: www.gfcc.bif.nic.in)

Sardar Sarovar Construction Advisory Committee

The Sardar Sarovar Construction Advisory Committee (SSCAC) was constituted in 1980 by the Government of India in accordance

with the directives of the Narmada Water Disputes Tribunal (NWDI) with a view to ensure efficient, economical and early execution of Unit-I (Dam and Appurtenant works) and Unit-III (Hydropower works) of the Sardar Sarovar Project.
(Website: www.sscar.gov.in)

Farakka Barrage Project

The Farakka Barrage Project (FBP) was commissioned in 1975 for preservation & maintenance of the Kolkata Port and for increasing the navigational depth of the Bhagirathi – Hooghly waterway. The Farakka Barrage Project comprises of a 2,245 m long barrage across river Ganga at Farakka in Murshidabad District of West Bengal, a canal head regulator at Farakka for diverting water to Feeder Canal, a 38.38 km long Feeder Canal and Jangipur Barrage, besides the road-cum-rail bridge across Ganga at Farakka, Navigation Locks at Farakka, Jangipur and Kalindi (Nurpur / Malda), a road-cum-rail bridge across the Feeder Canal, Townships at Farakka, Ahiron and Khejuriaghat having 4,000 dwelling units.
(Website: www.fbp.gov.in)

Bansagar Control Board

Bansagar Control Board (BCB) was set up vide Government of India, Ministry of Agriculture and Irrigation Resolution No.8/17/74-DW-II dated 30th January, 1976 it was amended vide Resolution No.8/17/74-DW-II dated 28th March, 1978. This Resolution was in accordance with an agreement reached between the Governments of Madhya Pradesh, Uttar Pradesh and Bihar on 16th September, 1973 for sharing the waters of River Sone and the cost of the Bansagar Dam.
(Website: www.bcb.nic.in)



Hon'ble President of India paying tribute at Statue of Unity, World's tallest statue



Hon'ble President, Min. of Jal Shakti and MoS Jal Shakti inaugurating the 6th India Water Week, 24th Sept 19

Upper Yamuna River Board

A memorandum of Understanding (MoU) was signed by the Chief Ministers of Himachal Pradesh, Haryana, Uttar Pradesh, Rajasthan and National Capital Territory of Delhi on 12th May, 1994 regarding allocation of utilizable surface flow of River Yamuna upto Okhla Barrage (Upper Yamuna) among the co-basin States. In order to implement the said MoU, Upper Yamuna River Board (UYRB) was constituted by a Resolution in accordance with the provision of the MoU. After creation of Uttaranchal State in 2000, the resolution was modified to include Uttaranchal (now Uttarakhand) also in the Board.
(Website: www.uymb.gov.in)

WAPCOS Ltd

WAPCOS, a Mini Ratna-I is a Central Public Sector Enterprise (CPSE) under the Ministry of

Jal Shakti is a scientific and technology driven consultancy and EPC organisation and provides consultancy services from project conceptualization to commissioning, which includes feasibility studies, design, engineering, scientific and technical evaluation, project management and socio-economic impact assessment, in all aspects of Water Resources, Power and Infrastructure Development in India and Abroad.

Key achievements in 2019-20

- Managing projects of around Rs 20,000 Crore annually in Water Resources, Power & Infrastructure Development
- Contribution of about Rs 1,100 Crore to National Exchequer in the form of Strategic Investment, Dividend and Taxes
- Conferred MINI RATNA-I Status

- Turnover from Consultancy and Engineering Projects increased from Rs 115.3 Crore to Rs 1,622.16 Crore (1,306.90% Growth) and profitability increased from Rs 21.59 Crore to Rs 225.24 Crore (943.26% Growth)
- Dividend Payment consistently increased from Rs 3.5 Crore to Rs 50 Crore (1,328.57% Growth)
- Operations expanded from 8 Countries to 51 Countries. The Company has commissioned several projects of national and international importance such as Micro Irrigation under Sardar Sarovar Project, Afghan-India Friendship Dam in Afghanistan, Water Supply Projects in Tanzania and Stung Tasal Dam Project in Cambodia etc.
- WAPCOS has recently completed PMC for supervision of construction of "Extension of Lake Victoria Pipeline in TABORA, IGUNGA and NZEGA Towns" in Tanzania. The Government of Tanzania has conveyed its appreciation for successful completion of assignment and rated as 'Excellent' for completing this massive water supply project on time with utmost quality.
- WAPCOS acquired NPCC, another Mini Ratna-I CPSE of Government of India under the aegis of Ministry of Jal Shakti, to ensure Revival, Transformation and Turnaround of NPCC.

Research & Development

Innovation & Technology in Water



Sardar Sarovar Dam

“ About 9,700 Flood Forecasts were generated last year, leading to timely evacuation of people, livestock by State Govt. authorities. ”

National Aquifer Mapping and Management Program (NAQUIM)

NAQUIM studies for aquifer mapping and management plan formulation have been taken up by CGWB. During June 2019 to May 2020, Aquifer maps and management plans for 2.2 Lakh sq. km have been prepared covering various parts of the country. So far, under the Aquifer Mapping programme, an area of 13 lakh km² has been covered out of

the total 24.8 lakh km² area identified for mapping in the country.

Aquifer Rejuvenation and Water Conservation:

Innovative schemes on Aquifer Rejuvenation have been initiated by CGWB in which innovative artificial recharge techniques has been carried out in Aspirational districts of the States of Maharashtra, Telengana and Andhra Pradesh.

“ India ranks third globally with 5,334 large dams in operation and about 411 large dams under construction. In addition, there are several thousand smaller dams.”

Ground water resource assessment

Ground water resources of all the 6881 assessment units were assessed jointly with the respective state departments. The National Compilation on “Dynamic Ground Water Resources of India, 2017” was approved on 11th July 2019.

National Hydrology Project (NHP):

National Hydrology Project (NHP) strengthens data available on water, and creates systems for sharing the data among user agencies, to improve water management. This was approved by the cabinet as a central sector scheme with a total outlay of Rs. 3,679.76 Crore. The project objective of NHP is to improve the extent, quality, and accessibility of water resources information, decision support

system for floods and basin level resource assessment / planning and to strengthen the capacity of water resources professionals and management institutions in India.

The National Water Informatics Centre, a repository of nation-wide water resources data, has been created.

Strengthening Hydrological Observation and Flood Forecasting – Central Water Commission

CWC operates 1,578 stations for Hydrological Data observation and Flood Forecasting activity at 325 stations in the country. These are being upgraded to provide real time data.

Installation of Real Time Data Acquisition System (RTDAS) at 160 stations has been completed last year, so that the number of stations with RTDAS is now 430.

About 9,700 Flood Forecasts were generated last year, leading to timely evacuation of people, livestock by State Govt. authorities.

Two new stations for coastal data collection were set up at the coasts of Gujarat & Maharashtra under Coastal Management Information System (CMIS).

Dam Safety and Rehabilitation – Dam Rehabilitation and Improvement Project

India ranks third globally with 5,334 large dams in operation and about 411 large dams

under construction. In addition, there are several thousand smaller dams. These dams are vital for ensuring the water security of the Country; and these also constitute a major responsibility in terms of asset management and safety. The Department of Water Resources, River Development & Ganga Rejuvenation, through Central Water Commission, implements the Dam Rehabilitation and Improvement Project (DRIP) with World Bank assistance at a cost of Rs 2,100 Crore, with an objective to improve safety and operational performance of selected dams. The project includes repair and maintenance of dams, but also emphasizes creation of safety protocols and capacity building for dam safety.

- Two hundred dams have been rehabilitated under this project in the last six years. Of these, work on 85 dams was completed last year.
- Dam Health and Rehabilitation Monitoring Application (**DHARMA**) has been developed. This system is helping dam owners monitor the health of their dams better.
- Capacity is being strengthened to provide technical and managerial assistance to dam owners and State Dam Safety Organisations for proper surveillance, inspection, operation and maintenance of all dams to ensure safe functioning of dams and protecting human life, property and the environment.



Jal Jeevan Mission - State Water Testing Laboratory, Bhubaneswar

Jal Jeevan Mission – Technical Committee

Given the speed and scale required to achieve the goal of universal FHTC coverage for every rural household by 2024, the use of innovative solutions and new technologies is necessary. Keeping this in view, a Technical Committee under the Chairmanship of Principal Scientific Advisor (PSA) to Government of India has been constituted. The Technical Committee on water headed by PSA has been set up to identify and accept technologies for assisting States in achieving JJM objectives. It held its first meeting on 11th December 2019 at New Delhi.

The Technical Committee's will work to

- i.) invite innovative technologies in drinking water, sanitation, grey water management and solid waste management sectors through Department / National Mission portal;
- ii.) facilitate techno-economic appraisal of technologies and consider appraised technologies for acceptance;
- iii.) recommend any non-technological interventions needed to achieve scaling up the use of such technologies;

“ The Technical Committee on water headed by PSA has been set up to identify and accept technologies for assisting States in achieving JJM objectives. ”

International Cooperation

Working together for common goals



Clean water in focus during Minister of Jal Shakti's visit to Sweden

Memorandum of Understanding

Ministry of Jal Shakti through its Department of Water Resources, River Development and Ganga Rejuvenation has signed Memorandum of Understanding (MoUs) with different countries on cooperation in the field of water resources management and development.

The recent MoUs include those with United States Geological Survey, MARVI partners Australia, with Norwegian Geo-technical Institute and with United Kingdom and Scotland on River Ganga Rejuvenation.

Visits of Hon'ble Minister

Hon'ble Minister of Jal Shakti visited Israel for participating at the Israel- India, Strategic Partnership on water event which took place in Jerusalem on 18th November, 2019 and also participated in WATEC Israel 2019 at Tel-Aviv, Israel.

Hon'ble Minister also attended Budapest Water Summit, 2019 held in Budapest, Hungary during 15th to 17th Oct, 2019 in which Hon'ble Minister had bilateral meeting with President of Hungary, Minister of

Interior of Hungary and Minister of Agriculture of Hungary.

Foreign visits / Deputation

To enhance capacity building about 200 officers were deputed for foreign trainings, visits, seminars and conferences in the field of water resources management, micro-irrigation, water use efficiency, irrigation management, enhancing crop production, flood disaster risk management, dam safety and rehabilitation, waste water treatment, sewage treatment, morphological modeling, ecosystem conservation.



Minister of Jal Shakti attended Ministerial Meeting with Minister of Energy, State of Israel

“ Ministry of Jal Shakti has signed Memorandum of Understanding (MoUs) with different countries on cooperation in the field of water resources management and development.”

INDIA-BANGLADESH COOPERATION

An Indo-Bangladesh Joint Rivers Commission (JRC) is functioning since 1972 with a view to maintain liaison in order to ensure the most effective joint efforts in maximizing the benefits from common river systems.

A Water Resources Secretary Level meeting was also held between India and Bangladesh in Dhaka during 7-8 August, 2019.

This was followed by a meeting of the India Bangladesh Joint Team held in New Delhi on 27 September, 2019.

During the visit of Prime Minister of Bangladesh to India, a Memorandum of Understanding (MoU) was signed on 5 October, 2019 with Department of Water Resources, Government of People's Republic of Bangladesh on withdrawal of 1.82 cusec of water from Feni River by India for drinking water supply scheme for Sabroom town of Tripura, India.

INDIA – NEPAL COOPERATION

Pancheshwar Multipurpose Project: The Pancheshwar Development Authority has been set up for integrated development of the Mahakali River. The Seventh Meeting of the Governing Body (GB) of Pancheshwar Development Authority (PDA) was held on 29 November, 2019 in New Delhi, India.

Besides this, the Sapta Kosi High Dam Multipurpose Project and Sun Kosi Storage cum Diversion Scheme (including Kamala Diversion) are also functioning. The 16th meeting of the Joint Team of Experts (JTE) between Nepal and India was held on 25-26 July, 2019 at New Delhi.

INDIA-CHINA COOPERATION

In 2002, the Government of India inked a MoU with People's Republic of China upon provision of hydrological information of the Yalu zangbu / Brahmaputra River in Flood Season by China to India. As per MoU,

Chinese side provided hydrological information on River Yalu zangbu / Brahmaputra which is utilized by the CWC in the formulation of flood forecasts. This MoU was further renewed in June, 2008, May, 2013 and June, 2018 with a validity of further five years. During the visit of Hon'ble Prime Minister of India to China in October, 2013, both sides signed a separate “MoU on Strengthening Cooperation on Trans-Border Rivers” on 23.10.2013.

Similarly, a separate MoU with China signed on 11.04.2005 upon provision of hydrological information of the Langqen Zangbo / Sutlej River in Flood Season by China to India. Chinese side provided Hydrological information of Tsada station from 2007. The MoU was renewed in December, 2010 for further five year and renewed again on 06.11.2015 for further five years.

“ In fulfilment of the requirement of Indus Waters Treaty, the daily G&D data of hydrological sites on six basins, The Indus, The Jhelum, The Chenab, The Ravi, The Beas and The Sutlej of Indus system is sent to Pakistan every month.”

INDIA – BHUTAN COOPERATION

“Comprehensive Scheme for Establishment of Hydro-meteorological and Flood Forecasting Network on rivers Common to India and Bhutan” consists of hydro-meteorological / meteorological stations network located in Bhutan and Operation & Maintenance (O&M) carried out by the Royal Government of Bhutan (RGoB) with funding from Government of India (GoI). The data received from these stations are utilised by the CWC for formulating flood forecasts. A Joint Expert Team (JET) consisting of officials from the Government of India (GoI) and the Royal Government of Bhutan (RGoB) meets twice in a year to review the progress and other requirements of the scheme. The latest (35th) meeting of JET was held at Paro (Bhutan) during 6-7 March, 2019.

Another meeting of the Joint Group of Experts (JGE) to discuss matter related to problem of floods created by the Rivers originating from Bhutan and coming to India was last held on 7-8 January 2020.

INDUS WATERS TREATY

In fulfilment of the requirement of Indus Waters Treaty, the daily G&D data of hydrological sites on six basins, The Indus, The Jhelum, The Chenab, The Ravi, The Beas and The Sutlej of Indus system is sent to Pakistan every month. Irrigated Cropped Area statistics for the crop year 2018-19 for the Indus, the Jhelum & the Chenab basin had been compiled and sent to Pakistan as per the provisions of Indus Waters Treaty during November, 2019.



Minister of Jal Shakti at World Water Week 2019, Stockholm, Sweden

Celebrating 150 years

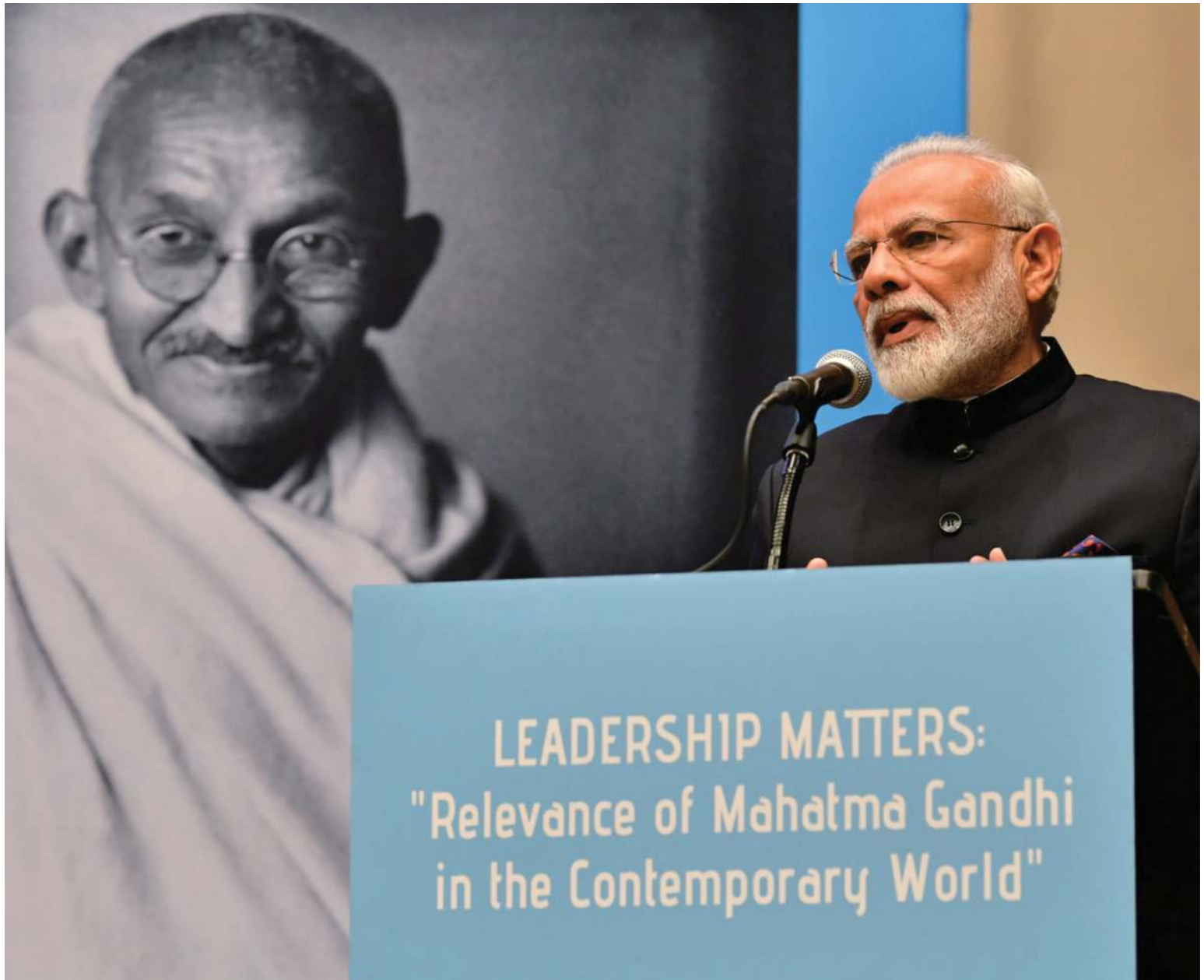
An Ode to Mahatma Gandhi



PM Modi at Sabarmati Ashram

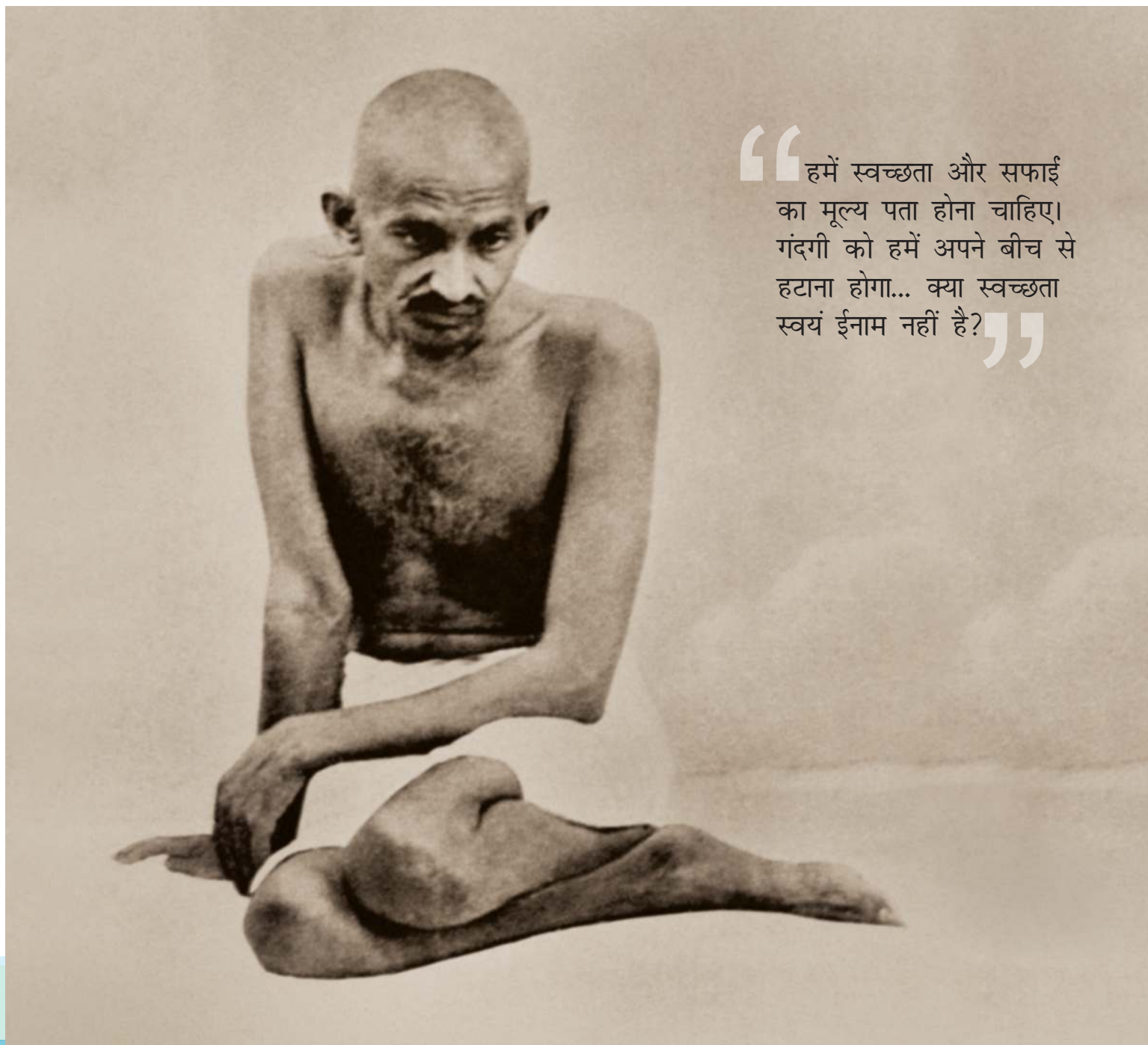
“ सच्चा व्यक्तित्व अकेले ही
सत्य तक पहुंच सकता है। ”

An Ode to Mahatma Gandhi



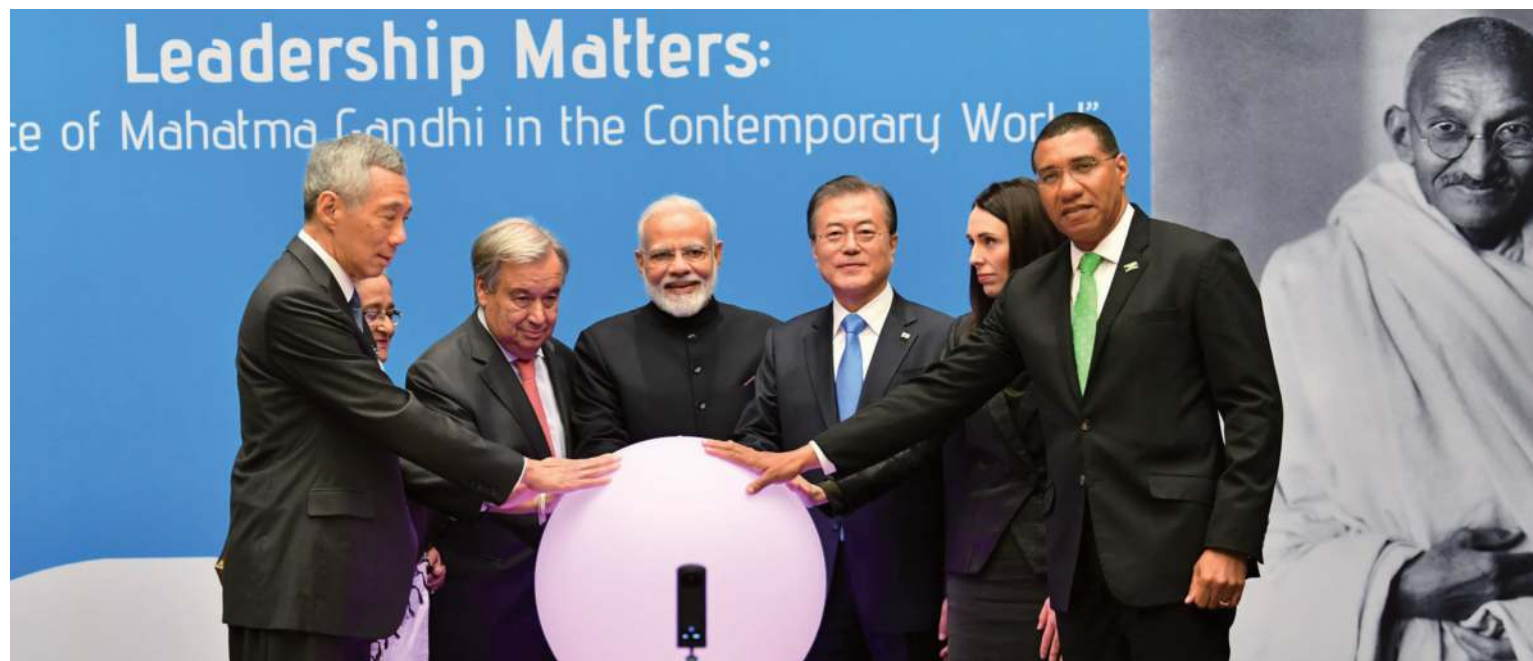
Addressing the United Nations assembly PM Modi pays tribute to Mahatma Gandhi at an event organised by the Indian mission to commemorate the 150th anniversary of the Mahatma

An Ode to Mahatma Gandhi



“ हमें स्वच्छता और सफाई का मूल्य पता होना चाहिए। गंदगी को हमें अपने बीच से हटाना होगा... क्या स्वच्छता स्वयं ईनाम नहीं है? ”

An Ode to Mahatma Gandhi



PM Modi with world leaders at Leadership Matters: Relevance of Gandhi in the Contemporary World, 24th Sept 2019, New York

“मैं किसी को गंदे पैर के साथ अपने मन से नहीं गुजरने दूंगा।”

“नदियों को साफ रखकर हम अपनी सभ्यता को जिंदा रख सकते हैं।”

महात्मा गांधी



Swachh Mahotsav 2019 Vigyan Bhavan, New Delhi, 6th Sept 2019



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