



TATA TRUSTS

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State Partnership for Jal Jeevan Mission in

COASTAL Gujarat 2024

Securing Quality
Drinking Water

State Partnership for
Jal Jeevan Mission in Coastal Gujarat
Securing Quality Drinking Water

**Coastal Salinity Prevention Cell is transforming 1,10,000+ lives
across Amreli & Bhavnagar by making them Water Safe & Secure,
through Technology & Sustainability Solutions**



Preface



Despite being near its abundance, water, the essence of life, has long been a scarce commodity for the communities living in the coastal landscapes of Gujarat. For generations, these resilient people have embarked on arduous journeys in search of safe, quality drinking water, a daily struggle that has perpetuated the cycle of hardship & deprivation in terms of social & economic growth.

This book bears witness to a transformative journey, one that has reshaped the narrative of water accessibility in Gujarat's coastal landscapes of Amreli & Bhavnagar. Through the unwavering efforts of the Coastal Salinity Prevention Cell (CSPC) & the Government of India's flagship 'Jal Jeevan Mission,' a paradigm shift has taken place – a shift that has brought the dream of Functional Household Tap Connections (FHTC) & sustained access to safe, quality drinking water to fruition.

Within these pages, you'll discover a tapestry of images that capture the essence of this monumental undertaking, from the meticulous planning & execution of robust water supply systems to the empowerment of communities to take ownership of their water security. Each photograph tells a story of perseverance, innovation, & the relentless pursuit of a future where every household, no matter how remote, can enjoy the convenience & dignity of having clean water at their doorstep.

Acknowledgements



This Book is a testament to the collective efforts of many individuals, communities, & organizations who have tirelessly worked to transform the landscape of water accessibility in the districts of Amreli & Bhavnagar in Gujarat. At the onset, we are sincerely grateful to the resilient coastal community that is the heart of this publication, who have relentlessly supported the project to ensure strong linkages for smooth & sustained results.

We also extend our deepest gratitude to Trent Limited & Tata Trusts for their vision, leadership & support for bringing this ambitious project to fruition. Their strong commitment to bringing about positive change in the lives of people in Amreli & Bhavnagar has made all the difference. We are deeply grateful to the Water & Sanitation Management Organization, Gujarat (WASMO), for their invaluable expertise & tireless efforts in implementing robust water supply systems as part of Government of India's Jal Jeevan Mission.

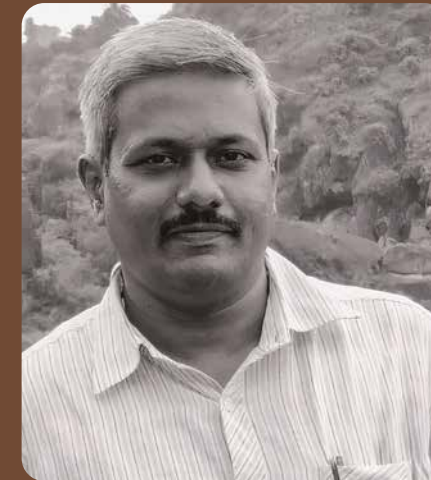
Finally, we are thankful to all those who have contributed their time, energy, & expertise, directly or indirectly, to this noble cause. Together, we can continue to drive positive change & create a sustainable & prosperous future for all.

Leadership Reflection

Sujit Kumar Gopinathan

Divyang Waghela

Arshiya Mecklai



Sujit Kumar Gopinathan

CEO,
Coastal Salinity Prevention Cell

The Jal Jeevan Mission, a transformative initiative by the Government of India, aims to provide safe & adequate drinking water through individual household tap connections. At CSPC, we have tried to align our engagements with the coastal rural communities with this mission of “Har Ghar Nal se Jal”. In Gujarat, the focus of our engagement has been to ensure that every household has access to safe & clean drinking water thereby significantly improving the health & quality of life of the households CSPC engaged with.

The national Jal Jeevan Mission program provided us with a platform to strive towards the above goal & the partnership between CSPC, Tata Trent & Tata Water Mission has been instrumental in leveraging collective strengths to realize the community level outcomes. This coffee table book tries to capture the extensive work & engagements of the team with the community & showcases the innovative approaches & collaborative efforts that have made the interventions successful. We have worked hand-in-hand with local stakeholders, government bodies, & communities to create sustainable water solutions that are both impactful & enduring.

I extend my heartfelt gratitude to everyone who has contributed to this mission—our team members, partners & most importantly, the community members whose cooperation & trust have been instrumental in achieving the outcomes. Together, let us continue to strive towards a future where every household enjoys the right to clean & safe drinking water.



Divyang Waghela

Head,
Tata Water Mission

The Tata Water Mission (TWM) – an initiative of Tata Trusts is dedicated to bringing safe water, sanitation, & hygiene solutions to underserved communities, promoting a healthy & water-secure future for all through sustainable approaches. The TWM aligns perfectly with the vision of Jal Jeevan Mission, India's flagship initiative aiming to provide tap water access to every rural household. In a large-scale partnership spanning 13 states, the Tata Trusts collaborated with governments to empower over 2,500 villages with a decentralized, community-led model, significantly improving access to safe drinking water.

CSPC, one of the associate organizations of the Tata Trusts, has been at the forefront of implementing sustainable water management practices in Coastal Gujarat. The collaborative approach in Gujarat, partnering with Water & Sanitation Management Organization (WASMO), Government of Gujarat, local communities, & other stakeholders has yielded transformative results & more than 22,735 households across 103 villages have benefitted from water tap connections in their respective homes. Creative communication strategies promoting social & behavioral change have helped build strong community ownership of the new intra-village drinking water systems & strengthen local community institutions. Leveraging new, robust technologies has also been our focus area - creating sustainable water systems speaks for that. These systems go beyond simply providing water - they ensure long-term water quality, efficient management, & equitable access for all. In partnership with local communities, we will continue to build strong local institutions that can effectively operate & maintain water systems, ensuring their long-term success & sustainability in rural Gujarat.



Arshiya Mecklai

Lead, CSR & Employee Engagement,
Trent Limited – A Tata Enterprise

Water is the lifeline of any community, & ensuring its availability & sustainable management is a critical challenge. At Trent, we are deeply committed to supporting initiatives that bring about significant positive changes in the lives of people, particularly in the realm of water management. It is with great pride that we extend our support to the Jal Jeevan Mission in Gujarat, an initiative spearheaded by Coastal Salinity Prevention Cell (CSPC). This intervention stands as a demonstration to the power of collaboration & community-driven efforts in addressing the pressing issue of water access. By leveraging the strengths of various stakeholders, including local communities, CSPC, Tata Water Mission & WASMO, we are collectively working towards a future where every household has access to safe & adequate drinking water. These initiatives not only ensure the availability of water but also empower communities with the knowledge & tools needed to manage their water resources effectively. This holistic approach is essential for creating long-term impact & fostering resilience among the communities we serve. As we look ahead, our commitment remains unwavering. We will continue to support & participate in initiatives that align with our core values of sustainability, inclusivity, & community empowerment.

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List of Abbreviations

CSPC Coastal Salinity Prevention Cell	WHO World Health Organization	DWSM District Water & Sanitation Mission
WASMO Water & Sanitation Management Organization	JJM Jal Jeevan Mission	TDS Total Dissolved Solids
WATSAN/ WaSH Water, Sanitation & Hygiene	IEC Information, Education & Communication	O&M Operations & Maintenance
CSO Civil Society Organization	LPCD Liter per Capita per Day	ISA Implementation Support Agency
CBO Community Based Organization	WRT With respect to	PPM Parts Per Million
SBCC Social and Behavior Change Communication	TWM Tata Water Mission	KVY Kharash Vistarotthan Yojana
FHTC Functional Household Tap Connection	CII Central India Initiative	
SDG Sustainable Development Goals	VWSC Village Water & Sanitation Committee	



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Background



Introduction



As per WHO estimates in 2023, around **3.78 crore Indians** have to travel more than **30 minutes** to access an improved drinking water source.



As a rapidly developing nation, India has made significant progress in providing access to safe drinking water to its population, but critical challenges persist in the country. *“The NITI Aayog estimated nearly 16.3 crore Indians – about 11% of our population in 2019 - to have inadequate or no access to safe drinking water, & categorically highlighted the divide among the urban, accessible areas & the rural, remote regions of the nation.”*

Groundwater, which is one of the source of rural drinking water supply in India, is increasingly susceptible to contamination from various sources, including :



Agricultural
Runoff



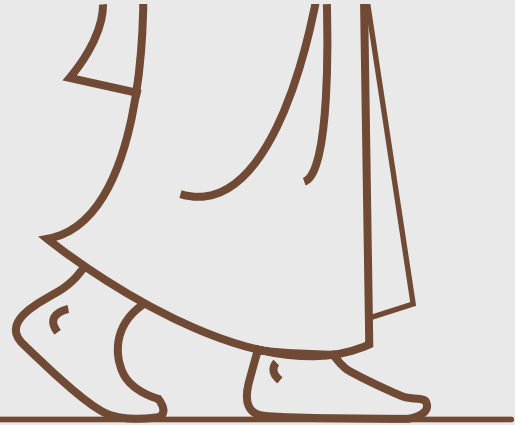
Industrial
Effluents



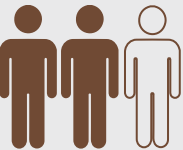
Improper waste
Disposal

Easy, inexpensive accessibility is another major hurdle, as many remote & isolated communities face difficulties due to geographical barriers & the lack of proper transportation infrastructure.

With such grave practical bottlenecks, inadequate access to safe drinking water poses socio-economic challenges for equitable growth of a nation, & climate change has only exacerbated these issues further. It is in this light that the Government of India, the private corporate sector, civil society organizations & the diverse communities of the country have come together to holistically work on resolving these development bottlenecks.



As per the CSPC Baseline Study, residents need to walk about **1 - 1.5 kilometers a day**, just to fetch water.



Almost two-thirds of people living in rural India have access to water sources via a non-piped system, relying heavily on untreated water sources such as:

Wells | Ponds | Rivers

Coastal Salinity Prevention Cell (CSPC)

An associate organization of the Tata Trusts, Coastal Salinity Prevention Cell is a non-government development organization set up in 2008 with the overarching vision of **‘Evolving sustainable approaches for prevention and mitigation of salinity ingress, whilst enhancing livelihood resilience of communities affected by salinity in coastal villages of Gujarat.**

Over the past 30 years, Gujarat has faced serious issues due to the indiscriminate extraction of groundwater, which has resulted in the ingress of sea water into arable land, reaching ten to fifteen kilometers inland in many places, especially for villages on the coastal lines. Underground water aquifers have been severely affected, leaving over 1,500 coastal villages with water unfit for personal consumption as well

as commercial use. This has had a direct impact on the drinking water, well-being & livelihoods of the people residing in these areas. In a bid to tackle the issues arising due to the indiscriminate extraction of groundwater & its resounding impact on the socio-economic lives of the coastal residents, Tata Trusts launched the Kharash Vistarotthan Yojana (KVY) & set up CSPC to work dedicatedly in coastal Gujarat.

CSPC focuses on mitigating the impacts of soil salinization, improving water management practices, & enhancing the livelihoods of affected coastal communities. To achieve these goals, CSPC works at the grassroot level to engage with the directly impacted coastal residents, providing them with hand-holding, advisory & capacity building support, while also ensuring their active participation in decision-making processes. The organization's projects include but are not limited to research, assessment & implementation of innovative technologies & community driven solutions for drinking water management, water salinity, water security & education, solid waste management, sustainable agricultural practices, menstrual hygiene management, among others.



Water, Sanitation & Hygiene (WaSH)



Livelihoods



Water Resource Management



Drinking Water Security



Animal Husbandry



Education



Overall, CSPC’s efforts are focused on promoting inclusive & sustainable development in coastal areas, by empowering communities & enabling them to take control of their livelihoods & natural resources.

Launched in 2014, the Tata Water Mission (TWM) aims to improve the quality of life of rural underserved communities by providing them:

Safe, assured & adequate drinking water

Improving sanitation & hygiene services

Ensuring year-round availability of water

Taking the **‘Water for All’** agenda of the Mission forward, CSPC anchors the TWM initiatives in the coastal regions of Gujarat. Within their WaSH program, CSPC has been working on improving access to clean & safe drinking water, building sanitation infrastructure to people, to bring about an irreversible impact on these coastal livelihoods.



SDG 6
(Clean Water & Sanitation)



SDG 3
(Good Health & Well-being)



SDG 17
(Partnerships for the Goals)



SDG 5
(Gender Equality)

One of the core development pillars for both Tata Trusts & CSPC as an independent development organization is Water, Sanitation & Hygiene (WaSH/ WATSAN). The WaSH sector plays a crucial role in achieving several SDGs, particularly SDG 6 (Clean Water & Sanitation), SDG 3 (Good Health & Well-being), SDG 5 (Gender Equality) & SDG 17 (Partnerships for the Goals). Access to safe drinking water, adequate sanitation facilities, & good hygiene practices are essential for improving public health, preventing waterborne diseases, & promoting overall well-being, especially in vulnerable communities.



CSPC has been **awarded as the Best NGO/ Civil Society Organization in the 3rd National Water Awards** by Jal Shakti Ministry, GoI, for its work on promotion of Micro Irrigation Systems in salinity-affected coastal areas of Gujarat (2022).



Jal Jeevan Mission in Gujarat

Jal Jeevan Mission (JJM) is a flagship Government of India initiative to provide **Functional Household Tap Connections (FHTCs) to over 140 million households in India**— an endeavor that will significantly enhance the quality of life for families in rural India. The Mission will also implement source sustainability measures as mandatory elements, such as recharge & reuse through greywater management, water conservation, rainwater harvesting, among others

The Mission is a decentralized, demand-driven, community-managed program with a bottom-up planning approach, to ensure sustained impact.

The program is conducted through **Pani Samitis (VWSCs)**, at the village level

50%

of whose members are women

The community collectively contributes a miniscule portion of the in-village water supply infrastructure costs to instill a sense of **ownership & pride**.

While infrastructure & technological advancements undoubtedly play crucial roles in narrowing the water accessibility gap, the success of JJM ultimately hinges on both individual & community behavior – Information, Education & Communication (IEC) is a key component of the Mission.



The Mission is being implemented by Water & Sanitation Management Organization (WASMO) in Gujarat, with crucial involvement of Village Water & Sanitation Committee (VWSC) or 'Pani Samitis' at the Gram Panchayat level.

Building Blocks of the Mission



Functional Household Tap Connections



Water Source Sustainability



Water Quality Monitoring



Institution and capacity building



Information, Education & Communication (IEC) and Social & Behaviour Change Communication (SBCC)

States/UTs for creation of water supply infrastructure so that every rural household has an FHTC by 2024, & adequate quantity of prescribed quality is made available on a regular basis.

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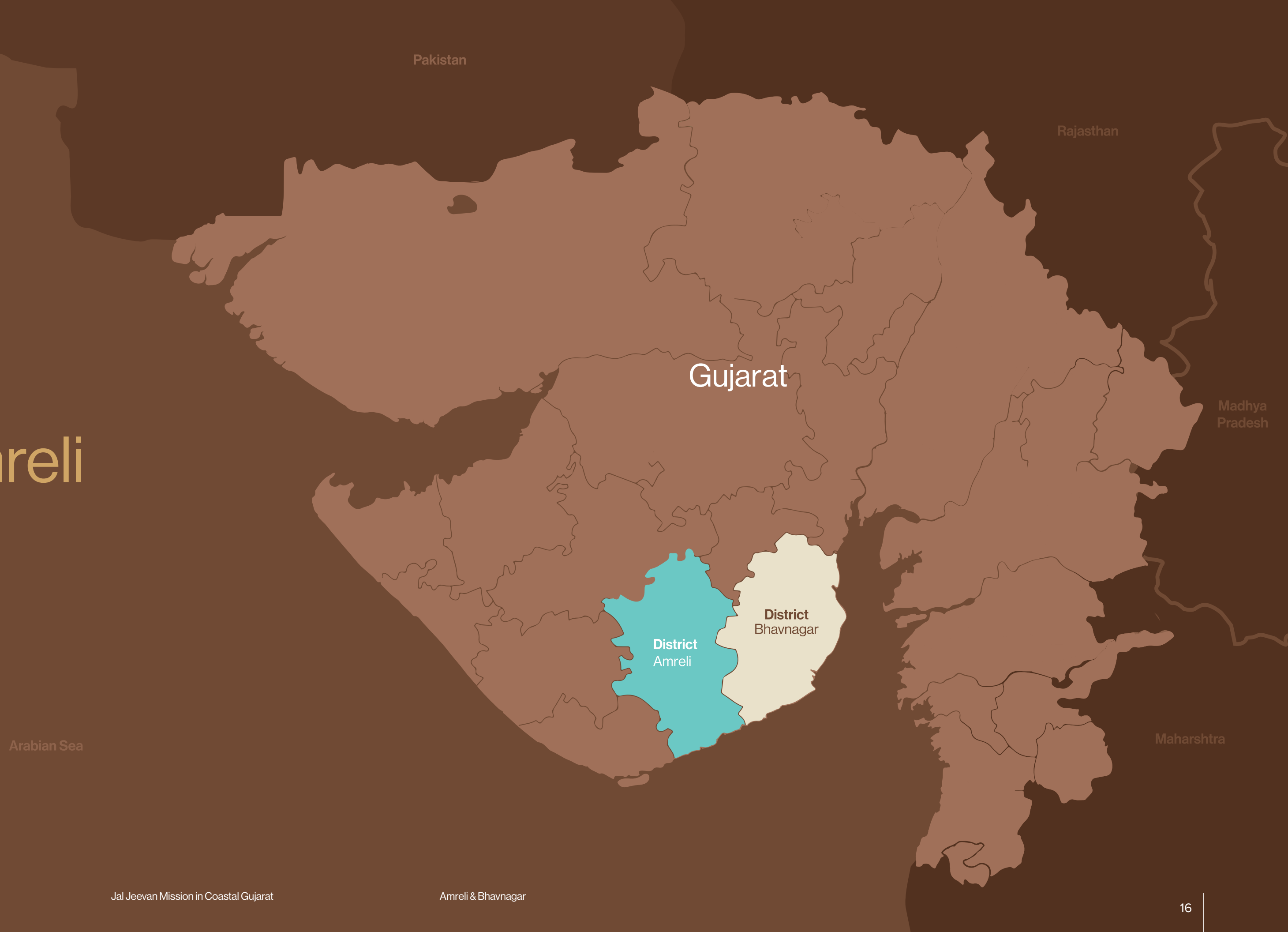
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Regional Landscapes of Amreli & Bhavnagar



Amreli

Located in the southern part of the Saurashtra region of Gujarat, Amreli is a coastal district spreading across 6760 km². It is bound by the Gujarati districts of Rajkot, Bhavnagar & Junagadh from three sides, while it faces the Arabian Sea in the south. With a sex ratio of 964 females & a literacy rate of 74.25%, Amreli's population is about 15 lakh & only 22% of it is urban. The terrain of Amreli district is characterized by a mix of flat plains & gently rolling landscapes. The majority of the district consists of level or slightly undulating terrain, typical of the Saurashtra peninsula, with a semi-arid climate with hot summers & mild winters. The local economy is primarily agricultural, with major crops being groundnut, cotton & wheat.

The blocks selected from Amreli under this project - Rajula & Jafraabad - are about five to ten kilometers from the Arabian Sea coastline. These coastal blocks receive low to moderate rainfall & major sources of water for drinking & domestic purposes are hand pumps & borewells.



Bhavnagar

Spread across 7034 km², the district Bhavnagar is adjacent to Amreli & houses over 24 lakh people, with 40% of them residing in urban areas. With a sex ratio of 931 females & 75.52% literacy, the district's population is significantly less dense than the national average of the country. The district is known for its diverse industrial base. The district houses the world's largest ship breaking yard at Alang, & is home to an enormous diamond finishing industry. Other than these large-scale employers, the district also has pasteurization, marine salt production, agriculture, fishing & allied services as prominent sources of livelihood.

The blocks selected from Bhavnagar under this project - Talaja & Mahuva - are about five to ten kilometers from the Arabian Sea coastline. These coastal blocks receive low to moderate rainfall & major sources of water for drinking & domestic purposes are hand pumps & borewells, with little use of open wells & surface water. The blocks receive an external piped supply from the rivers Narmada & Mahi as well.





Testing of
TDS level in
drinking water
by Jal Yodha

Need for an Intervention – Community’s Challenges

Having similar geographical & demographic features, all the four blocks across the two districts face similar challenges in terms of water availability & quality, specifically for domestic & drinking uses. Extensive testing of groundwater sources by the CSPC team showed **alarmingly high levels of Total Dissolved Solids (TDS)** in the water. In a few villages of Bhavnagar, fluoride levels were also found to be fairly high. Additionally, ingress of salinity into groundwater sources aggravates the problem even more.



TDS in Water:
500 PPM to 2600 PPM in Amreli



TDS in Water:
2000-3000 PPM in Bhavnagar

FHTC In Amreli and Bhavnagar project Villages:



Only **53.6%** of households in Amreli had an FHTC

Only **50.4%** of households in Bhavnagar had an FHTC

While others heavily relied on common & often extremely polluted sources.



The greater the distance of the water source from the house, the lower the water consumption - for distances more than 1 km, water consumption has been recorded at as low as **30 LPCD, way below the minimum acceptable levels.**



The problem disproportionately affected women & children, increasing their vulnerability, reducing their well-being, & reducing their participation in economically & socially productive activities. **Education**, especially education of girls, adversely suffers as a consequence.

Project Introduction & Objectives

Taking cognizance of this grave situation & the need for community involvement & behavior change for sustaining the intervention, CSPC partnered with WASMO for a Social & Behaviour Change Communication (SBCC) campaign within the implementation of JJM in the selected blocks of Amreli & Bhavnagar districts of Gujarat. In effect, CSPC is an Implementation Support Agency (ISA) for JJM in the four selected blocks across Amreli & Bhavnagar.

Objective

To fulfill Jal Jeevan Mission's behavioral objectives & enhance JJM efforts by embodying a commitment to sustainable water solutions, community empowerment, & innovative approaches for a water-secure future.

The project began in April 2021 with the following goals:



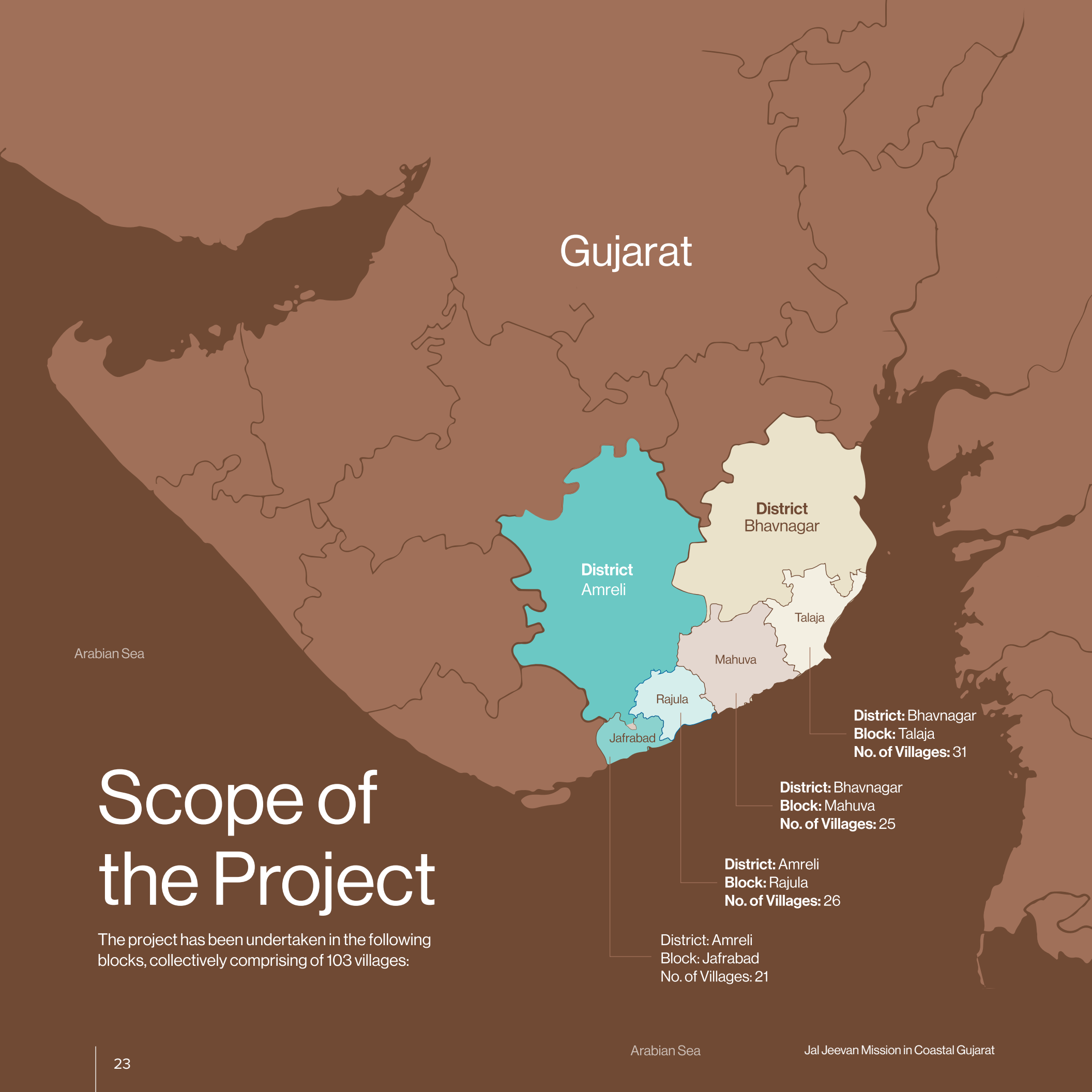
To demonstrate & establish an effective & sustainable community managed implementation model of drinking water supply schemes for 18,000 households across 103 villages in the selected blocks of Amreli & Bhavnagar districts of Gujarat.



To support & strengthen the implementation of the JJM in the selected geographies of Gujarat through evidence-based advocacy drawn from project lessons & results.

Thus, **WASMO, CSPC & the coastal communities** are the primary stakeholders in this project.





Scope of the Project

The project has been undertaken in the following blocks, collectively comprising of 103 villages:

Key Activities Involved



Amreli & Bhavnagar

The project follows a systematic approach to bringing about change in the community, and utilises a variety of capacity building and facilitation activities for promoting behavioural change towards water management and sustained operations:



Through this campaign, CSPC implements the drinking water schemes and promotes behavioural changes at three levels



Individual



Household



Societal

Central Themes of the Intervention





Participatory Approach: Keeping Community at the Heart of the Project

To ensure community empowerment & ownership & that the solutions developed are culturally appropriate & sustainable, CSPC works with the locals during all stages of the project





Leveraging Technologies & Fostering Innovation

TDS Testing

The water of Amreli & Bhavnagar has been found to have high levels of TDS, way beyond permissible limits. To tackle this, CSPC provides field testing kits & trains community members to regularly monitor & test water quality, especially pre & post monsoon to ensure the safety of water the residents are using.

In-line Chlorination (ILC)

To ensure a uniform quality of water supply, CSPC's low-cost prototype for ILC is installed as part of the village water infrastructure that saves the Jal Yodha from manually chlorinating the water.

Integration of Traditional Knowledge

CSPC worked with the village community to integrate traditional water management practices into the VAPs.

Ensuring Sustainability & Self Reliance

The sustainability of the project is largely dependent on the capacities of VWSCs to manage the scheme post commissioning & sustainability of the drinking water source to provide adequate water @55 lpcd to the targeted population. To ensure this, CSPC keeps self-sufficiency as the central principle of the project:

Training & Capacity Building

CSPC conducted comprehensive, specially curated training programs for VWSC members & all other residents of the region. Regular training programs conducted on technical & societal aspects of water management:



Awareness & Orientation



O&M



Construction Supervision



Water Quality



Accounts Keeping



Water Budgeting

Development of Jal Yodhas for sustained O&M

An informed, conscious village society becomes a well-equipped community to run & sustain their water channels & sources. Hence, the project focused on developing a cadre of trained community resource persons who then serve as local champions for water, responsible for operating & maintaining the water supply infrastructure as well as running the community water tariff system in their respective villages. Additionally, CSPC supported establishment of community-based revolving funds to ensure the long-term financial sustainability of the water supply systems & related infrastructure.



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Quantitative figures



103

Pani Samitis Formed



103

Village Action Plans Formed



802

Community Trainings Organized




11,143

Village Residents Trained




22,735

Households Supported for Drinking Water Schemes



69

Villages Supported in Sustained O&M



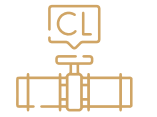
65

Villages Supported in Setting up Tariff Collecting Systems




101

Villages getting 55 lpcd Water



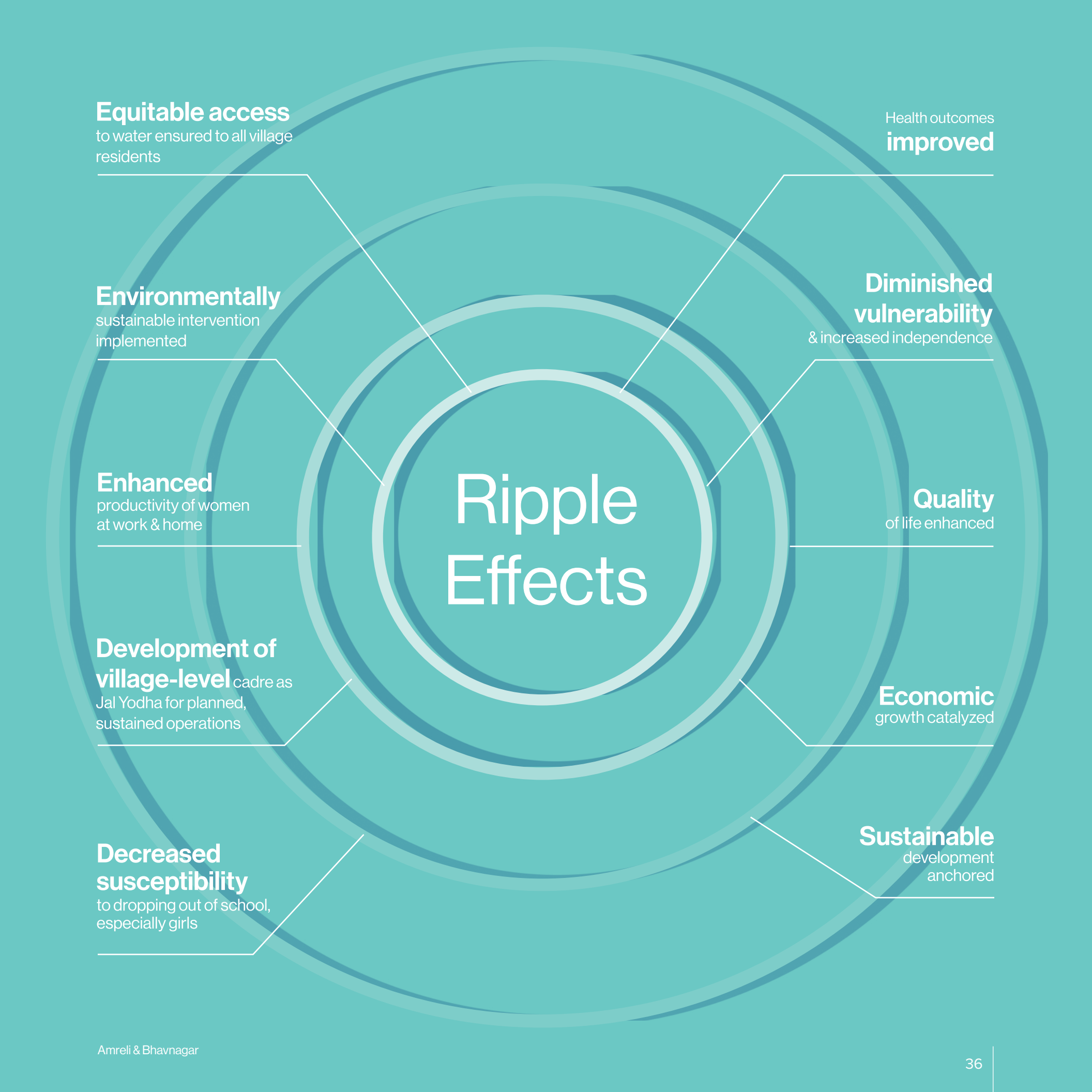
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In-Line Chlorination Systems Installed



1,10,000+

Lives Transformed



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Jal Jeevan Mission in Coastal Gujarat



Amreli & Bhavnagar

Coastal Salinity Prevention Cell is empowering communities & nurturing village cadres to ensure water sustainability.





From Crisis to Stability: Kishorebhai & CSPC's Water Management Success in Mota Ringaliyala

In the small village of Mota Ringaliyala, Rajula, a water crisis had long gripped the residents. Hand-pumps & groundwater were their lifeline, but poor management, irregular supply, & subpar quality had created a vicious cycle of discontent & deprivation. Villagers refused to pay tariffs, leaving the Gram Panchayat unable to improve infrastructure.

Enter WASMO & CSPC in 2021, bringing hope through the JJM initiative. They tackled both technical & social aspects, installing robust infrastructure & conducting extensive training programs. An ILC unit was set up to control chlorine levels, improving water quality.

The community rallied behind Maru Kishorebhai, a 46-year-old member of the Pani Samiti, appointing him as the village's Jal Yodha. CSPC armed Kishorebhai with knowledge on water management, quality testing, & system maintenance. His transformative leadership ensured punctual water supply for three years.

Kishorebhai's systematic approach to water distribution on the village's slope ensured equitable access. He religiously maintained the water quality through regulated and timely chlorination of the water supply through the ILC mechanism. His perseverance convinced reluctant villagers to pay a monthly water tax of Rs. 50. He championed awareness programs, community sensitization, & even introduced penalties to curb electric motor use for fair distribution.

This community-driven transformation resolved long-standing issues, rebuilding trust & fostering a sustainable water management system. Kishorebhai's dedication not only ensured timely water delivery & reduced chlorine consumption but also breathed new life into Mota Ringaliyala's water future.

Easing Water Collection Burdens: CSPC & Women's Resilience in Mota Ringaliyala

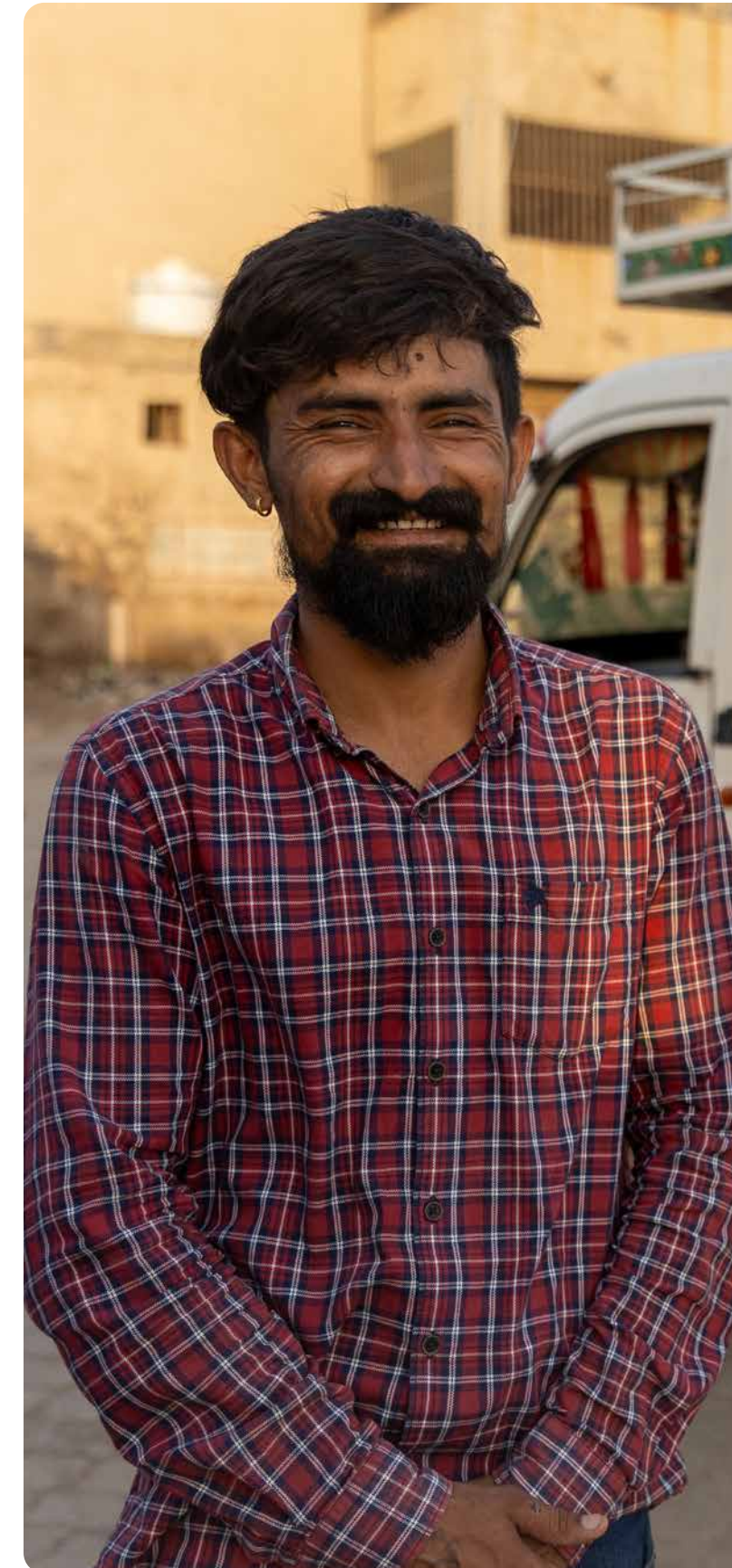
In the coastal village of Mota Ringaliyala, women once shouldered the heavy burden of water collection. Hours were lost trudging to distant hand-pumps, only to return with buckets of poor-quality water that threatened family health. This daily struggle took a toll on women's time, energy, & well-being, while exposing the community to waterborne diseases.

CSPC intervened, raising awareness about water quality & management. They mobilized the community for the JJM project through training sessions & Gram Sabhas, focusing on women's challenges & fostering ownership. The turning point came when Ladumore Divyaben Hiteshbhai, a 46-year-old housewife & Anganwadi worker, stepped up as a Jal Yodha. Divyaben tirelessly sensitized village women about tap water connectivity & rallied support for the project. She specifically engaged and mobilized women of the village to take charge of their water supplies. Her efforts were crucial in encouraging households to contribute Rs. 1000 each towards the community's 10% share of the project cost.

Divyaben's role extended beyond advocacy. Her understanding of water issues & rapport with village women, honed as an Anganwadi worker, proved invaluable in mobilizing local women for CSPC's water agenda.

Today, thanks to Divyaben & CSPC's collective action, all households enjoy clean, safe tap water daily. This success has saved women's time & effort while noticeably decreasing waterborne diseases. It stands as a testament to CSPC's approach of community engagement & local leadership in creating sustainable drinking water solutions for coastal areas.





Tapping into Change: CSPC's Community-Led Water Sustainability in Hindorna

In the hilly village of Hindorna, Rajula, 499 families faced a daily struggle for water. Women trekked to a distant river well, sacrificing an entire day for this essential task. For 75 years post-Independence, the village grappled with unreliable water access, hampered by geographical challenges & financial constraints.

CSPC & WASMO devised an innovative solution: constructing a sump on elevated ground to effectively pump water. This simple yet crucial modification finally overcame the geographical hurdles that had long denied villagers clean tap water.

Lakhnotra Samatbhai Harsurbhai, a 29-year-old member of the village Pani Samiti, emerged as the Jal Yodha. Following CSPC's training, Samatbhai & his team educated the community about the importance of a water tariff through door-to-door campaigns. Initially reluctant, villagers gradually understood its value for long-term water security.

The impact has been transformative. As Samatbhai recalls, "Women, now freed from the burden of water collection, have time for productive activities like farming & tailoring. Children, especially girls, are attending school regularly." A monthly tariff of Rs. 100 per household ensures sustainability, with Samatbhai earning Rs. 6000 monthly for managing the infrastructure.

Today, Hindorna enjoys reliable water supply with swift issue resolutions. By empowering local leaders like Samatbhai & fostering community responsibility, CSPC has secured lasting access to safe drinking water, significantly improving the coastal residents' quality of life.

Tides of Change in Dharabandar, Rajula

Dharabandar, a coastal village in Jafrabad, Amreli, endured decades of water scarcity since Independence. Its 146 households, mostly fishing families, relied on a distant well for daily needs. The sea's proximity made local groundwater saline & undrinkable. Fetching water from 3-4 kilometers away consumed time & wages, while children's education suffered.

CSPC & WASMO initiated the JJM intervention, conducting Gram Sabhas to raise awareness & mobilize residents. They provided support for setting up a water tariff mechanism. The community's eagerness & long wait to have a safe & quality water provision was evident when the households, despite thriving on meager incomes, each pitched in Rs.1000 as community contribution towards water supply installation, in a matter of two remarkable days. Today, each household contributes Rs. 400 annually to maintain the water infrastructure.

Bariya Dolubhai Chakurbhai, appointed as the village Jal Yodha, oversees daily operations & maintenance. The Gram Panchayat proactively installed a separate electric motor to ensure uninterrupted supply in this remote location.

The impact has been profound. Every household now receives clean drinking water. Women, freed from water collection, engage in income-generating activities like preparing fishing nets. Children attend school regularly.

CSPC's approach has not only provided safe drinking water but also catalyzed socio-economic improvements. Today, Dharabandar stands as a testament to the transformative power of community-driven water solutions, demonstrating the far-reaching impact of such interventions in coastal communities.





Smart Pumps, Smarter Village: CSPC's Functional Tech Solution for Easy Water Management

In coastal Bhavnagar, Mathawada faced a unique challenge: its water source, Jallumb well, lay two kilometers from the village center. The pump operator made multiple daily trips to manually operate the system, costing Rs. 12-15 thousand monthly in labor & fuel.

CSPC recognized this inefficiency & facilitated collaboration between Mathawada Pani Samiti, the Sarpanch, WASMO, & other stakeholders. Their solution: an automatic mobile-based pumping system. This innovation allowed the operator, Gusabhai, to control the pump remotely via phone, eliminating physical trips.

The impact has been substantial. The new system saves time, reduces operational costs, & improves water supply efficiency. It also decreases wear & tear on the motor, lowering maintenance costs. With reduced labor needs, the Pani Samiti can hire operators at lower costs, enhancing overall operational efficiency. Mathawada now serves as a pilot village for this L&T-supported technology, demonstrating its feasibility in remote coastal settings. CSPC's commitment goes beyond providing water access; it ensures sustainable & efficient water supply systems.

This initiative not only addressed immediate logistical challenges but also laid the groundwork for future advancements in water management. CSPC's approach in Mathawada exemplifies how innovative solutions can significantly improve coastal communities' quality of life.

Empowering Belampur to Secure its Water Future

Nestled in coastal Bhavnagar, Belampur's 308 agricultural households struggled with unreliable drinking water access. Trapped in a cycle of poverty & underdevelopment, they couldn't sustain their water infrastructure until CSPC intervened to drive behavioral change.

Despite initial challenges of irregular tax payments & economic hardships, CSPC's commitment transformed the village's water system into a model of efficiency & community cooperation. Through in-depth training, exposure activities, & water testing kits, CSPC empowered residents with technical knowledge & tools to maintain water quality.

The Jal Yodha, Dodiya Bijalbhai Kanabhai, a 61-year-old former agricultural laborer, played a crucial role. Trained by CSPC, he performs bi-monthly chlorination, conducts water quality tests, manages distribution, collects tariffs, cleans tanks, & handles repairs.

This intervention fostered community responsibility & active participation. Villagers now regularly pay the monthly Rs. 50 water tax, ensuring long-term sustainability. About 88 households have installed taps/valves on open pipe connections, enhancing conservation.

The village's water distribution system, divided into 7 zones, now operates smoothly, with 2 zones receiving water in the morning & 5 in the evening. This ensures equitable, regularized supply for all residents, showcasing how community-driven initiatives can overcome long standing water challenges in coastal areas.





Transforming Mathavada's Water Future Through Infrastructure, Community & Capacity Building

The coastal residents of Mathavada faced challenges beyond operational inefficiencies in water distribution. The community lacked awareness about water supply, quality management, & maintenance. To tackle this, CSPC realized they needed to both set up efficient systems & extensively train the Pani Samiti & Jal Yodha to make the village water independent.

CSPC's intervention resulted in a well-organized distribution system, dividing the village into four zones receiving water daily at 6 pm for 30 minutes each. They installed an ILC system, which Chiragbhai, the Jal Yodha, diligently monitors to maintain proper chlorine levels.

Chiragbhai oversees all O&M mechanisms, from timely distribution & chlorination to maintaining registers & repairing pipelines. He's the point person for new connections & provides support to families. CSPC's training has enabled him to ensure fair, equitable water supply across households.

The impact extends beyond infrastructure. It has fostered community service & pride through CSPC's approach of combining technical solutions with community empowerment. By training local operators like Chiragbhai, CSPC has created a sustainable, community-driven water management system in Mathawada.

This comprehensive approach has not only improved water access & quality but also significantly enhanced the quality of life for Mathawada's coastal residents, showcasing the power of local empowerment in solving water challenges.



Reviving the Flow: Transforming Water Management in Pavthi

Pavthi, a coastal village in Bhavnagar with 1,457 families, faced significant water challenges. Water tax hadn't been collected for two years, leading to wasteful usage & infrastructure maintenance difficulties. The lack of funds hampered the Pani Samiti's ability to address crucial repairs, despite its pre-existing presence.

CSPC intervened with the primary goal of mobilizing & capacitating the Pani Samiti & Jal Yodha. Recognizing that Pavthi's large population strained the existing group water scheme, CSPC implemented an innovative solution by combining water from the group scheme with local sources, ensuring adequate supply.

Community sensitization & training became central tools for empowerment. Pankajbhai Bhuthabhai Galtharia was appointed & trained as the village Jal Yodha, receiving extensive instruction on water management, financing, & quality control.

Pankajbhai's role has been instrumental in revitalizing the village's water management system. This comprehensive intervention not only improved Pavthi's water situation but also set a model for sustainable water management in neighboring coastal areas, demonstrating the power of combining technical solutions with community empowerment.

CSPC's holistic approach focused on both infrastructure improvement & community engagement. By addressing the water tax collection issue, they established a sustainable financial model for water supply.





A Village Transformed: The Inspiring Journey of Resilience & Grit in Dipadiya

In coastal Rajula, Amreli, the village of Dipadiya faced a silent crisis. Residents relied on hand pumps & borewells, unaware of alarmingly high TDS levels of 1800, causing widespread health issues. Shiyal Savitaben Premjibhai, the 42-year-old Sarpanch, was among the first to connect the dots.

WASMO & CSPC initiated JJM implementation, recognizing that lasting change needed community involvement. Savitaben emerged as the linchpin. With CSPC's training & her knowledge of local struggles, she took charge during a crucial Pani Samiti meeting, forming a women's group determined to solve water challenges.

CSPC worked closely with Savitaben, providing technical expertise. She went door-to-door, motivating families to contribute money & labor for pipeline work, & advocated for a Narmada Regional water supply connection. CSPC organized training sessions, especially for women, with Savitaben highlighting the health risks they'd unknowingly faced.

The results were transformative. Today, every home in Dipadiya has a tap, providing 55 liters of clean water per person daily. "We are not just consumers now," Savitaben says. "We are guardians of our water."

This success story demonstrates how local leadership, combined with technical support, can overcome long standing water challenges in coastal communities.



From Scarcity to Sustainability: Water Transformation of Khari

In the small village of Khari, Gujarat, a water crisis was unfolding. Inadequate supply, poor quality, & widespread wastage plagued the community. Children fell ill during monsoons, & women spent hours fetching questionable water. The failing infrastructure & lack of community know-how exacerbated the problem.

Recognizing the severity, WASMO & CSPC intervened with a dual strategy: improve infrastructure & empower the community through an extensive SBCC campaign. They identified potential leaders, finding a champion in Mehta Gitaben Punabhai, a 58-year-old housekeeper passionate about improving the village's water situation.

CSPC provided comprehensive training to Gitaben & others on water quality testing, conservation, & infrastructure maintenance. Gitaben mastered TDS meters & inline chlorinators, crucial for preventing waterborne diseases. She used her knowledge to raise awareness & promote water tax payment for sustainable supply.

The impact was transformative. New taps & valves reduced wastage, while the inline chlorinator decreased waterborne diseases, especially among children during monsoons. The community's understanding of water quality & conservation improved, leading to more responsible usage.

Most remarkably, this initiative changed Khari's social dynamics. Gitaben, once known simply as a housekeeper, became a respected community leader. Her journey exemplifies how knowledge & dedication can drive profound social change.



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Road Ahead

This book is an elaborate exhibit of the power of community-driven initiatives & the transformative potential of sustainable water management. As the pages of this book have showcased, the true impact of this intervention lies in the transformation of mindsets, the fostering of ownership, & the cultivation of a harmonious relationship between communities & their natural environment – a legacy that will continue to inspire and guide future generations on the path to a water-secure and sustainable future. The stories of the residents of Amreli & Bhavnagar shared here are not just narratives of individual triumphs, rather they are testaments to the resilience, ingenuity, and spirit of rural communities.

Going forward, as CSPC, we aim to focus on supporting the community in strengthening their tariff collection mechanisms and overall O&M activities. The goal is to develop water security & safety plans for hamlets & villages, with special emphasis on source strengthening, to ensure safe, post-chlorination water distribution to 22,000 coastal households.

For in the end, it is the collective efforts of communities, organizations, and individuals that will pave the way towards a water-secure future for all.

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