



Making Amalner Open Defecation Free...

A Project by Mahila Housing Trust

Content

SECTION I: Introduction and Background..... 01

- ▶ About Mahila Housing Trust 02
- ▶ Context: Prevalence of Open Defecation and Project Genesis 05
- ▶ Forging Partnerships – Working with the Amalner Nagar Palika..... 09
- ▶ Baseline Assessment..... 11

SECTION II: The Intervention – Making Amalner..... 13 **Open Defecation Free**

- ▶ Women leading the Change.....14
- ▶ Formation of Community Action Groups..... 16
- ▶ Behaviour Change Communication..... 18
- ▶ Elimination of Open Defecation Spots..... 22
- ▶ Community Toilets.....25
- ▶ Individual Toilets..... 27
- ▶ Water Managers..... 34

SECTION III: Addressing Emerging Issues –35 **Water Scarcity and Waste Disposal**

- ▶ Water Scarcity & Waste Disposal.....36
- ▶ The 3R Water Conservation Model.....38
- ▶ Well Rejuvenation.....40
- ▶ Solarization of Water Treatment Plant.....43

SECTION IV: Did Covid-19 Stop Us?.....46

- ▶ Health and Nutrition Intervention 47
- ▶ Livelihood Support – Mangwada and Bhilati48

SECTION IV: Impact and Way Forward 50

- ▶ Impact 51



Section I

Introduction and Background

ABOUT MAHILA HOUSING TRUST (MHT)

Mahila Housing Trust (MHT), established in the year 1994, works to strengthen grassroots collectives of women in the urban informal sector to advance constructive dialogue and action on improving their housing, living and working environments. MHT views habitat as a productive asset and believes that all citizens, irrespective of their residential status, have a right to equal access to services, and to be treated with dignity. By forging partnerships with communities and local governments, we advance access to basic services, promotes climate resilience and strengthens participatory governance. Through the 3E approach, we target 4 key areas of habitat development to improve the living conditions of urban poor.

3E Approach – Engage Empower Enable

ENGAGE. EMPOWER. ENABLE.



Establishing credibility in the community

We invest in women's collectives and community-based organizations to grow social capital and build capacities to affect change.



Demystify government schemes and complex urban planning procedures

We demystify government schemes and programs for poor women and empower women leaders with knowledge to negotiate planning and service delivery processes.



Direct public (and sometimes private) funds

We channelize funds in a significant measure into a given area, encouraging communities to invest in improving their habitat.



Expand its footprint across sectors related to habitat & urban development

We build on our credibility and ability to deliver results and expand across the 'share of people's day to day' pain through multiple initiatives.

We work by mobilizing and organizing communities (especially women), developing their social capital and empowering them to address the social, physical, and environmental issues they face, and take charge of their own improvement process, is central to MHT's work.

Our programs:



Water, Sanitation, and hygiene



Sustainable Energy and Climate Change Resilience



Affordable Housing and Land Rights



Skill Development and Livelihoods



Democratic Urban Governance & Planning

At the national level, MHT has provided significant inputs in 12th five year plan as member of steering committee for Affordable Housing and Urban Poverty. We served as a Member of Expert Committee on Rajiv Awas Yojna formulated by Ministry of Housing and Poverty Alleviation and as Member of National Committee Force for Housing Micro Finance Companies for poor.

MHT's work has been recognized nationally and internationally and has received numerous awards such as the Ashden Award for Cooling in Informal Settlements, United Nations Global Climate Action Award for Women's Action Towards Climate Resilience for Urban Poor in South Asia, and United Nations Sasakawa Award for Disaster Risk Reduction, among many others.



We didn't know anything about the Nagar Palika – how it looked like and what they did. When we would go for MHT meetings, the men would say – What are you going to achieve by going there. Still, we went saying let us see what it is and attended the trainings. We gradually realized how this will be beneficial for us and our communities. Before, we never spoke assertively and confidently with anyone outside our homes. When family members only didn't listen to us, there was no question of talking to anyone outside (laughs). Now, we don't even ask our families. If there's any problem in the area, we get the work done through our CAG group. The men now approach us with the problems in the area...

– Ms. Charu Kailashkad, Milchal Station – Amalner, CAG member



MHT's Journey – 1995 – 2023.....



Empowered **16000+ women** with knowledge and skills to influence Local Policy and Governance

CONTEXT: PREVALENCE OF OPEN DEFECATION AND PROJECT GENESIS

Globally, India accounted for the largest population of people that practiced open defecation about a decade back. Around 44% of the population had access to toilets and the remaining population of close to 620 million people continued to defecate in the open.¹

India also has alarming rates of child mortality, diseases, malnutrition and stunting in the 0-5 age group and the one common factor that is largely responsible for these statistics is the poor sanitation practices. Every year in India, diarrhoea claims approximately 1.1 lakh lives and is a leading cause of death in the children below 5 years.² Diarrhoea and worm infections affect a large majority of school children too, thereby affecting their learning abilities. An estimated 443 million school days are lost each year because of water-related ailments. These same diseases are responsible for costing the Indian economy 73 million working days each year.³

Open defecation disproportionately affect females, thereby widening the existing inequalities of the patriarchal Indian society. Adolescent girls and women experience fear, shame and indignity on a daily basis and are at a greater risk of facing abuse as they often wait until dark or venture during early morning hours to relieve themselves.

The practice of open defecation in India is largely concentrated in rural areas and urban slum settlements. With growing economic opportunities, the migration towards and around cities have created slum clusters in many parts of India. As per the census 2011 data, the slum population in India has tripled in the last 3 decades. The slum dwellers, often engaged in unorganized sector and largely belonging to the lower caste and tribal groups, are forced to reside in unsanitary and hazardous conditions that lack basic facilities and services.

To improve sanitation and address the public health crisis resulting from open defecation, the Government of India launched the flagship program – Swachh Bharat Mission (Clean India Initiative) on the eve of Gandhi Jayanti in 2014 with the ambitious goal of making India open defecation free (ODF) by 2019. The first phase of the project SBM 1 (2014-19) aimed at providing access to toilets to half of India's population. According to WHO, the mission if successful could help prevent the deaths of 300,000 people from diarrhoea and protein-energy malnutrition in these 5 years.⁴

1<https://www.statista.com/chart/14924/indias-toilet-building-revolution/>

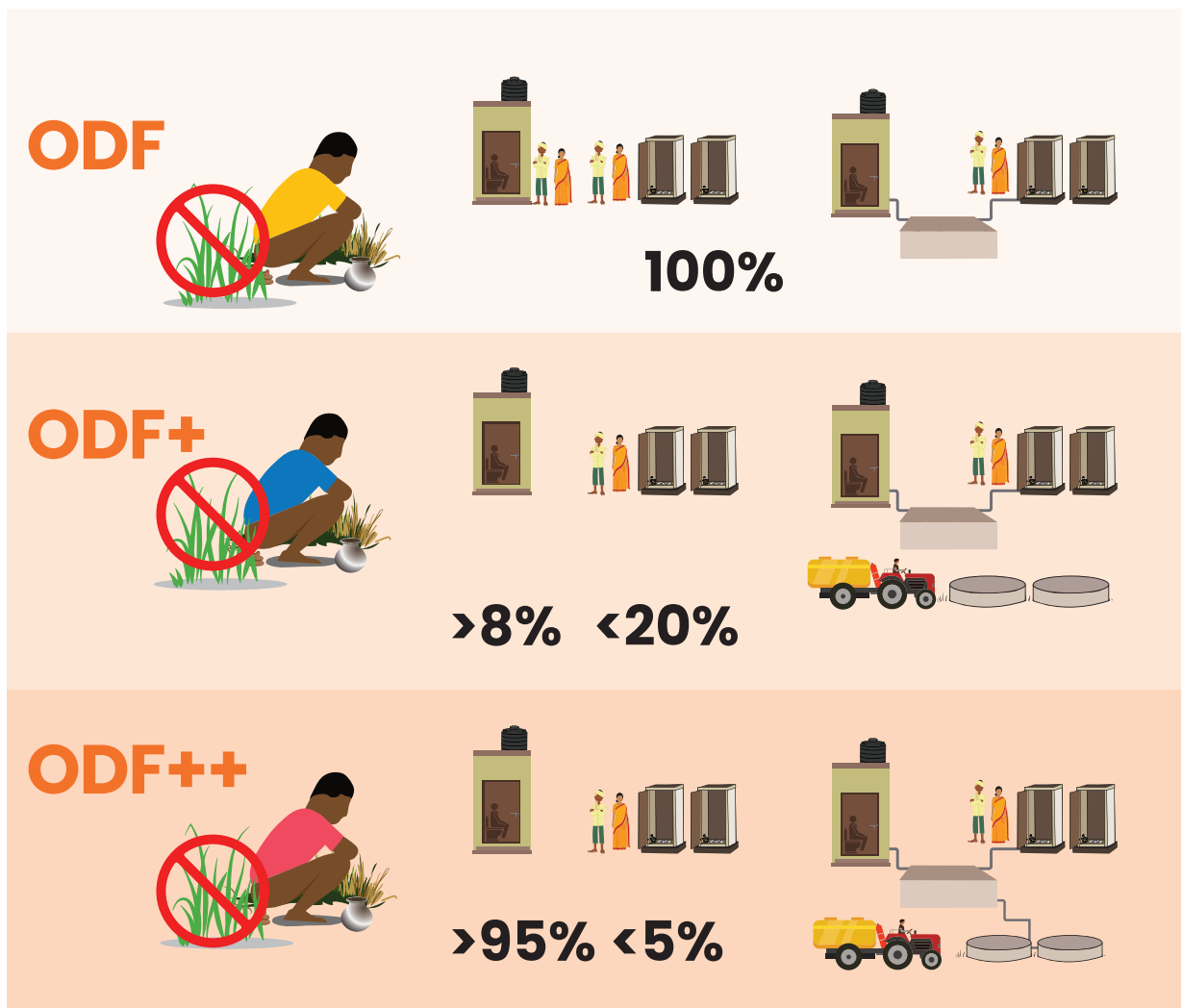
2<https://www.downtoearth.org.in/news/health/diarrhoea-in-children-under-5-more-prevalent-in-rural-india-nfhs-5-75058>

3<https://washmatters.wateraid.org/publications/drinking-water-quality-in-rural-india-issues-and-approaches>

4<https://www.who.int/india/news/detail/27-07-2018-health-gains-from-the-swachh-bharat-initiative>

The Swachh Bharat Mission progressed India on the Sustainable Development Goal 6 of Clean Water and Sanitation by building over 10 crore toilets by October 2019, declaring itself to be open defecation free.⁵ The mission was rolled out in a decentralized mode with the State Governments leading the strategy with the aid of Urban Local Bodies (ULB) and Gram Panchayats; the initiative also engaged and welcomed the participation from all key stakeholders – non-profit organizations (NGOs), private sector and general public in the form of volunteers.

To accelerate progress on the SBM campaign, the Government of Maharashtra (GoM) launched the Swachh Maharashtra Mission (SMM) in May 2015. **The state of Maharashtra also led the way in developing a framework for ODF Cities in India and defined the terms ODF, ODF+, ODF++ which was adopted at the Centre and by the other states.**



Also, there was a robust 3 tier verification system in place for certifying a city as ODF, ODF+ and ODF++ at the state level. With all efforts concentrated and support provided to ULBs, Urban Maharashtra was declared as Open Defecation Free (ODF) in October 2017.

⁵<https://jalshakti-ddws.gov.in/sites/default/files/Annual-report-2019-2020-eng.pdf>

However, the reality on the ground did not match the claim made and there were apprehensions w.r.t. sustainability. The GoM approached Mahila Housing Trust (MHT) to access the situation on the ground and work towards a sustainable transformation. From a list of 30 cities provided by GoM, MHT chose Amalner considering the challenge of being situated in the water scarce district of Jalgoan. Also, it would be an ideal place to pilot and develop a replicable model considering it's a small city with a population of approximately 1 lakh. With formal collaboration established between GoM and MHT, backed by CSR funding from the Hongkong and Shanghai Banking Corporation (HSBC), started the journey for the project titled – '**Making Amalner Open Defecation Free**' in October 2017.

Amalner, a Municipal Council located in Jalgoan district, rests on the banks of the Bori river. Spread across an area of 15.8 kms, the town currently houses around one lakh people. The town once showed potential for economic growth with the presence of Pratap Mills that employed almost half of Amalner's working population and with Wipro starting their first operations in the town in the year 1947. However, with the closing of Pratap Mills in 2002 and Wipro's expansion plans in the city not materializing, the city is now largely a retiree's paradise. There is increased migration of youth to cities like Mumbai for better economic opportunities, and the remaining majority of residing population are engaged in unorganized sector doing labour jobs and working on nearby farms.

Amalner was formally declared as a Municipality in 1991 and the Amalner Nagar Palika (ANP) established.



Pratap Mills Compound in Amalner

Need to focus on Tier 2 and Tier 3 Cities:

The rapid urbanization of India after the economic reforms of 1991 put major strains on what were earlier laidback tier 2 cities. As the economy continues to grow and change in nature, and at the same time the population of the country grows larger and younger simultaneously, more and more people are migrating to the urban areas in search of employment. This can be illustrated by the growth in the number of census towns in India. In India, a census town is one which is not statutorily notified and administered as a town, but nevertheless whose population has attained urban characteristics. As per the 2011 census, the number of census towns (CTs) in India grew from 1,362 in 2001 to 3,894 in 2011. This has put massive strain on the infrastructure of even the smaller cities and towns resulting in at best improperly planned and at worst unplanned and haphazard growth of the smaller towns and cities. The local bodies that govern these smaller cities and towns are facing challenges well beyond their capabilities, especially financial and technical. Most of the local bodies lack the financial resources and technical knowledge to make the paradigm shifts required for sustainable urbanization. Most often both the elected members as well as officials lack the latest technological knowledge to implement the necessary projects even in the unlikely situation that funds are available.

NGOs can help bridge this gap by providing both third party technical expertise as well as funding through CSR projects to execute cutting edge projects in Public Private Partnership mode. This is essential as most government schemes aimed at sustainable development are targeted towards individuals and companies, with very limited incentives for local bodies. Most of the large projects aimed at sustainable urbanization are targeted towards the metropolises and large cities, and smaller towns and cities are left to fend for themselves. NGOs can help in this situation by bringing in the necessary expertise and funding before the crisis grows beyond control.

As per the Census of 2011, there are 54 tier 2 and 166 tier 3 towns in Maharashtra, including Amalner.⁶ The project executed in Amalner can serve as a template for their sustainable development.

⁶<https://www.citypopulation.de/en/india/maharashtra/>

FORGING PARTNERSHIPS – WORKING WITH AMALNER NAGAR PALIKA (ANP)

Establishing rapport and working in collaboration with the ANP was the key to achieving the project objectives and sustaining the desired impact. The initial meetings held with the ANP to communicate the project goals were well received by the Chief Officer (CO) and the Department Heads, thereby leading to the mutual defining of the project objectives and co-ordination w.r.t planning of activities and events. This project, being the first for MHT in Maharashtra, we operated out of the ANP office for the first 6 months; the proximity not just ensured smooth coordination w.r.t planning and execution but also trust building. MHT adopted a positive collaborative approach focusing on and building upon the strengths of ANP. During execution, when the rapport with the community was established, this approach also aided in bridging the gap that existed between the community and the ANP.



MHT's meeting with ANP CO

ANP shared the map and the list of 11 notified slum settlements in the city wherein open defecation was prevalent. The CO and the Sanitary Inspectors also accompanied the MHT staff to the areas during the initial phase of the intervention, aiding us with providing details about the sanitation facilities available and the associated challenges. Through Geo-Spatial mapping, 13 OD spots and 26 community toilets were identified in these 11 slums. ANP also shared data concerning the subsidy amount released for toilet construction under the SBM and a brief status of the work done on IHHL (Individual Household Latrine) in the communities.



MHT's meeting with the Sanitation Inspectors and the City Coordinator at the ANP

| CBO/Slum | Households |
|-------------------------|-------------|
| Gandhlipura | 896 |
| Tadepura | 701 |
| Milchal Station | 283 |
| Roopjinagar | 274 |
| Bangali File | 187 |
| Milchal Galwade | 171 |
| Kumbhartek | 95 |
| Mullatek | 72 |
| Mangwada | 35 |
| Bhillati | 20 |
| Milchal Dharmshala | 8 |
| Total Households | 2742 |

| | |
|---------------------------|---|
| Project | Making Amalner Open Defecation Free |
| Goal | To enhance the quality of life by providing improved sanitation services through community engagement |
| Geographical Area | Amalner city, Maharashtra |
| Project Objectives | <ol style="list-style-type: none"> 1. To raise awareness and eliminate Open Defecation Spots 2. To restore community toilets and promote its use and maintenance 3. To encourage building of individual toilets at the household level |

BASELINE ASSESSMENT

Based on the information received from the Amalner Nagar Palika (ANP), MHT planned the below mentioned baseline activities to further assess the situation on the ground.

- ▶ Audit of Community Toilet
- ▶ Household Survey



Household survey in ground

Audit of Community Toilets:

MHT undertook the audit of 26 community toilets, located in the 11 slum areas and interviewed 162 community members.

- ▶ Most of the toilets were built under the Swachh Bharat Mission (SBM) in the year 2017
- ▶ Around 150-200 people used these toilets on a daily basis and the majority of these belonged to 25-50 age group
- ▶ The water facility was not available and people usually had to carry their own water
- ▶ The walls and the floor were in good condition but the doors were often found to be broken

Cleanliness of the toilets was a major concern cited by the participants. The same has also been reflected in the data of household survey wherein 25% of the participants responded that community toilets are not cleaned and 25% mentioned the toilets being cleaned only on a monthly basis.

Household survey:

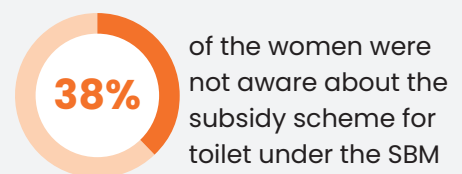
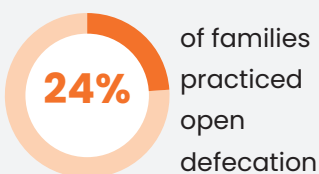
The household survey was carried out in all 11 slums by using the application SocialCops to minimize human error.



Key Insights Revealed from Household Survey

Key Findings of the Household Survey:

- ▶ 57 percent of the households belonged to marginalized communities of scheduled tribes (STs – 23%), scheduled castes (19%) and other backward class (15%)
- ▶ 44% of the women surveyed were illiterate and only 3% were graduates or post graduates and 95% of them were engaged in unorganized sector, mainly working as a domestic help
- ▶ 66% of the households have a monthly income of less than 5000



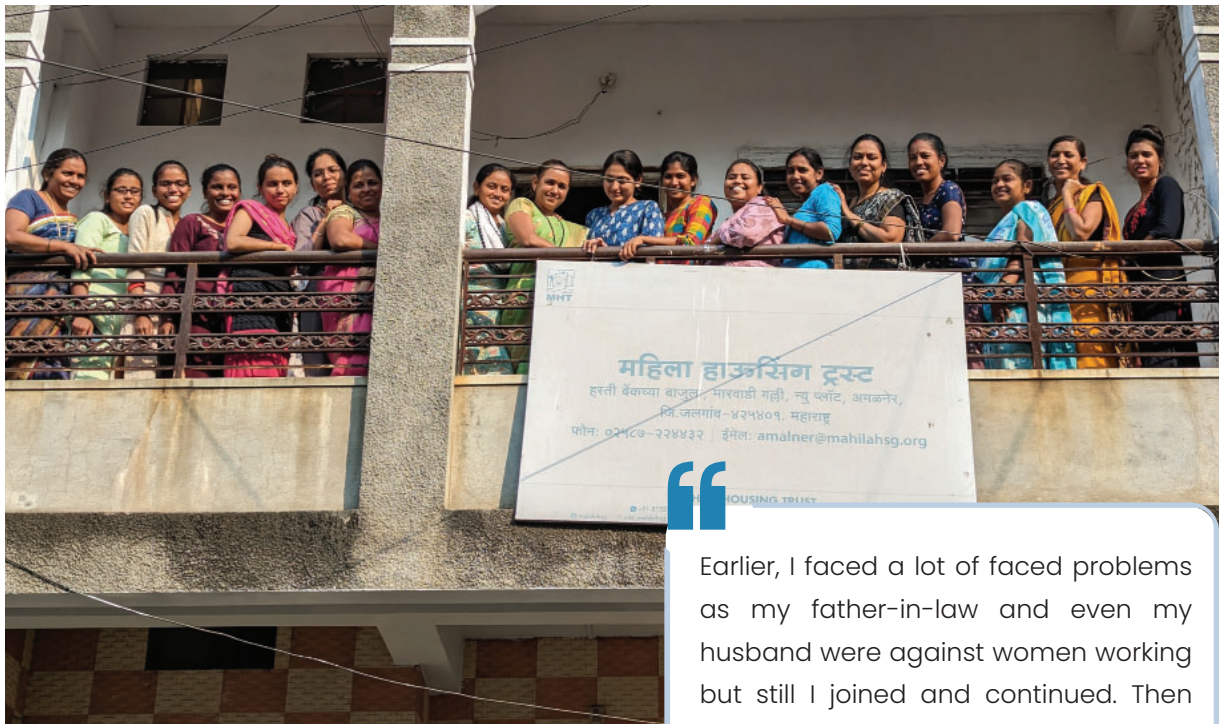
- ▶ Financial inability and space constraints emerged as the main reasons for not having constructed an individual toilet at home
- ▶ 74% of the women knew the ward councillor of their area but only 14% had met them in last 1 year to raise specific concerns about their area.
- ▶ 78% of the women had never visited Amalner Nagar Palika (ANP).



Section II

The Intervention – Making Amalner Open Defecation Free

WOMEN LEADING THE CHANGE



Staff at the MHT office in Amalner

MHT's intervention strategy was clear from the outset, rooted in their ideology and experiences spanning over 27 years and across 9 states – it would be the women that would drive the change and women of the community that would be the change makers. Apart from a couple of Managers/ Coordinators from the Ahmedabad Head Office, the entire Amalner project staff is composed of women residing in the Amalner city. Majority are holding jobs for the first time, have been associated with MHT since the start of the project and a few of them also reside in the community. While making an impact in the outside world, they have also witnessed amazing transformation in their own lives and have bravely asserted themselves against the socio-cultural gender prejudices.

Earlier, I faced a lot of faced problems as my father-in-law and even my husband were against women working but still I joined and continued. Then when Corona struck, my family realized the significance of my working as my husband's photography work was affected; my status in the family changed. They have now realized and accepted that times are changing and women are venturing out to work. While working at MHT, our confidence has increased. We feel we can also do the work that men do. Also, the women here in Amalner are seeking an opportunity and when they see us, they feel inspired that they too can work. Also, women can do better work in the field as it aids rapport building with community women.

– Ms. Deepali Bhoite,
Field Organizer and City Coordinator
with MHT since 2019

MHT provides a supporting and nurturing environment with flexibility that accommodates the needs of various individuals and fosters team work.

“

I had to leave my two jobs previously as there was not much support from home. I have been able to work at MHT for 6 years as they have been very supportive; I can work for any 8 hours of the day and at times, I can work from home too. Not just the management, even my colleagues here have been very understanding of my circumstances. I have at times shared the data over the call. I gradually learnt a lot from my colleagues, realizing why work in itself is important and it's not just a means of making money. I realized the purpose of my doing MSW in the truest sense after joining MHT - empowering communities that are not aware, enabling them to fulfill their needs. Gradually, I started being more assertive at home which resulted in arguments and fights. It's an ongoing struggle but things are changing.

-Ms. Bharati Dhabale, Field Organizer & City Coordinator with MHT since 2017

”



In Amalner, the project is largely executed by Field Organizers who are supported by Spearheads, with frequent visits of mentoring and guidance from the Coordinator based at Ahmedabad office. Each Field Organizer is responsible for about 400-500 households. Recently, the visits from the head office have reduced due to local staff's increased capability of managing the project; two field organizers have been promoted to the newly created post of a City Coordinator.



Interventions in the Field

FORMATION OF COMMUNITY ACTION GROUPS (CAGS)

CAGs are a collective of women leaders identified from their respective communities. During the first year in Amalner while conducting the baseline household survey and the audit of community toilets, MHT persistently mobilized women to attend their meetings wherein they explained the significance of achieving their project goal and their plan for the same. MHT followed an intensive module consisting of 6 core components, designed to build the capacity of community women.

| | Content |
|------------|--|
| Module I | Introduction to MHT and the program - "Making Amalner Open Defecation Free" |
| Module II | Community Action Group (CAG) – Role and Responsibilities |
| Module III | Area Mapping, Significance of Improved Sanitation & Technical Knowledge about the Construction Process. |
| Module IV | Structure & Role of Amalner Nagar Palika (ANP), Process for Grievance Redressal. Visit to the ANP office and Interaction with the Officials. |
| Module V | Maintenance of CAG Accounts and Sustaining the Services |
| Module VI | Health and Hygiene Awareness |

The trainings are delivered intermittently over a period of 2-3 months, with each module requiring 2 days. Initially, around 30-40 women from the area attend these workshops. The first two modules are designed basically to assess the women's interest and their leadership skills; they enable the MHT staff to know which women are active, assertive and interested and shall be ideal as being a member of a CAG. Community women are shown videos of MHT's intervention in other states wherein they see and hear from their counterparts in other areas; this enables them to relate and inspires them to work for the betterment of their communities.



Women's Group Participants in Craft Competition

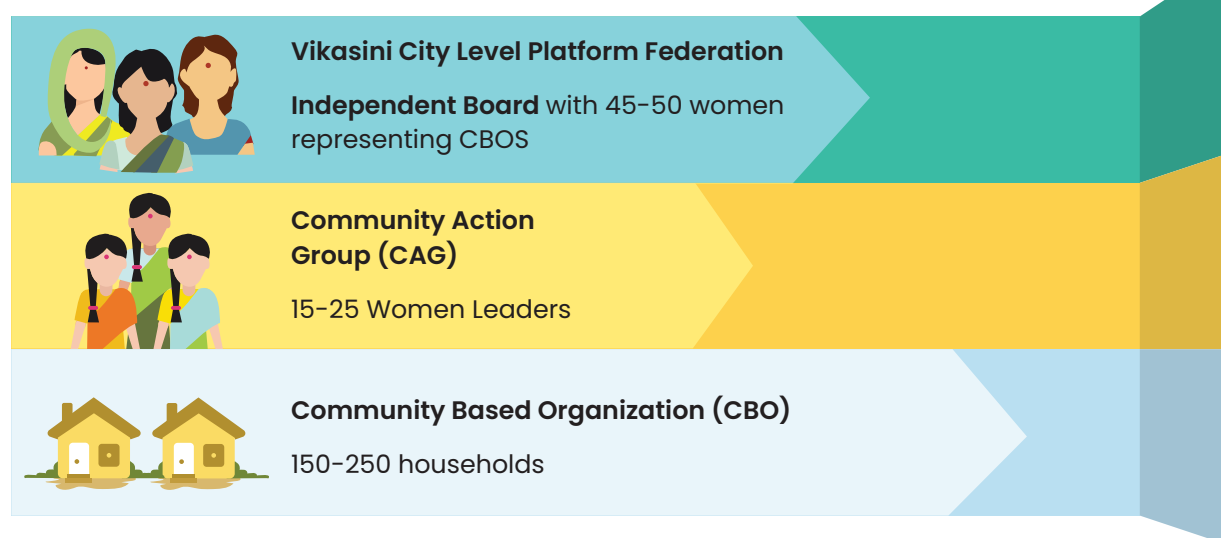
The remaining 4 components focus on imparting the knowledge and the skills associated with the intervention. There is detailed discussion about the responsibilities and working of the Urban Local Bodies, accompanied by a visit and interaction with the Nagar Palika officials. In addition to knowledge about health, hygiene, sanitation and water, the women are also imparted technical knowledge w.r.t the construction of toilets – the ideal depth of the septic tank, assessing the quality of materials like bricks, ratio of cement to sand, etc. The trainings are imparted using participatory methods, employing mediums like games, role plays and visuals.

Towards the end of the 6th module, 12 women from each slum form a Community Action Group (CAG) and take responsibility for their respective areas. Areas like Gandhlipura with a large number of households have two CAGs. A CAG group usually consists of women in the age group of 20–50 years with efforts being made to include atleast one adolescent girl or a young unmarried woman (14–24 years) in this group. There is also diversity in terms of their skills and all pockets of a slum area are appropriately represented.



Earlier, people in my area would make fun of me saying, “What can she do. She is just a kid who hasn’t seen the outside world”. But now, their views have changed. They now acknowledge and appreciate the work that I have been doing with MHT. Now, if they are facing any problems such as house tax, water tax, they come to me first and discuss it. Since I stay here, they come at late hours too if there’s any problem. When Nagar Palika people visit area for some work, they confirm with me the reasons for their visit. They now feel proud of me and say that whenever there is an election for the Nagar Sevak of our ward, we shall nominate and elect you as our candidate.

– Ms. Jayshree Chaudhari,
Spearhead with MHT
since 2022





Jayshri is a 24 year woman, residing in Kumbhartek and has made a remarkable transition from being a CAG member to working as a Spearhead in the MHT team, responsible for Kumbhartek and a part of Gandhlipura. She is the most educated girl in the community, having completed her MA in English. There are not many suitable job opportunities for women like Jayshree in Amalner. She radiates confidence while enjoying her work with the community, inspiring many girls of her area and Amalner.



Ms. Jayshri Chaudhary

BEHAVIOUR CHANGE COMMUNICATION

Alongside the formation of CAGs, an intensive campaign for behaviour change using various mediums was initiated in Amalner. Though the Swachh Bharat Mission (SBM) campaign recognizes the significance of changing behaviours for a sustained change, only 3% of the SBM budget had been allocated for behavioural modification.

Sensitization meetings

- ▶ Were organized, stressing on the significance of individual toilet



Group Discussion on Water-Related Issues



Women's Group Activity for Water-Related Issues

construction and making Amalner open defecation free. Information and discussion concerning related issues of water, drainage and other basic facilities like streets lights, electricity was also encouraged during these meetings. IEC materials with pictorial depiction and simple games such as snakes and ladders were used to aid in understanding. As with CAGs, videos of success stories of MHT's work was shown to the communities.

- ▶ In addition to sanitation, the effect of increased greenhouse emissions and the impact that climate change is and would be having on their lives was also discussed through video shows during the later stages of the project.

- ▶ Each sensitization meeting had about 15-20 participants. During the project duration, 313 sensitization meetings and 180 video shows were organized, reaching out to 3294 and 2556 women respectively.



Women and Children's Group Counselling

Campaigns:

To target large populations, street plays, rallies, competitions and musical campaigns were used. A theatre youth group of Gandhlipura performed 22 street plays at varied sites during the project period, reaching out to approximately 6000 people. In addition to generating awareness and discouraging people from open defecation, MHT team and Nagar Palika officials present interacted with the people post plays, gave information about the subsidy, the application process and guided them w.r.t the downloading of the Swachhta App.

A song composed by the women on cleanliness, individual toilets, SMM and garbage segregation was played by the band that travelled to important locations in the city; this musical campaign was organized jointly by the MHT and ANP. Additionally, a video clip made by ANP showing their efforts for cleanliness of the city was also played at numerous locations; this video also highlighted MHT's work.



Nukkad Natak Competition in City

In collaboration with the Education Department and the ANP, a drawing competition was organized in Nagar Palika School No. 1 wherein 400 students from 10 schools participated. The students were given two themes - Importance of individual toilets and Significance of garbage segregation. The jury panel formed included the CO of Amalner Nagar Palika (ANP), members from MHT team and drawing teachers. The best 5 drawings were selected for wall paintings in Amalner. All participants received the 'Swachhta kit' consisting of a soap, nail-cutter and learning stationeries with 2 important messages inscribed on the kit - 'Let's keep three different dustbins and segregate the waste' and 'Let's make toilets at home, make using toilet our habit, and stay away from illness.'

The street plays and the drawing competition were also covered by the local media.

14,228 people were reached through the various campaigns organized.

Awareness messages were also sent to the communities via the Interactive Voice Response Services (IVRS).



Painting Competition in City

- ▶ Wall Paintings were creatively done by local artists at various locations in the city highlighting the benefits of improved sanitation, water management and waste management practices. Walls of Nagar Palika office, community toilets, of market places around the intervention areas were used. Few of these paintings were done during the Covid-19 pandemic, focusing on the causes, symptoms and precautions.



Wall Painting for Awareness to Save Water

To develop ownership, conscious efforts to directly engage the community was made to execute the various mediums of the behaviour change communication.

ELIMINATION OF OPEN DEFECATION (OD) SPOTS

Targeting the OD spots was one of the important strategies employed during the initial phases of the intervention by the MHT. A watchdog committee comprising of 4-5 women was formed in each slum. These committees were primarily responsible for ensuring that people in their area did not practice open defecation and they also ensured that the general cleanliness of the area is maintained. They would monitor the OD spots at hours when people usually ventured out to defecate and explain to them the associated health hazards for their family and the community. They would use pamphlets, videos to encourage people to build their own toilet or use the community toilets and would also try to understand their reasons for not having a private toilet or for not using a community toilet. The watchdog committee members would make home visits and talk to the family members too, trying to explore ways of addressing their concerns.



Watchdog Committee Members -
Gandhlipura & Tadeपुरa

Initially, they also used tactics that instilled fear or caused embarrassment.

“

We would make teams of 2-3 people and monitor the OD spots at different times of the day, starting out as early as 4 am in the morning. This would also be our morning walk (laughs). We would try explaining to them that there could be snakes, scorpions on their way or outsiders passing by and defecating in the open would lead to filth and diseases. We also told them that we not setting a good example for our children by doing this. The trainings provided by MHT helped us to communicate – we used pamphlets, showed videos, etc. Initially, they also cursed and abused us, threatening us that they shall talk to our family members. We heard their abuses but still continued our work patiently. At times, we would scare them by saying we will click your pictures or embarrass them by giving a rose while they were on their way. Because of the fear of being clicked, many started using the community toilet...

– Ms. Nafeesa Bi Abdul Ajj,
CAG and Watchdog Committee
Member, Gandhlipura

”

Poor Maintenance of community toilets, inability to build a private toilet due to financial and space constraints emerged as primary reasons why most people preferred to defecate in the open. Addressing these concerns were crucial to gain people's trust and stop the practice of OD. CAG and watchdog committee members started filing applications with the ANP and followed up to ensure that the community toilets in their areas are restored, well maintained, cleaned regularly and there is provision of water. Simultaneously, they also encouraged community members to act responsibly and not leave the toilets dirty and litter around. The watchdog committee members actively started monitoring the site of community toilets too.

Families facing financial constraints were supported with information about subsidy and handholding w.r.t application filling.

“

We faced a lot of problems at home as some people would tell my husband that her wife goes around in the morning, stopping people from defecating. We had arguments about this but then he understood as we are doing good work for the community. It took 4-5 months of constant monitoring and awareness building to change people's habit of defecating in the open and begin using community toilets. We also took care that the community toilet was being maintained well – we would check if the water tank is filled and if the Nagar Palika staff have cleaned it. Then, we also helped with the subsidy.

– Ms. Ujwala Dilip Ahire,
Watchdog Committee
Member, Tadepura

”



Watchdog Committees Launching Publication for Awareness OD Spots

Due to the efforts of the CAGs and watchdog committees, all 13 OD spots have been demolished in Amalner.

Some of these spots are also undergoing transition in terms of aesthetics and utility.

The OD spot in Milchal station has been converted into a community garden by the women. The saplings bought from a nearby nursery and planted in the space have now blossomed into beautiful plants and trees. The youth in the area helped with the fencing. The community women now hold their meetings here and the children use the space to play.



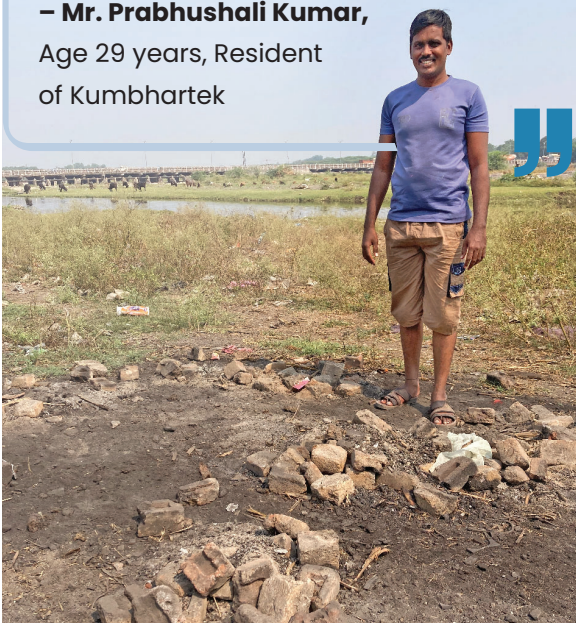
Community Space at Milchal station - OD spot to Garden

The OD spot in Kumbhartek along the banks of the river Bori, is now being used by the Kumbhar (potter) community to set up the hearth and bake their vessels.

“

Earlier, this spot here was very dirty and filthy. And because of that, people would come here to defecate. We would find it very difficult to set up the bhatti (hearth) as on one side there would be women sitting and on the other, there would be men. Even when the women leave, the area around the bhatti would be dirty. After the women here filed an application at the Nagar Palika around 4 years back, the ward councilor got the weeds and the bushes removed and the area cleaned. Thereafter, people were encouraged and schemes rolled out to build individual toilets. So now, the area is much cleaner and we are not facing any problems. Earlier, we had also shifted on the other side of the road due to this problem. The steps these women took has been very beneficial for us.

– **Mr. Prabhushali Kumar,**
Age 29 years, Resident
of Kumbhartek



OD to Baking

Watchdog committee members also undertook the responsibility of maintaining the cleanliness of their respective areas. They contacted the Sanitation Inspectors of the ANP if the garbage van did not arrive in their area on a particular day. In Gandhlipura, since the lanes are very narrow, the sanitation staff would park their vans outside and co-ordinate with the CAG members for communicating the timings to the households.

“

Our toilet was built in 2017 with the aid of subsidy before MHT came as I am educated and a bit aware but that is not the case with the majority of the community here. When MHT showed us videos, I thought this is an opportunity for me to do something for my area. Our area was very filthy and the drains would also not be cleaned regularly. After joining the CAG and the watchdog committee, I started writing strong applications to the ANP stating that there are diseases spreading because of this garbage. The Sanitation Inspector would scold their staff for not doing their jobs well. He has also visited my home, saying that we can just give him a call if the cleaning workers don't come or if there is some other issue such as the lights. Now, they have been coming regularly and our area has also become very clean.

– **Ms. Shagufta Sayyad,**
CAG member and Vikasini,
Gandhlipura

”

COMMUNITY TOILETS

MHT was confident that the community toilets would be a bridge that would allow for easy transition from open defecation to individual toilets.

With the support of MHT, the CAG and the Watchdog committee members actively started filling applications with the ANP concerning the maintenance of the community toilets. They also followed up regularly with the Sanitation Inspectors at the ANP and the Ward Councilor of their respective areas.

A remarkable change was observed post the intervention. The community toilet in Bangali File is now well maintained by the ANP. The doors have been installed, electricity connection restored and provision has been made for water by constructing a water tank. There a designated staff member – one male and one female, appointed by the ANP



Community Toilet - Bangali File

for regular maintenance and cleaning; they clean the toilet once in 2-3 days and on the remaining days, the CAG and the watchdog committee ensure that the community members using it take ownership and keep it clean. The toilet also has a ramp facility for differently abled people and one toilet suited for their convenience. Recently, a sanitary pad dispensing machine was also installed.



Wall Painting at the Bengali Septic Tank

Similarly, the condition of the community toilet at Gandhlipura has also improved significantly in terms of water availability and maintenance due to the intervention of CAG members. However, since the way leading to the toilet was paved of mud, the community faced problems when the water tank was filled and particularly during monsoons, as people had to make their way through the puddle. The women then discussed it with the area Ward Councilor and met the Chief Officer (CO) of the ANP, proposing to construct a pakka road to the community toilet; they also

filed a written application for the same. Now, there is a cemented road that leads to the Gandhlipura community toilet.

“

Earlier, it wasn't clean and the community members did not use it. But we worked for it - we stopped people from peeing openly around it and littering. We spoke to the CO, filed applications and got the pakka road made and the street lights fixed. We ensure that the public toilet is regularly cleaned and there is water in the tank.

– Ms. Bismilla Bi Rehman Malik,
CAG and Watchdog Committee
Member, Gandhlipura

”

26 community toilets in 11 slums of Amalner are now functional, well maintained and used by the community members post intervention by the MHT through CAGs.

Community toilets in Amalner would remain relevant and sustaining their maintenance would be significant even when 100% coverage of private/ individual toilets is achieved as the city faces severe water scarcity. Particularly in summers, these communities receive water once in 8–10 days from the usual norm of once in 5 days. At these times, even families with individual toilets have to often resort to using the community toilets.

“

Here, most families are usually big. Hence, during summers when the water supply from the Nagar Palika is delayed by an additional 3–5 days, these community toilets are used even by many families with individual toilets. Also, it helps when families have guests staying at their home for a few days.

– Ms. Sultana Bi Shaikh Chand,
CAG Member, Gandhlipura

”



Office Meeting with Teams

INDIVIDUAL TOILETS

The first important intervention w.r.t the individual toilets was the coordination with the ANP to understand the status of the subsidy released. The subsidy amount for IHHL (Individual Household Latrine) of Rs. 17,000 per household is composed of funds from 3 sources – Rs. 6000 each from the Centre and the State and the remaining Rs. 5000 from the Nagar Palika. While ANP had received the funds from the State Government, there was significant delay from the Centre. MHT intervened and facilitated with the release of the funds.



Individual Toilet - Bangali File

“ We faced problem with the subsidy too. We had transferred the first installment of Rs. 6000. We had not received the subsidy funds from the Centre. MHT helped us a lot in getting that amount. Their Ahmedabad head office staff visited the Ministry in Mumbai and helped with the completion of documentation formalities. There was one document pending for confirmation.

– Mr. Yucraj Chavhan, Sanitary Inspector, Working at the ANP for last 25 years ”

The ANP usually released funds in installments, with the first installment released to the families being Rs. 6000. The next step followed by MHT through the CAG groups was to assess the usage of the subsidy funds through home visits and interaction with the families. It was found that a significant number of families had not utilized the funds for the toilet construction and the remaining majority had incomplete work done as only 1 installment was released.

“

With support from the ANP, MHT staff and CAG members followed up intensively with the families that had received complete subsidy to get the work completed. We aided them with technical knowledge about different aspects related to the construction work such as the quality of materials, the depth of the septic tank, etc. We also facilitated their access to contractors who work at reasonable rates and our CAG members regularly supervised the work. For families with only one installment released and partial work done, we also shared the status with the ANP and enabled the release of remaining funds.

– Ms. Yogita Malusare, Project Coordinator, MHT ”

“

When the SBM campaign started and the subsidy was rolled out, some people had the mindset that they will fill the IHHL application, take the money and not get the work done. At the outset, we also didn't have much idea about how to address this. We were given a deadline and a particular number of subsidy had to be released. Hence, we had released the first installment of Rs 6000 to around 1225 households. We thought monitoring the fund utilization by families is not our responsibility. Then, we were told that we had to upload the photos of the work done – septic tank built, etc. It was then that we realized that some people had not even started work. They said that it is not possible to build a toilet in 6000 Rs, where will we arrange the cement and bricks from, etc. When MHT got associated, our work became much easier as the community women responded well to the women staff of MHT. Unlike the Ramai Shauchalay Scheme of 2011-12 wherein people uploaded the photos of their neighbor's toilet to claim the money, there is GPS tracking with the photos in IHHL subsidy scheme. MHT helped us with the verification process too; they would visit door to door and themselves took the photos and shared the status with us.

– Mr. Santosh Birkhade, Sanitary Inspector, Working at the ANP for last 28 years

”



MHT Staff Aiding Community Members with the IHHL Application

When MHT started intervention in 2017, a vast majority of the households were either unaware about the subsidy or had not applied for it despite having knowledge of the same. With MHT's intervention through home visits and behavior change campaigns focusing on the significance of individual toilets, these families were made aware and gradually convinced to apply for the subsidy. Then, in collaboration with the ANP and with support of the CAG groups, the MHT team facilitated in the completion of the IHHL subsidy application process. They supported with the filling of an application form, helped families arrange for the verification documents, submitted their application and followed up with the ANP.

“

We have to go very early in the morning or wait till late in the afternoon. My mother had to always accompany me, no matter what time of the day – be it mornings, afternoons or nights as sometimes, there are boys around and they tease us with dirty comments. Most girls of my age are accompanied by their mothers whenever they go. I feel good now that I don't have to go outside, esp. during periods.

– Ms. Nandini Padari,
Resident of Gandhlipura

”

Nandini is a 17 year old girl residing in Gandhlipura with her parents and a brother. When approached by MHT and made aware through posters and videos, the women in the family understood the significance of having a toilet as they

faced daily fear and shame of venturing out in the open, particularly when Nandini's mother had to go outstation for some reason. However, Nandini's father remained reluctant owing to concerns about his meagre earnings from daily wage work. MHT staff then helped filed application for their subsidy and Nandini came up with ideas for cost cutting as 17K would not be enough. She came up with the idea of having a sludge tank instead of septic tank as it would be more economical, requiring less bricks and cement. To save upon the labour cost, Nandini's maternal uncle was approached to build the toilet; he stayed with the family for 3-4 days and completed the work. Also, Nandini herself dug the pit and removed mud from it. A simple door made of tin was used to save money and the tiling work was done at a later stage when the family had money.



Ms. Nandini Padari

However, MHT faced challenges when it came to families staying on rent as convincing their landlords was difficult even when the tenants were keen on having a private individual toilet. While most of them gradually agreed and applied for subsidy or let the tenant apply for subsidy after persistent intervention, a few remain adamant. A different alternative of Shared Model was then proposed.

“

I tried a lot with my landlord but he refused. We even told him that we don't need a single penny from him. He neither wanted to apply for subsidy nor let us built it with our own money. I have two daughters and they are not comfortable going out for toilet. My mother stays alone nearby; her house is just one small room. So, we made the bathroom a bit wide and now have a combined toilet and bathroom. Not just my family, but a couple of my mother's neighbors too use the toilet at my mother's place.

– Ms. Rajiya Bi Shaikh Basheer,
CAG Member, Gandhlipura

”

The community toilet in Milchal station area has been converted into a shared toilet that is being used and maintained by 3 families as the remaining residents all have individual toilets now.



Shared Toilet - Milchal Station

The shared model is not just proposed for between families or relatives staying nearby but has also been successful between two neighbors or wherein the landlord and the tenant are staying adjacent to each other.

MHT also came up with a new strategy – Sponsored Model to expedite the intervention during Covid-19 outbreak wherein the families contributed a nominal amount of Rs. 2000 and the rest of the construction cost was borne by MHT, through funding from HSBC. This alternative also benefited the below mentioned categories:

- ▶ Families whose applications for subsidies were either rejected or were in process for a long time (delayed)
- ▶ Tenants whose landlords were not willing to file for a subsidy



I told the landlord that my husband doesn't keep too well and now, even my 13 year old daughter refuses to go outside alone to use the community toilet. I told him that now there is a good subsidy, so we should get it done; MHT staff also spoke to him over phone as they are based in Mumbai. He never showed any interest in applying for the subsidy and did not even approve when we said that we would bear the additional cost incurred above the subsidy amount. Then, when MHT proposed the Rs. 2000 scheme, we again spoke to him and he agreed saying he will cut the money from the rent.

– Ms. Shanta Gaikwad,
Tenant at Bangali File staying
on rent since 12 years



Ms. Shanta Gaikwad



Individual Toilet - Gandhlipura

For 29 senior citizens that stayed alone and were financially very weak, MHT made an exception and they were exempted from paying Rs. 2000.

During the course of the intervention, MHT learnt some of the key reasons that accelerated their varied efforts and strategies in convincing women and their families for having an individual toilet.



The presence of a toilet at the woman's maternal home and having experienced that comfort before



Adolescent daughter in the family and their hesitation or refusal towards OD and even using community toilets



Senior citizens and the problems associated with aging

Pratibha's story aptly captures the journey from OD – Community Toilet—Shared Toilet – Individual Toilet with the above 3 factors playing an important role.



When I came here after marriage in 2000, I asked my sister-in-law where are we suppose to go for toilet. She said that we will go out. I asked how will we go out during the day light. Then, she told me we will go when it is a bit dark. Then, this became a routine practice. Because of our weak financial circumstances, we kind of adjusted and somehow managed. It is a hand to mouth survival; there's not much left after meeting our basic needs. During pregnancy also, we had to go out and it was more problematic. This continued till my daughter was 18. It felt very awkward as every time my adolescent daughter would ask about going out, I would have to ask her to wait till it's dark as she was not a child anymore. Then in 2010, the MLA made provision for a community toilet. It was initially very clean and we used it for some time but after a few months, nobody from the ANP came regularly to clean it. Also, there was often water scarcity and the drainage line at the back side was left open which attracted many pigs. When the new community toilet was made in 2017, the old one was demolished partially. But again, there was no provision for water and due to irregular and poor maintenance by the ANP, people here stopped using it. After MHT came to our area, things changed. I joined the CAG group and we filed applications with the ANP. They promptly responded by building the water tank, restoring electricity and repairing the broken doors. Also, the ANP cleaning staff come once in two days to clean it. Many people here started using the community toilet and open defecation stopped. Then, I again started talking to my husband about having a private toilet at home. It was difficult to convince him as he kept saying – let us adjust as long as we can. However, we applied for subsidy but the process was taking long. Also, my daughter was now 18 and prospective grooms and their families had started visiting. Since my girl was now of marriageable age, I told my husband, "It's time that we should get a toilet built. If there are guests or if a prospective groom comes, where will they go if they have to use a washroom. It doesn't feel nice." This is how I convinced my husband. As the subsidy was getting delayed, MHT helped us with a no-interest loan of Rs. 20,000 which we gradually paid as and when we had money. At that time, Ashatai and Yogitatai from MHT came and said that we will help you financially, you make the toilet and return the money in small installments when you have it. Once we decided to make the toilet, we decided to renovate our old bathroom too as doing it simultaneously would help us save money. Later, we received the subsidy amount too.

– Ms. Pratibha Chaudhary, CAG member & Vikasini, Bangali File





Pratibha's sister-in-law Savita family's too benefited with the Shared Model as they started using the newly constructed toilet built at Pratibha's place. This continued for 2-3 years and then, Savita convinced her husband to build their own individual toilet and they were supported under the Sponsorship Model. Both these women had access to a private toilet at their maternal home.



Ms. Pratibha Chaudhary

In addition to the socio-economic factors cited by the communities during the initial phase of the intervention as reasons for being hesitant to have a private toilet, there was also the issue of water scarcity and the technical challenges associated due to the lack of proper drainage network.

To better understand the issue of water scarcity in the 11 slums, MHT formed a committee of Water Managers, consisting of 3-4 women from the existing CAG group in the area. They were given a holistic training on the various aspects related to water – water cycle, sources of water, rain water harvesting, assessing water quality, etc. These women then surveyed their resp. areas made home visits to understand the availability and the usage of water of each household.

WATER MANAGERS

“

Our main objective is to make more water reach our areas. We have done surveys in other areas too to understand how much water people fill for drinking and other household chores. We did geo mapping of the water sources; to understand how many borewells, tubewells, etc are there in the 11 slum areas. In training, we also learnt to check the quality of water. MHT is working on reviving the old wells in our areas. We as Water Managers have taken the responsibility for its maintenance and are talking to our communities to take ownership and keep it clean.

– Ms. Shashikala Vasantkad, Water Manager, Milchal Station area

”

The Water Managers also took responsibility for reporting and addressing issues related to water with the ANP for their areas.

MHT's field team adopted an intensive methodology in terms of tracking and following up with the community. Post the baseline, they visited each household regularly for a span of about 2-3 weeks to develop a better understanding of their behavior and the associated challenges w.r.t sanitation. Then, through a clustered approach, the work was executed. For e.g. the submissions of IHHL applications to the ANP was not on a case-to-case basis but in significant numbers. This focused approach made the execution on ground smooth and also enabled ANP to fast track their work.



Water Managers – Milchal Station & Milchal Garwade



Section III

Addressing Emerging Issues - Water Scarcity & Waste Disposal

WATER SCARCITY & WASTE DISPOSAL

Jalgaon district, in which the town of Amalner is situated, is a water deficient region. It has a hot semi-arid climate and an annual rainfall of approximately 690 mm. The supply of water is once every 5 days at best and once every 10-12 days at worst, during the summer months. The lives of the women tends to revolve around the water supply. In the summer months, some families rent 200 litre drums at an exorbitant cost of Rs. 30 per day just to store water. In this scenario, using toilets becomes a difficult task.

Furthermore, the city of Amalner does not have a functional sewage system or any sewage treatment plant (STP). The sewage network is under construction, as are the STPs. The city is dependent on septic tanks for waste management and there is only one operational faecal sludge treatment plant to process the refuse from the septic tanks. With the huge increase in the number of toilets, the waste treatment infrastructure will have to be augmented as well.

Both MHT and the ANP realized that the success of the project depended on two very important factors - ensuring adequate supply of water and augmenting sewage treatment facilities.

The city has also been impacted by climate change and has witnessed changes in its

natural resources. The economy of Amalner was pivoted around the cotton textile industry, with Pratap mills being the main employer in the city. The mill was fed by the cotton grown in the black cotton soil in the region and the city was also a very large cotton market. However, the region has seen the annual rainfall decline from about 1200 mm per annum to about 700 mm per annum on account of climate change. This caused a decline in the region's agriculture, with food crops like maize replacing cash crops like cotton. This decline in agriculture resulted in an overall economic decline of the city and its surrounding region.

The decline in precipitation not only caused economic decline but also caused a lot of hardships to the people of Amalner and have mounted challenges for the administration as well. The Bori river which was once a flourishing sight, with a perennial flow now runs dry during summers. Till about 15 years ago, the Bori river on whose banks Amalner is situated, used to supply a part of the city's water supply. But now, water is only available from the Tapi river which is about 30 kms from Amalner. Pumping water from such a large distance requires considerable energy expenditure which has to be borne by the Amalner Nagar Palika (ANP).



MHT presenting the DPR to the ANP CO

In view of the above, ANP approached MHT to prepare a Detailed Project Report (DPR) based on the 3R Water Conservation Model to assess the water situation in Amalner and propose technical solutions to address the same. MHT collaborated with Netherlands based company Smart Water Solutions and prepared a DPR- 'Reviving of Water Regime in Amalner', proposing the below mentioned:

01 Rejuvenation
of Wells

02 Solarization of
Water Treatment
Infrastructure

03 Installation
of Sewage
Treatment Plant

3R WATER CONSERVATION MODEL

Retention

The 3 old anicuts in the Bori river need to be renovated to rejuvenate it; the water stored in the anicuts can be used directly and will also recharge the water table in the area. If water is lifted from the Bori river, there will be major energy savings which will reduce both - the municipal expenditure and greenhouse gas emissions.

Recharge

Wherever possible, attempts need to be made to use the rejuvenated wells for groundwater recharge from the rooftops. The drainage from multiple rooftops can be connected to a single filtration unit before the well. This can save the construction cost of installing filters for every house and simplifies maintenance as only one filter has to be maintained by the community.

This method has been successfully tried at one of the 3 wells rejuvenated in the Tadeपुरa area.

Reuse

The Tadeपुरa tank, which is an old and abandoned stone quarry, has the capacity to store 1 MLD of water. Unfortunately, it is full of sewage from the neighbouring settlements. But the water is still grey water and not black. Efforts are being made to use phytoremediation methods to purify it to usable standards.

The table below provides a brief summary of the specific recommendations of the DPR - 'Reviving of Water Regime in Amalner'.

| S.N. | Approach | Source | Recommended Structures |
|------|---|-----------------------|--|
| 1 | Retention/ recharge | Tapi river | Construction of subsurface dyke/dam - 2 units Development of recharge shaft and sump well |
| 2 | Recharge | Bori river | Repairing and strengthening of the existing dam - 2 units Development of recharge pit/ shafts |
| 3 | Recharge | Dug wells | Rain roof water harvesting structure on 17 dug wells |
| 4 | Reuse | Tadepura | STP plants at Tadepura slum to recycle 1.5 MLD Strengthening and development of the drainage network in slum area Installation of pumping station STP Installation Pipes network for treated water distribution |
| 5 | Reuse | Bori river | STP plants at near Gandhlipura at Bori river bank about 3 MLD Strengthening and development of the drainage network in slum area Installation of pumping station STP Installation Pipes network for treated water distribution |
| 6 | Resource conservation | Mini water supply | 2 mini water supply schemes in lane of slum with storage capacity |
| 7 | Resource conservation | ATM based water shops | 2 Water ATMs at Tadepura slum, near Bori river |
| 8 | Energy conservation | Tapi river | Installation of solar plant on net metering basis at 2-3 location; capacity 1 MW |
| 9 | Community awareness towards water utilization | Amalner town | Motivation and awareness Meetings, workshops, community and city level competitions Development of IEC materials |

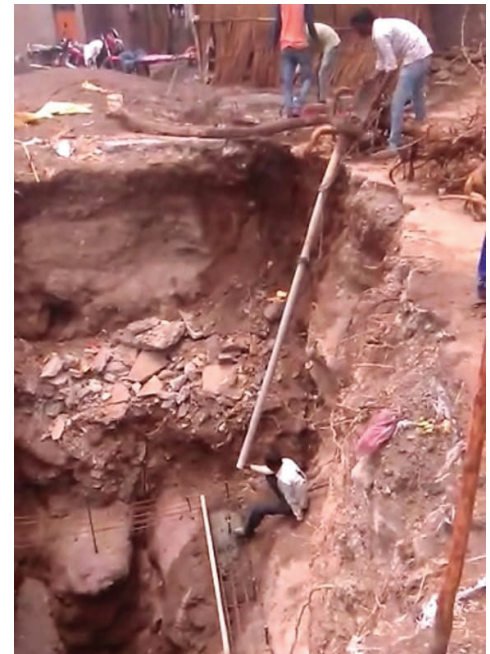
WELL REJUVENATION

Just like most of the region, Amalner had an old tradition of dug wells. Almost every large house had one, and there were many community wells to serve those who did not have a private well. Unlike borewells, dug wells are able to store more water – the diameter of the well being directly related to the storage capacity of the well. They are also the best way to tap into an unconfined shallow aquifer.

Over time, due to the proliferation of borewells and piped water supply, the wells – both private and public – fell into disuse and disrepair. The art of digging and maintaining wells, which was once crucial to survival in the region, slowly started to disappear. Some of the public wells were encroached upon and even private wells in the houses were neglected and built over. The public well at Shubhash Chowk was covered up and a tea stall established on top of it, and the well at Fakirwada in Tadeपुरa had a road constructed over it. This was despite the fact that the average borewell in the region had reached a depth of approximately 120 m and yet could supply only a limited amount of water, whereas a properly located dug well could provide more water from a depth of merely 40 feet.

The revival of the wells was taken up on a priority basis by the MHT team with support from Germany Based foundation – Katholische Zentralstelle für Entwicklungshilfe (KZE)–Misereor. It was an uphill task as finding skilled workers for well cleaning and repair, let alone well digging, was difficult. The experts hired by the Trust had to

Fakirwada–Before



Fakirwada–After



scour the nearby villages to find workers who knew how to work on wells. A team of skilled workers was assembled and repair of the wells in various states of disrepair began in earnest.

The project involved draining the wells to clean them, repairing the well walls and covering the top of the wells with iron grills covered with wire mesh to prevent the ingress of contaminants. In many locations, rainwater recharge systems were integrated into the wells to recharge the groundwater.

The Water Managers have taken the responsibility of maintaining the revived wells for their areas.

A total of 17 public wells in the city were identified for revival and the work initiated.

Hydrological analysis of the wells conducted throughout 2021 and 2022 demonstrated a distinct rise in the water levels from pre-monsoon to post-monsoon periods. Despite the annual rainfall in 2022 being 5% lower than the previous year, there is an increase in the water levels. This suggests that the recharge of groundwater is occurring consistently. It is expected that this sustained recharge of the groundwater resources will equalise the carrying capacity⁷ of the wells throughout the year.

It is estimated that 2,38,56,190 litres of rainwater has been collected across the 17 wells till October 2023.

Fakirwada Well

Located in the slums of Tadeपुरa is a century old well dug and built for the purpose of domestic use and to provide water for the

cattle and livestock. The well was destroyed and rendered unusable over the passage of time.



Well Construction Works in City

| | |
|------------------------|------------------------------|
| Age of well: 60 years | Depth of the well: 11.4 Mtrs |
| Restoration year: 2019 | Roof area: 846.1 Sq. Mtrs |

Scenario Post Restoration:

The water availability in the low-lying area of the settlement has experienced notable enhancement. The community now utilizes this water resource for domestic tasks and for cleaning livestock. There has been a substantial reduction in both - water storage needs and wastage. As a result, community members have saved significant amounts of time and energy that were previously dedicated to storing and transporting water from neighbouring areas to the final destination. This newfound efficiency allows them to focus more on income-generating activities rather than the laborious process of water management.

⁷Carrying capacity is determined by averaging the consistent water levels maintained by the wells, measured at 15 days intervals.

Subhash Chowk Well

Rehabilitating the city's oldest water source situated at the main junction of Amalner was a priority. Before the introduction of the city's piped water scheme, the municipality had installed an electric motor on the well to provide water to the public. At that time, approximately half of the city's population relied on the dug well for their water supply.

| | |
|------------------------|-----------------------------|
| Age of well: 100 years | Depth of the well: 8.3 Mtrs |
| Restoration year: 2021 | Roof area: 183.3 Sq. Mtrs |

Scenario Post Restoration:

The dynamics of water supply from the well underwent a complete transformation following the implementation of the Nal Jal Yojana (Pipe Water Supply Scheme). The once highly productive dug well had turned into a dumping ground. However, it has now been restored and stands as a pivotal water source, capable of continuous pumping for 10 to 12 hours daily. Post restoration, nearby hawkers and street vendors have started using the water for their own purposes instead of discarding garbage into the well.

Subhash Chowk-Before



Subhash Chowk-After



SOLARIZATION OF WATER TREATMENT PLANT (WTP)



Solarization of Water Treatment Plant (WTP) in Ambarishi Tekdi

The biggest head of expenditure for the Amalner Nagar Palika (ANP) is the electricity bill. The annual revenue of the ANP is approximately Rs. 3 crores while its expenditure is in the tune of Rs. 7 crores with the expenditure on electricity being approximately Rs. 4.5 crores. Supplying water to the entire city from a distance of 30 kilometres involves massive energy expenditure. So far this energy requirement is being supplied by the electric grid. This dependence on grid electricity is upsetting the budget of the ANP and also contributing to the city's carbon footprint. Also, it is not possible to augment the water supply without further increasing the consumption of coal based electric power.

An MOU was signed between MHT and ANP for solarization at the WTP at Ambarashi tekdi wherein ANP will support financially

and in administrative works and MHT will be implementing the project and create awareness among the population in Amalner. However, ANP did not have the necessary financial resources and the project was supported with CSR funds from Collectives for Integrated Livelihood Initiatives (CINI) and the ANP contributed Rs. 2 lakhs i.e. 10% i.e. of the total budget.

A major challenge during the solarization was the conversion of the High Tension load of the pumps to a Low Tension load, for which another Rs. 6 lakhs were spent by the ANP. As a result of the installation of a 45 kW of solar power to run the filter plant, the monthly electricity bill of running the WTP reduced from Rs. 56 thousand to Rs. 17 thousand, resulting in an annual saving of Rs. 4.7 lakhs.



Solarization of Water Treatment Plant

This pilot project has helped to tackle the two major issues. The first is that of funding - by collaborating with CINI, MHT has played a pivotal role in its success. The second issue tackled is that of converting the High Tension load to Low Tension, and the successful implementation of the pilot project has given the ANP the confidence to carry out more projects of this nature. It is hoped that in the near future the entire water supply system will be solar powered, saving money as well as reducing the city's carbon footprint. The money saved can then be used to further improve the civic infrastructure.

Due to the differences in the tendering process of Sustain Plus and ANP, it was proving to be difficult to find a single vendor for the whole project. MHT had to do a complete technical and administrative evaluation of the project requirements so that the responsibilities of Sustain Plus and ANP were so divided that a single vendor could satisfy the tendering process of both the partners and can be entrusted with the responsibility of the entire project.

Furthermore, the government subsidy was only given on the cost of polycrystalline panels, which have lower efficiency. MHT took the initiative to source the differential amount to execute the project with monocrystalline panels of higher efficiency.



Our electricity bills are very high even when we supply water once in 3 days. Our annual income is 3 crores and the expenditure is around Rs. 7 crores. And the major expense for the ANP is the electricity bill which is Rs. 4.5 crores. We address this two proposals have been made; one has been successfully implemented in coordination with MHT i.e. the solarization of WTP at Ambershi Tekri. Currently, we are in talks with MHT for planning a solar plant at the main pumping source near the Tapi river. We are exploring if they can arrange CSR funds for the same as these measures will enable us to address our budget deficit significantly. Also, we have benefitted from their technical expertise.

– Mr. Prashant Sarode, Chief Officer, ANP



Role of Sustain Plus, MHT and ANP in Solarization of Water Treatment Plant

Sustain Plus:

- ▶ Provide financial support to operate Amalner's water treatment plant with solar energy
- ▶ Collaborate with the Amalner Nagar Palika (ANP) to select vendors and materials for the task

Mahila Housing Trust (MHT)

- ▶ Facilitate the collaboration between the ANP and Sustain Plus
- ▶ Conduct a survey of WTP to check the feasibility of pilot WTP
- ▶ Collaborate with various government departments
- ▶ Work with the partner for the establishment and monitoring of the solar plant's system
- ▶ Work as the knowledge partner for the project, including preparing quarterly reports and meeting minutes
- ▶ Raise awareness among people about the renewable energy

Amalner Nagar Palika (ANP)

- ▶ Identify the area for the Dual Treatment Plant under the project
- ▶ Pay the pending electricity bill to the Electricity board for uninterrupted power supply
- ▶ Undertake necessary steps for project implementation

Challenges during Solarization of WTP:

Several challenges emerged during the implementation of the project, primarily due to it being a first-time endeavour in a small city like Amalner. Information about necessary approvals for this work was not available with the ANP and the appointed vendors. During the process of applying for the solar rooftop, it was found that transformer conversion was needed, which was conveyed to the ANP. For the WTP, the electricity supply meter was initially at HIGH TENSION (HT) 120 kilovolts, which needed to be converted to LOW TENSION (LT) because HT meters are not eligible for government subsidies.

Additionally, there were challenges in deciding between polycrystalline and monocrystalline solar panels. Monocrystalline solar panels have better efficiency but lack government subsidies. The cost of monocrystalline panels was added to the total project cost. This additional cost was borne by the ANP, causing a delay in the project. In addition, the MHT was responsible for coordinating meter testing in the Sub Zonal Electric Offices and Divisional Electric Offices (If this test is not conducted, the solar roof will not be activated). Due to these challenges, the project took a year to complete, and the cost exceeded the estimated budget.



Solarization of Water Treatment Plant (WTP) in Amalner Nagar Palika (ANP)



Section IV

Did Covid-19 Stop Us?

HEALTH AND NUTRITION INTERVENTION

Post the baseline assessment, when the MHT's intervention in Amalner was at its peak and the transformation had started to become visible, the world was struck with Covid-19 pandemic. Though everyday life, work and movement halted for many, our CAG women were approached by the ANP and they found themselves to be gearing up for another challenge – creating awareness and protecting their communities from Covid-19.

CAGs and many other slum/CBO women were trained virtually about the causes, symptoms and precautions to be taken during COVID through the google meet and zoom meetings. Different videos and images were used to spread the awareness messages. The CAG group in each area were provided with a health monitoring kit which included an oximeter, blood pressure digital devise, a weighing machine, etc. The trained community members made home visits, creating awareness and checking for basic symptoms with the aid of a basic questionnaire and the health kit; this data was then shared with the ANP. Later, the CAG women also mobilized families for vaccination.

“

Nagar Palika had invited us to help with the Covid work as many of their staff were not ready to do it and additional man power was required. During Covid, certain families did not even allow us to enter their lanes. There were people who were not ready to take vaccines but we convinced them. We had done online meetings with Yogitatai and Antaratai (MHT staff from Ahmedabad office) to understand how to look after ourselves and others. We were told to take important precautions like frequently washing our hands, using a mask and a sanitizer. We made home visits and would check the BP, oxygen level, etc.

– Ms. Nafeesa Bi Abdul Ajij,
CAG member, Gandhlipura

”

During the first wave, the CAG members also cooked meals and distributed it in their area. They also mobilized food kits and nutrition kits from local donors and organizations.

LIVELIHOOD SUPPORT – MANGWADA & BHILATI

The situation was particularly worse in the Mangawada area inhabited by the Dalit community Mang and the Bhilati area that is inhabited by the tribal community Bhil. The 35 Mang families of Mangwada are largely engaged in their traditional skills of broom making and basket making, the market for which is during Diwali festivities. Their entire families are engaged in broom or basket making for a month with raw materials bought from Songir, that have arrived from the neighboring state of Madhya Pradesh. The remaining months, the men work as laborers in agricultural fields or at construction sites and play music in bands during weddings and festivities. The women are either working in fields or do domestic work in other households.

“

We got ration and cooked meals from MHT during the Covid period. Our work got affected for 2 years as raw materials had stopped coming from Songir. Last Diwali, when the big leaves for broom making started coming, we didn't have enough money to buy it. MHT provided our family with Rs. 1500/- and this helped us restart our work.

– Ms. Rekha Raju, Mangwada Community, CAG member and Water Manager

”



Ms. Rekha Raju with Family

“

I leave home at 5 am in the morning, travel 15-20 kms in an auto to buy the grass. We reach Amalner at 7-8 am and sell grass till 2 pm in the afternoon. Till 2 pm, we survive only on a cup of tea. Then, we come home and cook meals and eat at around 3 pm. We make around Rs. 200 of which the to and fro auto expenses are Rs. 80. During Covid, we lost the little savings that we had. When things become a bit normal, we did not even have money for auto and for buying raw materials. MHT understood our situation and provided each family in our area with the money they would require to start working again. MHT has also helped us to complete our toilet work. Initially, we had received only Rs. 6000 from which we got the tank made. Then, when MHT started working here, we received the remaining subsidy. They also gave us an additional Rs. 3000 for the door and the toilet seat which we gradually returned. Earlier, we faced a lot of problems when we had to defecate outside. During rains, there would be water, dirt and garbage all around. We would be scared as there are scorpions and thorns around, on the way. Having a toilet at home saves our time in the morning as we have to start work very early in the morning.

– Ms. Rukmabai Rama Bhil, Bhilati Community Woman

”

The women of the Bhilati Community sell grass for the cattle and make Rs. 100-150 a day; some also work in the fields. As with the Mang community men, the men of the Bhil community also do labour jobs. Men from both communities migrate to cities like Mumbai, Vapi, Valsad, etc. in search of work during summers.

Since the livelihood of both these communities was severely impacted for 2 years, MHT did an economic assessment of each family in these areas and provided them financial assistance to restart their work.

The courage and efficiency displayed by the CAG groups during COVID-19, working in partnership with ANP, is a testament of the efficacy and the sustainability of the CAG model.



Bhilati Community

“

During Covid-19, there was no work for 3 months. There were orders for us to not step outside the colony. They arranged for cooked meals by coordinating with a nearby Gaushala organization and MHT also gave us ration. We are very grateful for their support during the difficult times.

– Mr. Bapu Sakharam Bhil,
Bhilati Community member

”



Section V

**Impact and Way
Forward:**

IMPACT



13 OD spots of Amalner are completely eliminated



26 Community toilets are now well maintained and in use by the community members



1583 Individual toilets have been constructed during the project duration and are currently in use by the households



Amalner now ranks at 6th position in the Swachh Survekshan Survey 2022 at the state level; our rank in 2017 was 183. Our regional rank is 9. There has been a remarkable transition and we are confident that we shall sustain this as this is a change wherein the community has been at the forefront.

– Mr. Ganesh Gadhari, City Coordinator, Working at the ANP for last 5 years



Improved sanitation facilities have also resulted in better health outcomes for the communities, evident from the significant decrease in the incidences of water borne and vector borne diseases.

| CBO/Slum | Households | Individual Toilets Built |
|--------------------|-------------|--------------------------|
| Gandhlipura | 896 | 397 |
| Tadepura | 701 | 321 |
| Milchal Station | 283 | 117 |
| Roopjinagar | 274 | 248 |
| Bangali File | 187 | 106 |
| Milchal Galwade | 171 | 79 |
| Kumbhartek | 95 | 30 |
| Mullatek | 72 | 45 |
| Mangwada | 35 | 21 |
| Bhillati | 20 | 11 |
| Milchal Dharmshala | 8 | 6 |
| Total | 2742 | 1583 |



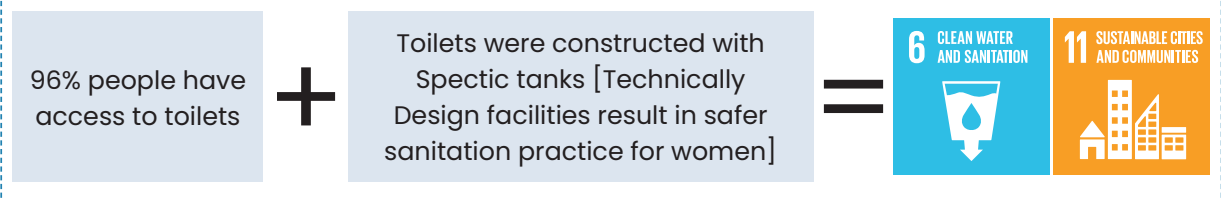
The proportion of water borne and vector borne diseases have reduced considerably, especially water borne. Before 2017, as soon as monsoons would start or if there is some pipeline leakage in an area, then every lane would start reporting diarrhea cases. Since 2017, we have not had any health camps set up; we have not had 10-20 patients coming on a single day since 2017.

– Dr. Vilas Mahajan, Medical Officer, Amalner



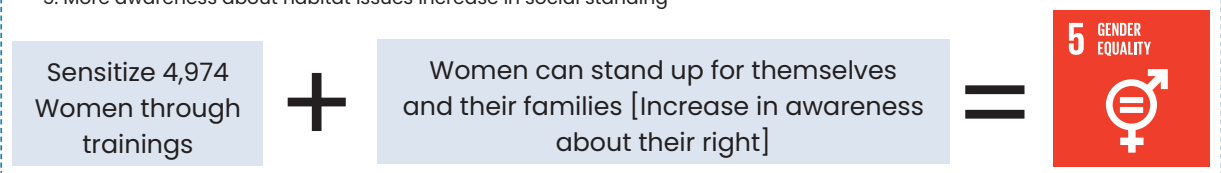
| Sanitation Facilities | Before | End Results | |
|--|--------|-------------|---|
| Access to Household level Toilets | 45% | 83% | ↑ |
| All time access to community/public toilet | 75% | 97% | ↑ |

| Behavioural change | Before | End Results | |
|--|--------|-------------------------------------|---|
| People were washing hands only with water after using toilet | 15% | 6% (Rest are using soap with water) | ↓ |
| Individuals Practicing OD | 24.4% | 4% | ↓ |



| Governance | Before | End Results | |
|---------------------------------|--------|-------------|---|
| Women Know their ward councilor | 74% | 84% | ↑ |
| Women visiting to Nagar-palika | 14% | 24% | ↑ |

1. More confidence
2. Ability to travel independently
3. Ability to speak to councillors/ govt. officer/ other stakeholders
4. Increase in access to information
5. More awareness about habitat issues Increase in social standing



The team has achieved not the objectives set at the outset but have also addressed emerging issues and have adopted a holistic sustainable approach towards improving sanitation and increasing water availability in the city. The rejuvenation of 17 wells and the solarization of the WTP is a testament of success of the strengthened collaboration between the MHT team and the ANP. Efforts are ongoing for the solarization of other existing infrastructure and piloting more diverse initiatives for water conservation.

MHT has also prepared a DPR on the ecology of Amalner and is working with the ANP on Climate Action Plan to increase the green cover of the city under the Majhi Vasundhara Campaign. Also, efforts have also been initiated for landscaping in the 11 slum areas.

“

People in these communities have a sense of togetherness and I want to create beautiful spaces in the community wherein they can meet and celebrate this bonding. During evenings, children can play over there. These spaces will be aesthetically appealing and enhance their environment. Currently, I am having discussions with the community women and we are exploring the possibility of having a community garden at one of the sites. Also, under the Majhi Vasundhara Campaign, we are considering humidifier plants as Amalner is a dry region.

– Ms. Forum Mamtara,
Architect, Project Associate – MHT

”



Ms. Forum Mamtara Discussing her Plans with the MHT Staff

The energy and the enthusiasm of the community women is inspiring; having transformed their areas, they now want to make a bigger impact and transform the city. MHT has formed a city level federation of 22 Vikasinis, elected democratically from the existing CAG groups of 11 areas. They have been trained on understanding the issues at the city level, with a focus being on climate change. They have had the opportunity to visit their counterparts in Ahmedabad and have witnessed the work that the Vikasinis have done on the cool roof technology and solarization.

MHT's work in Amalner has been appreciated by other Urban Local Bodies in Maharashtra who have approached MHT to carry out similar project in their cities too.

“

Amalner stands tall as a model town, illuminating a path for 300+ small cities across India. It is a blueprint for responsible urban development, centered on empowering and uplifting marginalized communities, serving as a guiding light for the state and the national governing body. In the tapestry of Amalner's success, we find the threads of inclusive growth, proving that cities can flourish responsibly and communities can thrive in the embrace of social empowerment, responsible urban development, becoming Climate Change Resilient using technology and local resources.

– Ms. Bharati Bhonsale, Programme Manager, MHT

”





MAHILA HOUSING TRUST
Towards Responsible Urban Development

7th Floor 701-702, Sakar 4, Opposite to MJ library,
Ashram Rd, Ellisbridge, Ahmedabad, Gujarat 380006
+91 79-26587725, +91 79-26587726, +91 79-26587728
www.mahilahousingtrust.org
info@mahilahsg.org