



W-SHARP: Linking Climate-Resilient WASH, Social Protection and Food Security to Empower Women in Maharashtra, India

SUMMARY

The 'Women-led Water, Sanitation, Hygiene and Resilient Practices' (W-SHARP) Project, was designed to increase the resilience of communities threatened by the risk of drought in the Marathwada region of Maharashtra in India. Drought is a significant detriment to Maharashtran communities, with those in Marathwada experiencing more intensive drought periods as of late. The project relied heavily on the participation of women of the Marathwada region, who are singularly the most important facet of this project. Targeted in two administrative units called blocks (Kalamb in Osmanabad district and Deoni in Latur District), this pilot approach has trained 2,000 women farmers on climate-resilient farming and collectively reached out to 10,000 households across 100 villages.

To address the problem of water shortage, UNICEF together with the Government of Maharashtra, implemented the W-SHARP project in the region since 2018. The objective was to strengthen climate-resilient farming practices within the most vulnerable groups and W-SHARP called for the participation of women and vulnerable families as a core feature of the project. The project positioned women as key change agents who were responsible for mobilizing their communities, local bodies, and government institutions for shared causes. Women community leaders, or '*arogya sakhis*', were selected and trained by UNICEF and other implementing partners to promote hygiene, water security and climate-resilient agricultural practices in every village. Designed in alignment with the Swachh Bharat Mission¹ and Jal Shakti Abhiyan², both of which support protecting environmental resources through community-led practices, W-SHARP placed women in the centre of water governance. The innovative approach by the Government of Maharashtra opened avenues for women's empowerment while addressing water scarcity and disaster resilience. The project has ensured that women who suffer the most from the disasters caused by climate change provide solutions to reduce its catastrophic impacts.

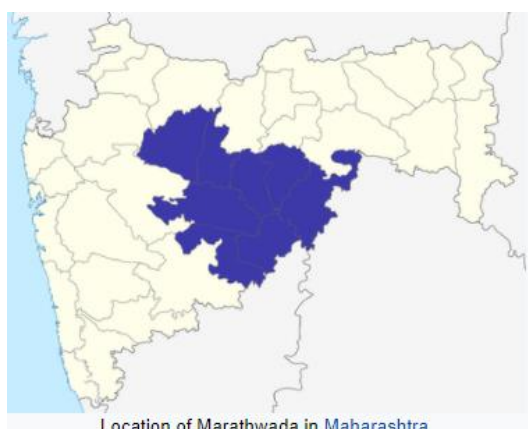
¹ Clean India Mission, a flagship sanitation programme with the objective of making India open defecation free by end of 2019

² A water conservation campaign aimed at promoting better resource management in communities

Introduction

The Marathwada region is situated in the state of Maharashtra, in the Central-Western part of India. Over the past 10 years, this region has suffered from one of the highest rainfall deficits in the country with multiple years of drought. Two districts of Marathwada were particularly hard hit, namely Osmanabad and Latur. These districts suffered tremendous losses of agricultural produce, the agricultural sector as well as the water and sanitation sector were hit hard. Given that the population highly relies on groundwater, either through wells or handpumps, the insufficient quantities of water available during drought, especially for irrigation results in poor nutrition during the lean period, when nearly 40% of households are unable to afford three meals a day, and 20% of these households do not have access to vegetables during this period. Sanitation and hygiene practices have equally been affected by the lack of sufficient water, which had a disproportionate impact on young adolescent girls, who are starting to menstruate, new mothers while caring for children and ensuring personal hygiene.

Figure 1: Location of Marathwada in Maharashtra, India



This also involves drudgery of collection of water from multiple sources during lean period and water scarcity time.

To mitigate the impact of this situation, a coordinated multi-sectoral approach was designed and developed which combined climate-resilient farming practices for production with high nutritional content together with improving the hygiene and sanitation infrastructure and practices through integrated water resource management. Yet, this project is not merely a Water, Sanitation and Hygiene (WASH) or food security project, the fundamental challenge it aims to overcome is the situation of marginalized women. Women are the most affected by the repercussions of climate variability, in addition to being barely recognized as legitimate farmers by their community even though they are essential in all activities of the family unit. While female-headed households grant women some economic power within that scope, they have limited decision-making power and they feel the full brunt of battling food and income security whilst having little power to change their lives. The W-SHARP project has responded to this challenge by positioning women as key change agents in their communities and hence redefining resilience for small and marginal farming households by addressing the complex issues of climate change and gender roles and its impact on water, health, nutrition, sanitation, and hygiene.

Description of Interventions

The project targeted two blocks (district sub-divisions), Kalamb in Osmanabad district, and Deonie in Latur district, reaching out to about 10,000 households in 100 villages. These two blocks had been identified as particularly impacted by climatic adversity, as both had been hit by droughts and Kalamb had further suffered from an earthquake. The project focused on WASH, as well as food security for the most

vulnerable families, which included families with children under the age of five. The project started in May 2018 with a series of capacity building workshops for the arogya sakhis for three months. Simultaneously, a baseline survey was carried out across the selected 100 villages.

The Baseline Survey

To capture the situation on the ground in the two blocks, a baseline survey was conducted to assess the access to WASH facilities and to food during the lean period (March to June). The total sample for the baseline was 2,000 families (including 200 farmer households) in 100 villages. The following data collection methodology and tools were adopted to conduct the baseline survey:

- **Enumerator recruitment:** Selected through a personal interview, *arogya sakhis* and block coordinators were trained, through a series of trainings spread over three months, to become enumerators and dispatched to the villages to collect data.
- **Questionnaire:** The UNICEF team and partners developed a survey questionnaire to map the challenges and bottlenecks faced by the drought-affected communities accessing WASH, nutrition, and health services. The questionnaire was tested on a subset of the intended population (approximately eight people in six villages each) to determine its effectiveness and fine-tune the overall survey protocol based on the initial responses. The questionnaire was used to gather information on household demographics, sanitation infrastructure, water use and access, nutritional needs, agricultural practices, and health status of the respondents. The UNICEF team provided support through training and handholding assistance to the enumerators, including mentoring on research skills such as data gathering techniques, how to ask structured

questions, probing effectively, and asking follow-up questions.

- **Personal interviews and focus-group discussions with communities:** Using a qualitative social research method, the enumerators gathered insights on the effectiveness of policies implemented to mitigate the effects of drought by conducting personal interviews with the affected communities. The interviews probed on to perceptions and experience of climate change and how climate-related trends have impacted and influenced people's lives, both directly and indirectly. Additionally, focus group discussions were organized to identify the challenges the community faces during and after a drought with regards to WASH, nutrition, health, and livelihoods. The focus group discussions were guided by a moderator who facilitated a lively discussion among the communities. Some key findings of the baseline survey are summarized in table 1.

Table 1: Baseline Survey Findings on water availability, access to WASH infrastructure, Food security and community awareness and participation

Water availability
During the dry period, more than 25% of the villages surveyed did not have a regular source of water supply. 84% of farmers faced challenges in irrigating their fields.
Less than 20% of households reported having access to more than one source of drinking water throughout the year.
Although 47% of <i>gram panchayats</i> (group of villages) ³ confirmed practicing some form of water budgeting, this was only carried out during 3-4 months of the lean period.
Water for Health, Sanitation and Hygiene
30% of the population reported cases of diarrhoea in the last six months (monsoon season) due to the contamination of water sources due to the lack of hygiene practices and improper greywater

³ Gram panchayats are a group of villages/hamlets that have elected representatives for a decentralized governance

management. Of these, 13% were children below the age of 5.
82% of households have access to individual toilets (Indian pan toilet), yet 15% of these households were unable to use them throughout the year due to a lack of water availability
19% of respondents said they skipped regular bathing due to a lack of water
50% of female respondents do not use sanitary napkins and depend on reusable cloths during menstruation due to limited awareness, access, and affordability of disposable products
Only 17% of respondents were re-using water for kitchen gardens, toilet usage or cleaning
Food security
60% of households interviewed purchase vegetables from the market during the lean period, only 7% of farmers practice cultivating vegetables during the lean period
39% of households are unable to afford 3 meals a day, out of these 20% do not have access to vegetables during the lean period
79% of farmers confirmed they cultivate cereals and pulses, yet only 0,5% of these reported the availability of these for consumption during the lean period.
91% of adolescent girls were reported to have low haemoglobin levels ⁴ (anaemia) often related to poor dietary habits leading to an iron and Vitamin B12 deficiency
57% of households reported inadequate water for livestock, of these 1% reported distress sale of livestock due to insufficient water and fodder.

The findings from the baseline survey highlighted the following issues:

- Household access to safe and sustainable drinking water, as well as sanitation and hygiene services, was unreliable, in particular during the lean period, disproportionately affecting women and girls.
- Food insecurity affected a significant number of households in particular during the lean

⁴ As reported by the local health centres at the gram panchayat level.

months and the health of adolescent girls was particularly impacted.

- Many households cultivate only cash crops; the cultivation of food crops is minimal. This often leads to household members not eating enough energy-rich foods and has led to malnutrition and anemia in women and children.
- The participation and decision-making of women in community-level activities was marginal yet their role in WASH and food security activities is significant.

From these lessons, it became clear that WASH, food security, and environmental issues were closely interconnected, and a comprehensive plan needed to be developed to tackle all issues simultaneously for a sustainable approach. To initiate the risk-informed planning process, a theory of change (ToC) model was developed, which formulated a collective vision to reach the desired impact. The goal of the W-SHARP project was to establish a gender-equal and resilient community with food and water security in drought-prone areas. The ToC included behaviour change related actions that focus on reducing risks due to drought and climate variability and collective action of women farmers. It also assessed the enabling environment to see if it was equipped to facilitate these changes. In terms of outputs, the ToC aimed to stimulate a change in performance, capacities, skills, power structure, and tools of the target communities with the overall objective of developing drought resilience. To achieve this change in aptitude and attitude towards coping with drought and food insecurity an enabling environment with organizational and technical support, as well as collaborative partnerships at the local level, were identified as fundamental to help meet the overarching goal of the project.

The Project

Project activities were designed to respond to the

issues identified in the ToC and focused specifically on families with specific vulnerabilities (see Box 1 for the criteria) They strongly emphasized behaviour change communication for improved WASH practices, community integration, and leveraging funds through the convergence of state and national flagship programs. At the core, the project aimed to transform women, who struggle to establish their identity at a grassroots level due to patriarchal traditions and gender socialization into leaders.

BOX 1:

SELECTION CRITERIA FOR HOUSEHOLDS (HH) IN THE W-SHARP PROJECT

- HHs with children below 5 years of age
- HHs with adolescent girls
- HHs without landholdings (landless agricultural labourers)
- HHs with less than 2.5 acres of land
- Women-headed households

The activities described above were implemented in 50 villages each in Deoni and Kalamb blocks. These 100 villages were selected based on their existing vulnerabilities as well as the involvement of women in their local governance. In each village, 100 households were selected for the outreach program (see box 1 for selection criteria), in total, the programme implemented outreach activities to 10,000 households. Each block was headed by three female coordinators managing clusters of villages and each village was supported by one *arogya sakhi*, a female facilitator (community animator) for the village.

Table 2: Key activities implemented in the project to achieve W-SHARP’s goal.

Focus Area	Activities
Addressing household water security issues to ensure sustained water, sanitation, and hygiene during the lean period	<ul style="list-style-type: none"> • Community-level awareness-building activities around water collection, storage, and handling on household level (HH level Water Budgeting) and exercises • Water source protection through sanitary surveillance • Promotion of good menstrual hygiene practices for adolescent girls • Training on greywater use and management
Addressing water security through convergence and partnership with existing development schemes at the Gram Panchayat, block and district levels	<ul style="list-style-type: none"> • Facilitate leveraging of funds through national flagship schemes • Facilitate an increase in toilet use and overall community hygiene and installation of handwashing stations in schools • Construction of water-efficient toilets and soak pits through convergence under the Swachh Bharat Mission-Rural (SBM) • Facilitate the participation of women in the Gram Sabha (local governance body)
Improving community resilience for food security and productive use of water through better allocation	<ul style="list-style-type: none"> • Training of women to lead farms, in water-efficient irrigation, and managing micro-enterprises • Adoption of bio-farming methods, such as using vermi-compost and organic fertilizers • Improve the nutritional intake of community members (esp, in households with children under 5) through kitchen gardens
The emergence of trained women community leaders, and providing last mile access to WASH products and services	<ul style="list-style-type: none"> • Promoted women to become farmers from being ‘cultivators’ by challenging patriarchal norms⁵ that opposed land inheritance to women, leaving them unable to access benefits and rights and hindered their agricultural productivity • Establishment of micro-enterprises such as health marts to achieve last-mile service delivery of the agricultural produce • Facilitate partnerships with government and civil society stakeholders for capacity building and networking.

⁵ The Wire (2018): <https://thewire.in/women/women-farmers-agriculture-rights>

About the *arogya sakhis*

'*Arogya sakhi*' translates as 'well-being facilitator and friend', and this is exactly who they are and the role they play within their villages. *Sakhis are the pillars of this project: they have an established relationship with the community members, and they possess sound knowledge of their villages and its members.* For their role in the project, the *arogya sakhis* and block coordinators were remunerated INR 1,000 and INR 5,000 per month respectively (USD 15 to USD 75).

Within the W-SHARP project, the *arogya sakhis* play the role of the facilitators; they are responsible for disseminating knowledge and awareness related to WASH, nutrition security and climate-resilient agricultural practices and connecting to the larger network of the W-SHARP project umbrella. More than the remuneration, the *sakhis* were driven by the respect they were entrusted that not only elevated their social standing, but made their voices heard by assuming leadership roles such as elected representatives of the gram panchayat. Ten out of the 100 *arogya sakhis* became gram panchayat representatives.

Block coordinator (*sakhis*): Deonie and Kalamb blocks both have 3 coordinators each, who induction course prepared and implemented by SSP. This course covered aspects of being a community worker to facilitate the desired changes in their villages. The course provided them with skills necessary to confidently engage with members from their village, as well as expertise in technical areas (Box 2).

oversaw the coordination of the activities led by the *arogya sakhis*. These coordinators were appointed by the Swayam Shikshan Prayog (SSP)⁶ and their tasks include guiding the new *sakhis* in their role and responsibilities and to provide initial support in the relationship-building process within their communities with the village leaders (*sarpanch*), Panchayati Raj Institution, or local governance bodies, representatives and self-help group organizers to explain the planned project activities. These coordinators also play the role of master trainers and they provided trainings to the *sakhis* on leadership development, WASH, nutrition, and bio-farming techniques.

Selection process of the *Arogya Sakhis*: The 100 *Arogya Sakhis*, one per village, were selected through a consultative process based on the following criteria: the candidates should have an open personality, be apolitical, and comfortable working with the local communities. Women candidates demonstrating community leadership were approached to be part of the project. *Arogya Sakhis* were then included through a participatory consultative process by constitutionally elected village institutions in agreement with the SSP and the block coordinators. Following this selection process, the *sakhis*⁷ benefitted from a rigorous 15 days

⁶ SSP is an Indian NGO based in the state of Maharashtra with the mission to promote inclusive, sustainable community development by empowering women in low income climate threatened communities/regions. Swayam Shikshan Prayog repositions women's collectives by training them as farmers and entrepreneurs and thereby increasing their economic and social resilience.

⁷ *Sakhis* were women from the villages where the intervention was ongoing. They were married women from all age groups. They were remunerated INR 2,000 per month for the part-time service that they provided. 1000 per month as fixed and rest 1000 was incentive and performance based

BOX 2:

TRAINING TOPICS FOR THE AROGYA SAKHIS

- Leadership development and responsibilities of *arogya sakhis*
- Orientation on the importance/potential of WASH as a critical pathway to transforming gender relations and supporting women and girls as agents of change to lead healthy lives and participate in social, economic and political activity
- Water budgeting, handling and storage of water and sanitary surveillance
- Nutrition awareness and practices
- Climate resilient agricultural practices
- Grey water use and management
- One-acre mixed cropping method (a type of agriculture that requires planting two or more crops simultaneously in the same field)

Roles and Responsibilities of the sakhis: Once they had the induction course completed, the sakhis were ready to start implementing W-SHARP project activities. The sakhis started to mobilize village groups with active participation of local administrations and commence a discussion about issues in the village; threats and risks the inhabitants face daily. Key topics discussed were water scarcity, open-defecation, cleanliness of the village grounds, and health-related issues, during periods of drought. Indeed, during periods of drought, it was deemed normal for people to compromise on personal hygiene and sanitation, this included a reduction in toilet use and a subsequent rise in diseases from contaminated water caused by poor hygiene practices. The sakhis, as part of the communities they worked in,

understood these situations well, as they themselves were often confronted with the same problems. Another issue faced by many of the community members in the Marathwada region was food insecurity, during drought periods. Along with the health workers, the sakhis promoted healthy and nutritious eating habits among the villagers. Awareness raising is carried out through peer to peer learning and sharing of good practices on climate-resilient agricultural practices, the safe use of greywater and mixed cropping methods. The sakhis are supported in their work by angawadi (pre-school centres) workers, who have many years of experience in combatting malnutrition. Collectively, the sakhis formed a larger network that was supported by the village administration and ASHA workers⁸.

The sakhis' participation in village-level meetings and decision-making processes is pivotal to the success of the W-SHARP project. For the sakhis to carry out their missions, the relationship they build within their communities at the household level, and how they connect this to the local governing bodies is crucial. The sakhis play an important diplomatic role in this sense, ensuring communication lines between these different levels are open, effectively representing the community by being their voice at the Panchayat level, whilst consolidating the relationship with the local governing bodies and representing them back to the community.

⁸ ASHA workers are government appointed village women to ensure health and immunization of children below 6 years of age

BOX 3:

BUILDING SOCIAL CAPITAL: INVESTING IN INDIVIDUALS TO BUILD STRONGER COMMUNITIES

Asha was a young widow with two children and no land holdings. She could have easily been one of the community members reached through the W-SHARP project, yet she took on the challenge to become an *arogya sakhi* herself, as a role model for other women in the village.



Asha is a Sakhi but she also continues to work as a daily wage labourer to support her family. Her determination and personal investment as a Sakhi have been key in her community mobilization efforts and has garnered impressive results as she is widely recognized as a key actor within her village and the W-SHARP community. Thanks to her work with the community on improving water security for her village, her village was awarded USD 8000 for future interventions from the State fund, under the 14th Finance Commission. Her key achievements include:

- *Challenging and raising questions in Gram Sabha meetings to bring change in water allocation*
- *Setting-up a Health Mart to ensure accessibility for village members*
- *Facilitate construction of 150 Soak Pits in Satefal village*
- *Mobilizing 300 women to work for village development activities*
- *Her village was awarded the 3rd best village by the Paani Foundation for its achievements in Sanitation and Hygiene through water budgeting and construction of soak pits.*

W-SHARP activities led by the arogya sakhis

Awareness raising for improved hygiene, sanitation, menstrual hygiene and nutrition:

During their induction, the *arogya sakhis* received comprehensive training on hygiene and sanitation, as well as nutrition issues. They were provided with information, education, and communication materials (IEC) in addition to social and behavioural change communication (SBCC) materials. These materials were used by the *sakhis* during their meetings with the community members to impart knowledge and generate awareness. They were used at the household level where meetings were held every month with discussions focused on handwashing

with soap at key times, the dangers of open defecation, and proper toilet usage. The communication materials were also used in schools and Anganwadis⁹ where each *sakhi* invested time to build a rapport with the school children and promote hygienic practices. As the *sakhis* became familiar with the girls in the school, it allowed them to talk freely about menstruation. Adolescent girls outside of the school system within the village were also targeted. An open dialogue was created with these girls about safe menstrual practices, stressing the importance of a nutritious diet to stay healthy, talking about safe methods to dispose of menstrual waste and breaking myths around menstruation.

⁹ Rural childcare centers

Safe household water management: The *sakhis* mobilized women's groups and led discussions concerning water collection, storage, and handling practices at the household level. As the *Sakhis* benefitted from intensive training on these topics, they were able to convey information to the participants in their own words and explain the importance of safe and hygienic practices, including safe drinking water management and storage. Topics discussed were:

- Dos and don'ts for the handling of drinking water
- Use of proper utensils for handling water, such as using a ladle and covering the water jug
- Water purification at the household level, use of chlorination tablets for purification
- Identifying visible particles/ pollutants in drinking water
- Hygienic storage of drinking water

This was the first step to building drinking water safety. Availability of treatment products, sold at the Health Marts, further played a key role in the promotion of safe drinking water practices.

Water budgeting: The concept of water budgeting and daily water use, for personal and work purposes, were introduced to the communities by the *Arogya sakhis* through simple planning and assessment exercises on water consumption within the household and roles played by each member to collect and conserve water. The *Arogya sakhis* sat with a member of each household (usually women) and a consumption and savings plan during dry periods and regular seasons was developed based on the number of family members within the household, key areas of water consumption, and the identification of areas, where water can be re-used and re-allocated for optimum utilization. This technique was used throughout the project with positive feedback from the women in both blocks. See Box 4 for an example of this exercise.

BOX 4.

Water Budgeting exercise

"I sat with each one of the women from selected households and understood how they use their water for each activity like cooking, washing, toilet usage, etc. it is an essential exercise as we only get a limited amount of water in this village. A lot of households were throwing away wastewater after a single use. The exercise provides them a perspective on their own usage, helping them allocate water better. While some used the water for the kitchen garden leading to additional nutrients, for some it was simply more water for a longer period of time."

- Arogya Sakhi, Bhatshirpura village, Kalamb block, Osmanabad

Part of the discussions on the topic of water budgeting was the reuse of greywater (non-faecal wastewater, such as used water from kitchens, bathrooms, and cleaning processes). Re-using this water means treating it before letting it out into the surrounding areas, such as kitchen gardens. Households with enough garden space were recommended to develop kitchen gardens and grow vegetables, in this way water management also contributed to improved nutrition. Those with less space were provided with small plastic containers to grow vegetables around their homes. The construction of soak pits or recharge pits was also proposed for greywater management. Soak pits are covered, porous-walled chambers that allow water to slowly soak into the ground. It is filled with stones of various sizes to ensure even distribution of the water throughout the pit. The construction of soak pits was encouraged to prevent the accumulation of stagnant water around houses, which can quickly become a health hazard, but also to recharge groundwater levels within the communities.

Kitchen gardening, animal husbandry, and mixed-crop farming: As mentioned above, the

objective of the promotion of kitchen gardening is two-fold: the efficient use of greywater as well as the introduction of additional high-value nutritional food items, such as fruits and vegetables that are often missing during lean periods. The following farming methods were promoted and proposed as solutions to the small and marginal farmers:

- Diversification of food crops of five to seven varieties: pulses, cereals, vegetables, oilseeds, etc.).
- Using easily available local and traditional seeds.
- Water management systems using drip, sprinklers, and drainpipes as well as water conservation structures such as farm ponds, farm ditches, rainwater harvesting, and well-recharge.
- Use of bio-fertilizers such as cow dung, slurry or vermi-compost.
- Use of bio-insecticides over chemical pesticides.

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Growing their own fruit and vegetables reduced the households' dependency on purchasing vegetables. The *Sakhis* were instrumental in promoting the kitchen gardens during their meetings and upon observation of the benefits, more women reached out to the *sakhis* to help them in obtaining the necessary seeds. Hence,

the *Sakhis* came up with the idea of developing a kitchen garden kit to encourage the practice of kitchen gardening. The kit contains 12 varieties of nutritious local seeds and 3kg of organic, vermi-compost fertilizer, put together with the support of health marts. Each kit was sold at an affordable price of INR 50 (less than a US dollar) on a 'no-profit-no-loss' basis.

During periods of drought, it is not uncommon for farmers to sell their livestock, as they are unable to feed the animals. To prevent hardship livestock selling, the W-SHARP project has been promoting the farming of Azolla fodder, a water-efficient crop, under the climate-resilient farming activity group. Azolla has high protein content which improves the quality of the milk and is replenishing the livestock's need for excess water.

The Marathwada region is particularly affected by food insecurity due to harsh droughts and crops typical for the region, such as *kharif* (monsoon) and *rabi* (winter) have been massively impacted. However, this is not the only reason for food insecurity; the intensification of cash crop cultivation instead of food crops has impacted food security and consequently led to malnutrition. For this reason, one of the key components of the W-SHARP project was to train in climate-resilient farming methods and make them economically self-reliant.

Moreover, women farmers were encouraged to gain cultivation rights to grow food crops. This often started with women cultivating a small piece of land, where they would make the decisions on what to cultivate, what to sell, and where and what to keep for themselves. Women farmers trained by the *sakhis* used water-efficient farming methods as well as cultivating a mixture of crops such as vegetables, millets, cereals, and pulses which improved household food security levels. Gradually, the households realized the benefit of cultivating food crops as well as cash crops instead of cash crops only.

¹⁰ The supplies were procured through a combination of thrift, credit and bulk purchasing from the wholesale market and

Health Marts: Health marts were introduced to improve access at the local level to some key items needed to implement the W-SHARP activities. The *sakhis* became a focal point for this and made the decision on where the health mart would be most useful, either at their homes or in a key place within the village. Daily hygiene essentials such as soaps, sanitary napkins, chlorination solutions, vermi-compost beds, and nutrition supplements were procured centrally and sold to customers through health marts by *sakhis*, which made them earn a nominal profit¹⁰. The availability of these items at a local level has meant that women of the village do not need to go far for these basic items as they are readily available. In turn, this has also developed the entrepreneurial skills of the *sakhis* who can develop these Health Marts further to include other items that are essential for local village women. Health Marts also acted as a thrift and credit society to support the members with seed loans.

Developing networks and partnerships: The W-SHARP project was built on the premise that it would thrive through the development and consolidation of networks and partnerships. The relationships created by the *arogya sakhis* at the village, block, and district level are crucial to the success of the project as they are part of their support system. A relationship of trust was built with the various local stakeholders which helped them gain both a voice and credibility at the local decision-making platforms. Participation in multi-stakeholders' meetings informed the *sakhis* of the financial avenues they could leverage from the existing social protection schemes, such as a subsidy of INR 12,000 (approximately USD 160) granted for constructing a toilet per household, or livelihood opportunities offered under the National Rural Employment Guarantee Scheme. The W-SHARP project, by way of the *Sakhis*, did build bridges between existing national and state schemes developed to support local communities and the target communities. Without the help from the *Sakhis* in applying for funding from these schemes, the local communities often do not feel

then were sold in the villages with a profit margin by the *sakhis*.

confident to take on the procedures themselves. The *sakhis*, with support from their local network, were able to ensure that their communities can benefit from these types of schemes.

Monitoring activities: Sanitary surveillance and the ‘seven-star model’: The W-SHARP project integrated an internal monitoring component: sanitary surveillance. This activity ensured that water sources were well maintained and free from contamination. This involved periodic monitoring of communal water sources as well as the maintenance and overall hygiene of the village. The process is headed by the Arogya block supervisor, the village *arogya sakhi*, who is supported by 5-10 women leaders and the *jal doot*, who is the Panchayat appointed person responsible for water source maintenance. It is a means to assess the cleanliness and management of the water source and used to carry out in-depth cleaning of the water source area and the equipment employed.

Photo 1: Women engaged in climate resilient farmland



Source: (credits: Swayam Shikshan Prayog)

Another internal monitoring tool the project developed was the seven-star model. This tool is used by the *arogya sakhis* to promote good WASH practices at the household level through recognition and reward. Each star in the seven-star model stands for the achievement of a WASH

objective or a step towards achieving this objective (Box 5 for the seven-star model details). When a household can demonstrate that they have attained an objective, the *arogya sakhi* confers a star to the household in a small ceremony in the presence of the neighbours. This motivates other women in the village to work towards attaining a similar status, thereby improving the village’s overall WASH situation. The goal is for all households to become 7-star households, which would lead to the village to be designated a seven-star village.

BOX 5.

INDICATORS FOR THE REWARD OF STARS ON VILLAGE OR HOUSEHOLD LEVEL

1. Handwashing: Frequency of washing hands (before and after toilet usage and meals) and availability of soap in households
2. Drinking water safety: Number of safe drinking water sources in the vicinity of their households
3. Grey water management: Number of households effectively managing greywater, whether using the greywater in kitchen gardens or discharging it in toilet soak pits
4. Women’s health and hygiene: Menstrual hygiene practices followed by the women in the family and number of visits made by the woman and child to the local health centre
5. Waste disposal: Presence of adequate dustbins or waste disposal systems in their village, and whether they segregate dry and liquid waste
6. Toilet usage: Availability of a functional toilet used by entire family
7. Nutritional awareness: Availability and easy access to food, consumption of naturally produced food and the families diet constitution.

Table 3: Quantitative results of the W-SHARP project

Household/community water security for sustained water and sanitation & hygiene in lean period
<ul style="list-style-type: none"> ▪ Water budgeting active in 10,000 households ▪ 1,392 soak pits constructed in 100 villages ▪ 10 sakhis became elected local panchayat members ▪ 28 hand washing stations set up in various schools across the two blocks ▪ 172 community water sources cleaned and purified through regular sanitary surveillance ▪ 102 community water sources marked as safe water sources ▪ 80% increase in toilet usage
Water security through the convergence of various development schemes at the Gram Panchayat, block and district level
<ul style="list-style-type: none"> ▪ USD 89,613 (INR 6,350,000) has been converged under the national flagship programmes such as SBM(G), MGNREGA and via ATMA linkages ▪ 62 village groups linked under ATMA agricultural initiatives
Community resilience towards food security and productive use of water through better allocation
<ul style="list-style-type: none"> ▪ 2000 women farmers received land rights for 1-acre farming model ▪ 2,000 women farmers trained on climate resilient farming ▪ 1,735 women farmers practicing mixed crop farming ▪ 124 vermi compost beds installed ▪ 2,650 families cultivating less water-intensive fodder and practice water allocation for livestock ▪ 1,470 families led by women and adolescent girls cultivated kitchen garden for household consumption
Trained women community leaders; providing last-mile access to WASH products and services
<ul style="list-style-type: none"> ▪ A cadre of 100 <i>arogya sakhis</i> developed, of which 10 were elected to leadership positions within Gram Panchayats, with 6 coordinators ▪ 500 women leaders emerged under the guidance of <i>arogya sakhis</i> ▪ 400 community awareness meetings held ▪ 112 village advocacy meetings held ▪ 89 health marts set up across 100 villages ▪ Products worth USD 17,640 sold through health marts

Outcomes

The key achievements of the W-SHARP project in the two blocks of Kalamb and Osmanabad are given in Table 2 below. The cadre of 100 *sakhis* and 6 coordinators, who were trained to be leaders, improved not only their societal position but also contributed significantly in achieving the following outputs:

Lessons Learned

The positive stories and examples of how the W-SHARP project, and especially the *arogya sakhis* have improved the lives of the households in their respective villages have been numerous. However, in initial days Sakhis also struggled with acceptance by community and political leaders. The *sakhis*, due to their continued presence in the village and proximity to household members of their villages, have been able to have regular meetings with their fellow community members to promote the W-SHARP agenda. They have also been able to take advantage of informal chats and discussions with other women to advance the ideas of the project. This was specifically the case for the discussions around menstrual hygiene, which is often a taboo topic. Yet, the *sakhis* have been able to debunk long-held preconceived notions and myths surrounding menstruation, pointing out the orthodox views and unsanitary practices, demystifying menstruation, and proposing more hygienic and sanitary practices. This has particularly had a lasting impact on young adolescent girls, who needed to be able to talk openly about menstruation and ask questions, as this is often not done in their own homes.

It was witnessed that the *sakhis* have set an example for other village women that their voices can be heard, they have encouraged and empowered women to get out of their homes and participate in village affairs by demonstrating their leadership in community meetings, house to house visits and be part of political platforms, contenting for local body elections. This was a big step towards increasing the participation of women at the Gram Panchayat level and beyond and has changed perceptions of men and women

and the role women can play in local governance matters.

The W-SHARP project has emphasized the need to invest in district level capacity building; strengthening the capacity of Self-Help Groups (SHGs), collectives, village frontline workers like the *aroyga sakhis* and members of the Panchayats, to develop and implement district plans. This has influenced and impacted policy level discussions at the state level, and they in turn are now inviting the participation of districts in voicing their concerns and joining in the discussions.

The communication and awareness-raising messages used by the *sakhis* in their day to day WASH promotion need to include more information on how the project activities are supported by the government and health officials and not only driven by the local community facilitators. This would bring more credibility to the messages promoted by the *sakhis*. Ad hoc interventions by government leaders and health professionals at the block level may help in reasserting these links.

Although the project does carry out internal monitoring and evaluation activities through the sanitary surveillance and seven-star model, routine analysis of monthly data and supportive supervision visits are important to assess the quality of data and identify reporting errors. Localized climate-resilient indicators should be included in local Management Information Systems (MIS) to track progress more effectively.

Next Steps

The W-SHARP project activities and its positive outcomes have demonstrated that the training of *Aroyga Sakhis* and the activities they carry out presents an opportunity for replication and scaling-up in other districts and states. The current model of social mobilization, although dependent on funding for training and equipping women with skills and communication tools, has been successful in building the *Sakhis* confidence and developing them into full-fledged community

leaders, who can effectively catalyze development. The process of this growth for the *sakhis* has been crucial: they have been given the ability to make strategic choices in a context, where it was previously denied to them due to the socio-economic systems within their society. Currently, the project is proposed to be scaled-up in three additional districts in the Marathwada region, with a major component of COVID-19 management being incorporated in its activities. In subsequent phases of the project, the following recommendations could strengthen project implementation:

- Water insecurity is a fundamental issue faced by many of these communities. A greater focus on how to ensure water-use efficiency both at household and agricultural levels should be developed further.
- Using the best practices that have emerged from the W-SHARP project will create demand from other farmers. Study tours and demonstration projects should be considered to transfer knowledge to farmers, local stakeholders, and policymakers.
- The acquisition of land by female landless agricultural workers for climate resilient multi cropping demonstrated in the W-SHARP project that women with small landholdings can considerably improve the economic wellbeing and prosperity of their family in other drought affected areas of Maharashtra and India.
- Information flow between local on the ground experiences and government level schemes must be improved if the processes put in place by the W-SHARP project are to be scaled-up, too often projects are still confronted by a top-down approach by government and a bottom-up approach by farmers, processes need to be revised to align interests and opportunities.

References

Findings of the baseline survey conducted by UNICEF Maharashtra and Swayam Shikshan Prayog <https://unicef.sharepoint.com/:b:/t/IND-KM/EZEPkpAHY1FNrlc-r0DNErABrU6WLkr4KXTE3BpBRDN4Tg?e=tlaxfq>

Research pieces on mixed cropping methods: <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/mixed-cropping>

Swayam Shikshan Prayog: <https://swayamshikshanprayog.org>

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