



# KEY INITIATIVES

DECEMBER 2019 - JANUARY 2021



## Overview

This report explores the various initiatives and activities undertaken by Paani Foundation from December 2019 to January 2021. The COVID-19 pandemic, subsequent lockdown and social distancing norms brought with them an uncertain, unprecedented time for organisations such as ours, whose work is wholly on ground, and shaped by a bottom-up model of creating social change. Despite several hardships, as this report details, the people's movement against drought persisted in new, creative and inspiring ways - proving that the groundwork laid since 2016 is robust and that months ahead will see this movement flourishing and thriving in bigger ways.

Here are the key moments of our journey this year:

### **1. Flagging off a new competition: The Satyamev Jayate Samruddha Gaon Spardha**

From 2016-2019, thousands of villages in Maharashtra participated in the [Satyamev Jayate Water Cup](#), a competition for the best and maximum work on soil and water conservation. The Water Cup was really a means to an end. It was a way of mobilizing the creative energy of villagers in order to drought proof their villages. It was an attempt to create a people's movement to fight drought by turning the work into a joyful activity, by 'gamifying' the solution.

At the heart of the method was training. Over 51,000 villagers took part in our four-day training and were empowered with social and technical skills in the science of watershed management. These trainees went back and inspired their villages further, to lead a thriving people's movement against drought. Over 6,000 villages became a part of this movement over 4 years. Most importantly, lakhs of villagers participated on a voluntary basis.

And as lakhs united in this fight, barriers of politics, gender, caste, class and religion were shattered. Their unyielding efforts created over 550 billion litres of water storage capacity in the state. Several villages drastically increased their water conservation capacity.

However, as water availability increased so did its usage.

In some villages, the area under water-intensive crops grew, and the rate of water extraction shot up. With this indiscriminate water usage, man-made drought struck again as summer approached.

This reality made it clear that working on water and soil conservation alone cannot insulate a village against drought. Moreover, the crisis of climate change further exacerbated agricultural uncertainties and drought.

Therefore, after consulting with several experts and veterans in the field, Paani Foundation took the bold and critical step to deepen the scope of work, and launch a new competition aimed at achieving this.

With this in mind, the Satyamev Jayate Samruddha Gaon Spardha was launched in 2020 to inspire villages to adopt a more comprehensive approach towards uprooting drought.

In 2020-2021, a total of 944 villages across [39 talukas](#) are participating in this competition. These villages have also gone through two phases of their self-nomination process, and submitted both Form 1 and Form 2, required as per the Spardha's guidelines.



The work required to be done in the Spardha is extremely demanding and requires strong volunteer groups in the village. Moreover, villages will need to be doubly motivated owing to this being the pilot year of the competition, and that too during a global pandemic.

Therefore, we have narrowed the participation geography, and the 944 villages which are currently a part of the competition have secured this place based on the quality and consistency of their work done in the Water Cup held from 2016-19.

The primary mission of the Spardha is to transform rural ecology and the rural economy in Maharashtra, and empower citizens to create the village of their dreams. Its central focus is on sustainable water use and environmental restoration.

This focus and the below key aspects are the cornerstone of the Spardha as they have been historically critical in boosting rural ecology and the rural economy.

## Key Aspects of the Spardha:



Soil and Water  
Conservation



Water  
Management



Restoring  
Soil Health



Tree and Forest  
Cover Increase



Creating Protected  
Grasslands



Increasing  
Family Income

To sum up this section, the Spardha will build on the social capital of the Water Cup. It will create a cadre of village volunteers armed with extensive knowledge and skill sets necessary to create model villages. It will nurture and further grow a people's movement to create prosperous and drought-free villages.



## 2. Training Programme: Focus on Demand Management & Ecological Restoration

Since its inception, Paani Foundation has focused on mobilising villages, harnessing a strong sense of ownership and social unity, and motivating them towards action. Our training has consistently played the biggest role in making this possible.

For the Samruddha Gaon Spardha, we have created a training programme from scratch, focused on aspects necessary for demand management of water and environment restoration. The core driving principle of this training is to foster a deep, emotional and concrete understanding of how ecological resources are shared resources. The training also aims to solve the problem of managing these shared resources, since they are often neglected or misused, as our tendency as humans is to care only about what we individually own. Whether it is water, forests or pastures, the foundation has to be built on managing ecological resources in a sustainable way and treating them as precious community resources.

Like the Water Cup training, this programme too is in line with our mission of linking knowledge with direct action.

### To list some key activities and experiences:

- **Welcome to Your Dream Village:** This is an immersive, meditative activity where villagers are guided by a soundscape and voiceover, to visualise and imagine their dream village. In the training of the trainers, this session left many in tears.
- **Climate Change:** Through films and activities, it is shown how climate change is the deadliest crisis facing the planet today. Once the possible consequences and real-life impacts are seen, it is crystal clear that it has never been more important than now to work towards ecological restoration.
- **Crop Planning:** Through an interactive and strategy-focused activity on crop planning, trainees are taught how to calculate crop revenue and crop profit *per litre* of water used. This activity shows that some water-guzzling crops, which are usually more profitable in terms of revenue, have a poor rupee / litre ratio. However, water-efficient crops, which may get lesser revenue at the market, have a better rupee / litre ratio, and they also ensure that the farmer has more water available at the end of a crop cycle. This water can help farmers take up additional crops, pursue allied livelihoods or ensure that they don't have to be tanker dependent. At the end of the activities around crop planning, trainees understand how to gauge the water-efficiency and true profitability of a crop.

- **Bhujal Bhauki ('The Groundwater Brotherhood')**: Through a session led by a 3D model simulation, trainees listen to a story of three farmers in a village who share the same aquifer. As the story progresses, trainees visually observe how one person's water usage impacts the other two. The story is humorous and mimics real-life situations in a village. Towards the end, it is evident that co-operation is the way forward, and not competition, when it comes to water management.



- **The Anatomy of a Well:** Through an interactive and engaging field visit, trainees are taught how to identify which wells share the same aquifer. This activity translates the conceptual understanding to action, and gives villages tools to understand which farmers need to specifically work together to plan their usage of water.



In December 2019, an introduction to the Samruddha Gaon Spardha was given to over 60 members of Paani Foundation's team, comprising Regional Co-ordinators, Taluka Co-ordinators and members of the Mumbai and Pune offices. This three-day training and discussion, held at the Snehalaya campus, in Ahmadnagar district.

In the first week of February, a pilot of the four-day residential training on demand management and ecological restoration was conducted with over 70 team members of Paani Foundation. This was hosted at the training centre at Ralegan Siddhi in Ahmadnagar district, and served as a fantastic learning and team building opportunity.

In the remaining three weeks of February, 107 Social and Technical Trainers were trained to conduct the four-day residential training, and were allocated talukas to work in, starting March. Simultaneously, towards the end of February, this training was piloted with 30 villagers from 5 villages. The training modules were refined and finalised after this pilot, with relevant feedback incorporated.

### **3. Nisargachi Dhamaal Shala: Creating 30,000 New Eco Ambassadors**

After a robust training of 128 trainers in December 2019, Paani Foundation's beloved and popular school programme launched its second edition in the months of January and February 2020.

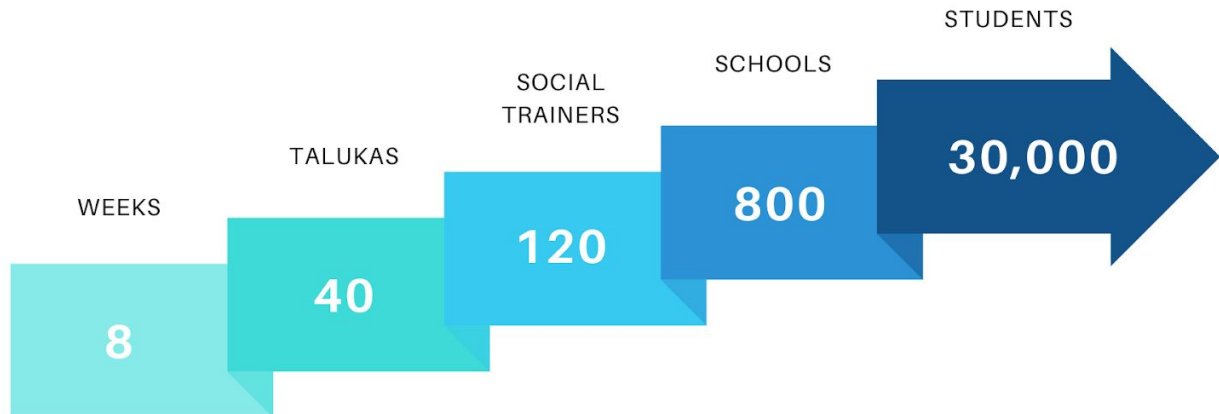
This programme was initially launched in January 2019, and has been created with the mission of sensitising students on crucial environmental issues, and inspiring direct action. No textbooks, homework or exams are involved, and the programme is free of cost. This is an emotional experience that educates and instills love towards nature.

For 2020, a six-day workshop was created with 3 completely new sessions to discuss the concepts of evolution, ecosystem, water, climate change, watershed management and other solutions, and collective efforts towards conservation. These new topics were specifically chosen as they reflect the ethos and pillars of the upcoming Satyamev Jayate Samruddha Gaon Spardha. Keeping the fun aspect of the workshop intact, we focused on emotionally bringing alive a narrative that contextualizes the place of human beings and the repercussions of our actions on our planet Earth.

The programme was rolled out in the villages eligible to participate in the Spardha, across 39 talukas in Maharashtra.

## SCHOOL PROGRAMME SCALE

JAN - FEB 2020



**If we combine this with the scale achieved last year, the total impact in numbers stands at 65,000+ students, from almost 2,000 rural schools, across 76 talukas of Maharashtra.**

**Here are glimpses of the sessions from 2020:**

**Session 1 - 'When Did We Get Here?':** In session 1, students learn about the evolution of the Earth and how humans arrived at the very end. The knowledge that Earth and other life forms have been around for centuries before humans, is a humbling revelation and creates a sense of awe towards nature. This session also provides a solid foundation for the rest of the workshop.





**Session 2 - Ecosystem:** After establishing just how recent human history has been on Earth, students learn about their interdependence between humans and the environment. This session comprises an emotional role play activity, an 'Ecosystem Musical Chairs' game and a screening of a powerful film. The Musical Chairs game is arguably the most entertaining game with a crucial lesson - every human action has far-reaching effects on the environment which are not always visible. A story of destruction of an ecosystem has been specifically written and set to tune for this activity. Each chair in the game is an element of the ecosystem. Every round, one element gets eliminated. Students must identify the secure chairs or be eliminated. After all the elements are destroyed, only the Human chair survives. But, can humans live without the environment?





**Session 3 - Water:** The third day of the workshop dives deep into the topic of water focusing on its indispensability, availability, and pollution. Through a fun physical activity, an experiment and a powerful film, students learn about how everything human-made requires water, and how humans have mistreated this precious resource despite how crucial and scarce it is.





**Session 4 - Climate Change:** Students learn about the biggest crisis faced by the Earth today. Through an emotional game led by a story, a simulation of a world devastated by climate change is unravelled, and the students physically experience land slipping beneath their feet. They learn about the painful reality of losing land, resources and life to climate change. After experiencing how this catastrophic reality could be like, they watch a moving and powerful film on the real-life impact of this crisis on walruses, whose natural habitat - sea ice - is melting on account of climate change, thus jeopardising their lives. This session ends on a sombre note, with moving discussions and realisations.



### Sessions 5 and 6 - What can we do and how?

The last two sessions of the programme focus on practical, doable solutions to address these grave issues facing our planet. Students are also introduced to the Samruddha Gaon Spardha as a means to be a part of a solution-focused people's movement that's working for the environment. Students are taught the fundamentals of watershed management through a fun physical activity; taught about the importance of grass via an experiment-led film; given examples of other children who have become changemakers in their villages, and taught about the vital importance of co-operation over competition through a strategy game. These learnings and solutions act as a starting toolkit for students to implement their learning into action.





### From Students to Changemakers:

Post this 6-day workshop, students across 39 talukas responded with heart-warming enthusiasm and sincerity. Seed banks and nurseries were created, trees in the school yard were adopted, and awareness rallies were organized in response to the school programme. Students put up street plays, wrote poems and songs, and expressed their earnest feelings towards the environment in incredibly beautiful paintings and posters.

Teachers were also impacted and played the crucial role of encouraging children. In a village in Buldhana district, teachers opted to share public transport, to reduce their carbon footprint. In a school in Akola district, students created a compost pit in their school campus. And in Beed district, students staged a demonstration and snatched axes from their parents to set an example against deforestation. Many such impact stories emerged across 39 talukas.



#### **4. Setting up Training Centres**

In February and in early March, our team also worked to set up 16 fully functional training centres.

Each centre accounted for:

- Safe, hygienic and comfortable living quarters for male trainees, female trainees and all trainers
- Safe and hygienic washrooms for male and female members, considering availability of water and sanitation facilities
- Training halls big enough to accommodate at least 50 people
- Outdoor spaces to carry out physical games and activities
- Facilities in terms of storing training material
- Feasibility of resources in terms of field visits
- Comfort and feasibility of the host village

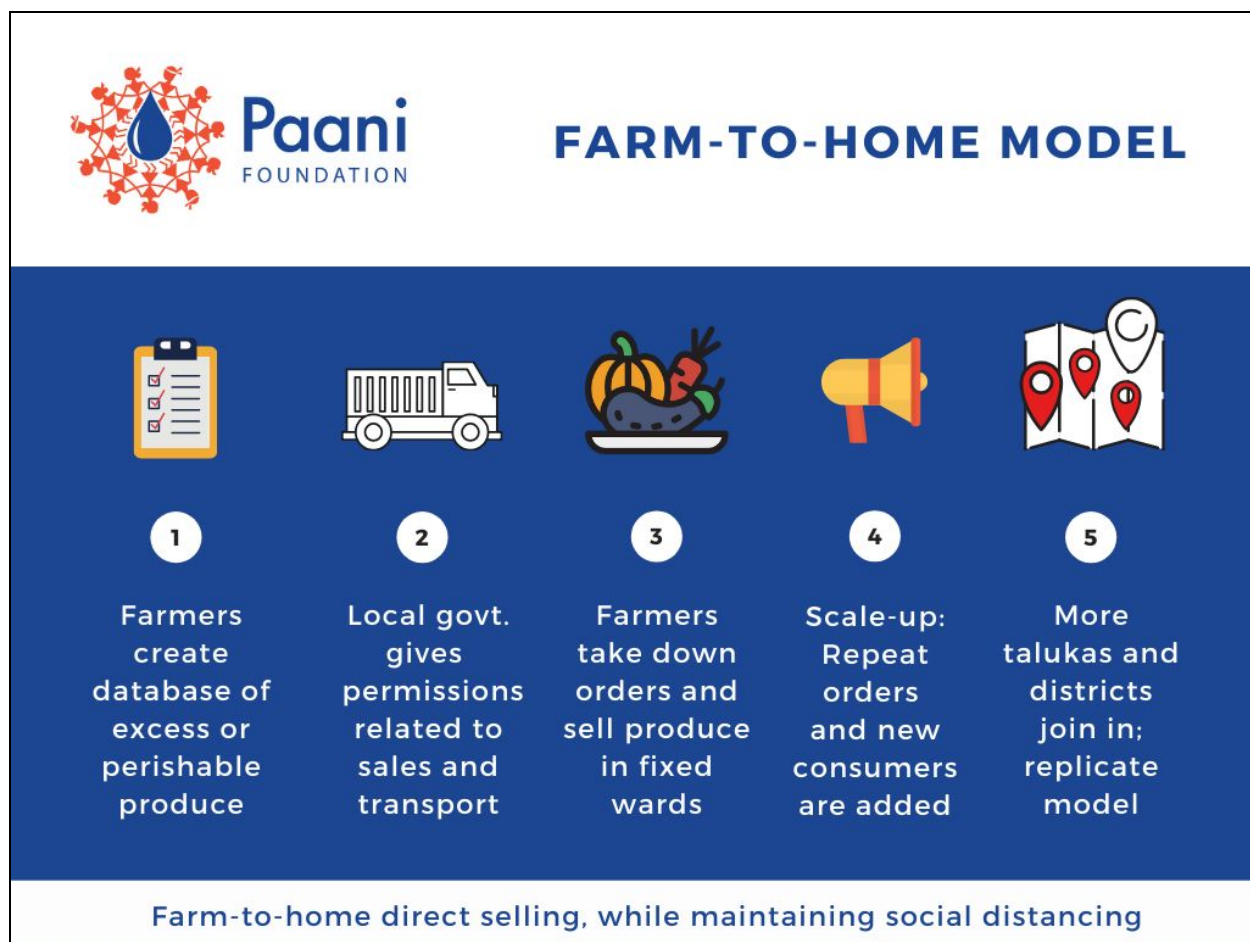
All centres were scheduled to host simultaneous trainings starting March 13, 2020. The planning had been to host almost 5,000 villagers from over 1,000 villages in the months of March and April. However, the training had to be postponed, owing to the COVID-19 pandemic starting to spread in India, around mid-March.

#### **5. Key Lockdown Activity: Farmers Turn Entrepreneurs, Deliver Direct-to-Consumer**

The lockdown towards the end of March gripped several farmers in an unforeseen crisis. Despite agricultural services being essential in the lockdown, farmers faced a disruption of supply chains and increased market uncertainty. Truck owners were not as accessible as earlier to ferry produce, middlemen offered unfair prices, and migrant labourers working on farms were forced to return home. As a result, several farmers were left with the clock ticking on perishable produce. Many also had excess grains or pulses, or were anxious about the upcoming harvest.

As word reached Paani Foundation's Chief Advisor, Dr. Avinash Pol, this unprecedented challenge began to transform into an unprecedented opportunity. Under Dr. Pol's guidance, farmers in Koregaon taluka (Satara district), started executing a farmer-to-consumer delivery model. First, they created a database of excess or perishable produce. Armed with this information, work began on two fronts: (1) Collaboration with local government and (2) Finding assured customers in Satara city.

With the support of the local government, Paani Foundation's team secured necessary transit permissions in just two days. Wards in Satara were allocated for selling produce, and vehicles were rented. Next, donning the role of salespersons, farmers contacted families in the city, promised delivery of fresh produce, and listed down their requirements.



On day 1, farmers in four vehicles drove down from Nhavi Budruk village (Water Cup 2018, Koregaon taluka 2nd prize winner), and flagged off this innovative model. As days passed, sales picked up with the customers' growing trust. During Ramzaan, farmers in Satara were selling over 4 ton of fresh produce every single day, without the help of a single middleman.

As an added bonus, farmers helped each other harvest, load and sell produce, and found confidence in this shared success. The removal of middlemen ensured a win-win scenario economically. Farmers got more of their hard-earned due, while customers got more reasonable rates. In the month of April alone, farmers in Nhavi Budruk village, from where this model started in Satara, collectively earned a total of Rs. 11,91,580.



The success of the Satara model inspired farmers in other talukas associated with Paani Foundation, to experiment with similar models.

**To sum up some successful initiatives:**

- **Socially Distant Farmer's Market in Akola district:** In Barshitakli taluka, Paani Foundation's team worked with the agriculture department, police department, ATMA society, and revenue department, to set up a farmer's market.
- **Farm-to-Home Model in Akola district:** 17 villages participating in the Samruddha Gaon Spardha sold 652 quintals (65,200 kg) of produce in Akola city, in just the first month of the lockdown. This was done direct-to-consumer, without the support of a single middleman.
- **Farmer's Market in Girgaon Mumbai:** Farmers from Karjule Harya village in Parner taluka (Ahmadnagar district), set up a small market in a housing society in Mumbai's Girgaon area. In each visit, produce worth Rs. 40,000 was sold in less than a day. Within just a few trips, farmers collectively earned over Rs. 5 lakh! Inspired by this, women from an SHG in a nearby village, also sent items made by them, to be sold alongside fresh produce. Their snacks, pickles and bhel mixtures were a big hit.
- **Farm-to-Home Initiatives in Sangli:** In Atpadi taluka, Sangli district, five villages were engaged in farm-to-home initiatives. From these, farmers from Jambhulani village, a participant of the Samruddha Gaon Spardha, found customers in Mumbai, Navi Mumbai, Chinchwad and Pune. In just eight trips, they sold Rs. 6,37,650 worth of produce.
- **Success in Marathwada:** With the farm-to-home model, farmers from nine villages in Khultabad and Phulambri taluka, collectively achieved earnings of Rs. 11 lakh 80 thousand! Paani Foundation's team co-ordinated with the ATMA department to secure necessary permissions and a list of housing societies in Aurangabad city, where fresh produce could be sold twice a week.

At the heart of Paani Foundation's work in Maharashtra, is fostering social unity and empowering citizens to solve their own problems with entrepreneurial zeal. The work done as part of the Water Cup has created a culture that re-inforces the power of co-operation over competition. This farm-to-home model was fuelled by the same principles, combined with the effective use of technology.

In the coming months, Paani Foundation will work on striking partnerships with retail platforms, corporates, government agencies, FPOs etc., and scale this model, to create a basis for increasing family income, as part of the Samruddha Gaon Spardha.



## In Photos: The Farm-to-Home Model in Action

### 1. Farmers set off from Nhavi Budruk and sell their produce in Satara city:



### 2. A glimpse of the socially distant farmer's market set up in Akola district:





**3. Farmers from Jambhulani make vegetable kits, to sell to customers in Sangli district:**



**4. Farmer's market set up in Girgaon, Mumbai:**



## 6. Relief for Migrant Labourers: Watershed Management Amid Lockdown

As India went under lockdown, several villagers originally from areas such as Melghat (comprising Dharni and Chikhaldara talukas), were forced to undertake arduous journeys back home - via multiple means of transport, and on foot. Moreover, residents needing to find work in cities, found themselves stuck at home, with no means of employment.

With the aim to ease the situation to the extent possible, Paani Foundation's on-ground team took this matter to the BDO, tehsildar and officers in-charge of MGNREGA in the region. Within a few days, with the paperwork in place, several labourers found work in their own villages.

In Chikhaldara and Dharni, under the MGNREGA scheme, over 2,300 workers were engaged in several watershed management and environment restoration efforts - such as watering saplings, building CCTs, loose boulder structures, compartment bunding, etc. Similarly, hundreds of other villagers found work in their own villages, in other talukas participating in the Samruddha Gaon Spardha. Paani Foundation's team co-ordinated multiple such efforts across 39 talukas.



*Daily wage labourers in Mehriam, Chikhaldara taluka (also the village which won a taluka prize in Water Cup 2018). All workers ensure they wear masks, practise social distancing and sanitise their hands.*



## **7. Digitisation of Trainings and Partnership with Vedantu**

As the lockdown progressed and Maharashtra emerged as one of the worst affected COVID states, we took a critical step to ensure that the core aspect of our work, i.e., training, can continue in a safe yet impactful and effective manner this year.

Our training team worked on digitising our training programme, and rigorously tested content with the aim of creating the same impact online. Activities, games and materials were redesigned or created from scratch, keeping in mind the socially distant and online nature of the training.

Moreover, we carefully selected a platform to conduct the trainings. As we know, when it comes to online trainings, the impact is directly proportional to not only the effectiveness of the content, but also the effectiveness and features provided by the chosen online training platform.

With this in mind, we partnered with Vedantu.com, one of India's most trusted and leading online teaching platforms, which currently engages with over 1 million students online, across 500 cities worldwide. With cutting-edge technology, Vedantu offers live classes at lower bandwidths compared to Zoom, Google Meet, etc. and has been specifically designed to make online learning effective. It also offers multiple features to retain attention spans and ensure two-way communication, such as polls, quizzes, MCQ questions, interactive chat, leaderboard, etc.

Across several sessions, our trainers were trained to conduct the trainings and create content for the Vedantu platform. Then, a pilot round of sessions were conducted with some top villages, to test the efficacy of the content. After making some critical changes, the digital trainings were launched starting September 30, 2020.

## **8. Webinars and Capacity Building Workshops**

In June and July, we conducted online trainings and webinars via Zoom on sapling plantation, making easy and portable rain gauges at home, and measuring rainfall, which are all critical aspects of work before and during the monsoon months. A total of 1,762 villagers attended our series of trainings on scientific methods of sapling plantation, while a total of 861 villagers attended our training on rain gauges and measuring rainfall.

Post the training on sapling plantation, villagers and Paani Foundation teams in the villages planted saplings on the occasion of Ashadhi Ekadashi and Guru Purnima. This week was also the time of the Krushi Sanjivani Saptah, launched by the Govt. of Maharashtra, to boost farmers' efforts and update them about the latest innovations in agriculture.



In Barshitakli taluka, in collaboration with MSRLM UMED, villages associated with the Spardha carried out the 'One Woman One Tree' initiative, where women united and decided to nurture one tree each.



Across many villages, rain gauges were also prepared and installed.



Apart from these, 13 capacity building webinars were also hosted for Paani Foundation's team members in June and July. Many of these were in co-ordination with government officials, and focused on understanding aspects of government schemes relevant to the Spardha. The rest of the trainings were conducted by in-house and external experts on topics like well measurement, importance of creating grass nurseries, increasing productivity in fruit orchards, etc.

Some experts who led these webinars are: Mr. Bipin Jagtap (CEO of Khadi Gramudyog, Mumbai); Mr. Ganesh Deshpande (Deputy Director of Vairan Vikas Dept., Pune); MSRLM UMED's State Mission Managers, and Shri Bhalerao of the State Fruit Production Department.

Additionally, three trainings on the scientific method of watershed management were conducted by team Paani Foundation for government officials. Attendees included the Deputy CEO and BDO of Solapur district, Panchayat leaders, MGNREGA officials, Gram Sevaks, etc. The total number of participants across these three trainings was 244.

## **9. Creation of Films: Best Practices, DIY, Case Studies and More**

One of the key strengths and guiding principles of Paani Foundation is to use effective communication to inspire social change and transformation. At the heart of our communication strategy and material have been our films. For the Water Cup, we had created a series of animated training videos, and had also documented impact stories over the years. These videos have garnered millions of views, and continue getting views and traction even today.

For the Samruddha Gaon Spardha as well, our team is working on a series of videos which focus on demand management of water and ecological restoration. These videos are being scripted in co-ordination with agriculture experts and are being finally vetted by experts at the Mahatma Phule Krishi Vidyapeeth, Rahuri - Maharashtra's best agricultural university.

Here's an overview of some of the video topics. While 10+ videos are in the pipeline, those which have been publicly shared already, are hyperlinked below.

- [\*\*The Power of Drip Irrigation\*\*](#): The origin story and benefits of drip irrigation in terms of economics, water and soil conservation
- [\*\*Miyawaki Magic\*\*](#): The possibility of creating a fast-growing forest, boost rural biodiversity, and create a thriving ecosystem in the village
- [\*\*The Vermicompost Method Explained\*\*](#): A cost-effective, environment-friendly and natural manure created by a farmer's best friend - the earthworm! This is a manure created via decomposition of organic material. It boosts soil fertility, and if taken up as a serious business, it can lead high incomes with a low capital expenditure.
- [\*\*Preparing Green Manure\*\*](#): A DIY on 'growing manure' in your own field. It is a scientific low-cost, home solution to drastically improve soil health, fertility and prosperity.
- **Growing Nutritious Grasses**: A DIY video on how to set up a grass nursery of nutritious and palatable grasses in your village
- **Lakhpati Kisan**: Chronicling the inspiring journeys of successful and progressive farmers who use best practices of agriculture and water management to boost their incomes and strengthen their futures



The film on Vermicompost is an animated explainer, and takes the viewer through all its aspects in a step-by-step manner. It was made public in an [inauguration event](#) presided over by Mr. Eknath Dhawale, Secretary, Department of Agriculture, Maharashtra. This event was broadcast live via Facebook and Zoom, and attended by hundreds of villagers. Post the event, this film was watched by several taluka-level government officials.

## 10. Successful Pilots: Forest Creation, Grass Nursery and Sweet Sorghum

### 10. 1: Miyawaki Forest in Nhavi Budruk village, Satara district

In September 2020, our Miyawaki forest in Nhavi Budruk village in Satara district, turned 2 years old. Throughout the lockdown, the villagers have ensured the upkeep of the forest. The forest has become a thriving ecosystem and is the pride of the village. In the coming months, villages will be trained in the Miyawaki forest creation technique, as an effective means of working towards environment restoration. This initiative will also present multiple partnership opportunities with corporates and other organisations willing to support some costs and volunteer to carry out the initial plantation. The below photo was shared on our social media, when the forest was one year old. Since this time, it has continued to become more dense and now attracts pollinators such as bees, birds and butterflies.



## 10.2: Creation of a Nursery of Nutritious Grasses

Over the last many years, several villages have witnessed a sharp decline of nutritious and palatable grasses. Animals instinctively and naturally choose nutritious grasses over unhealthy grasses. Therefore, in villages where open grazing is permitted, this leads to a quick depletion of nutritious grasses and allows unhealthy and unpalatable grasses to grow unhindered.

The availability of nutritious grasses is directly linked with the income of farmers engaged in animal husbandry. This is because a better diet for livestock leads to an increase in the quantity of milk, thus boosting their business. Due to this reason, model villages like Hiware Bazaar and Ralegan Siddhi have prohibited open grazing and made protected grasslands compulsory.

In order to replenish these nutritious grasses, since September 2019, Paani Foundation's team has been growing a 3-acre grass nursery in Purandar taluka, Pune district. In a period of just 5 months, each root slip has multiplied - leading to a minimum of 50 slips to a maximum of 160 slips! On June 28, 2020, farmers from 45 different villages participating in the Spardha travelled to Purandar taluka to acquire these grass slips. These farmers have already prepared the land, with furrows and raised beds, to replicate this nursery in their own villages.





### 10.3: Sweet Success with Sweet Sorghum

As part of the Spardha, it will be imperative for us to create the basis for farmers to increase their income and empower them to maximise their yield and cash profits, while minimising water usage. The current problem is, many farmers naturally opt for water-intensive cash crops such as sugarcane, with the aim of earning more cash profits. However, in several villages, this leads to the creation of man-made drought as water reserves are fast depleted and the profits earned are marginal compared to the resources invested.

To create an alternative to such crops and prove that water efficiency can indeed maximise cash profits and resource efficiency, Paani Foundation carried out multiple experiments of growing Sweet Sorghum (God Jawari) - which is a drought-resilient and multipurpose crop. When processed, its juicy stalks yield fuel in the form of ethanol; its grains are high in food nutrition value; and the bagasse derived from the processed stalks doubles up as nutritious livestock feed.

Sweet Sorghum is a 4-month crop, which, in two cycles, yields more profits than one cycle of sugarcane, with almost 50% reduction in water usage. In the 2020 Kharif season, three farmers handpicked and mentored by Paani Foundation's team enjoyed bumper harvests of this crop.



## 11: An Overview of Partnerships

With the Spardha, Paani Foundation aims to create a 'plug and play' platform which can enable potential partners to get involved, and result in a win-win scenario.

Here are some key institutions and partners we are working with at the moment:

- **WOTR:** They are India's leading organisation working on watershed management, and were our Knowledge Partners for the Water Cup. Our partnership with them continues till date.
- **UMED (MSRLM):** UMED is the Maharashtra State Rural Livelihoods Mission's platform to empower women with the skills and initiatives which can result in meaningful employment, entrepreneurship opportunities and improved access to financial services. Women Community Resource Persons (CRPs) associated with UMED will play a key role in leading initiatives associated with the Samruddha Gaon Spardha in their villages. Many CRPs have also attended our online trainings, and will serve as key leaders in their respective villages. In the coming months, Paani Foundation will also work on creating entrepreneurship opportunities, in partnership with MSRLM and the CRPs.
- **IIMR and ICRISAT:** India's leading millet institute and crop research institute. We have visited these institutes and they have supported us for the Sweet Sorghum initiative. Further collaborations are also a strong possibility.
- **Mahatma Phule Krishi Vidyapeeth Rahuri:** Maharashtra's premier agricultural university, which is helping us ensure that our videos are factually and conceptually sound. We have also received the nutritious grass seedlings for our nursery from them.
- **ACWADAM:** This is a leading organisation in the science and management of groundwater. They have helped us shape our training sessions on groundwater as a shared resource.
- **BARC:** The leadership team at the renowned Bhabha Atomic Research Centre contacted us and met with our core team. With their support, we carried out an experiment using Hydrogel - a high water-absorbing product which decreases the irrigation requirement of a crop such as Sweet Sorghum by almost 50%. The pilot didn't yield expected results, mainly due to unseasonal rainfall. We may carry out another pilot in 2021.
- **SayTrees:** This is an award-winning social enterprise focused on the creation of Miyawaki forests. We will work with SayTrees to implement the creation of these forests as the Spardha progresses.

More supporters and partners can be seen on our website, [here](#).

## 12: Social Media and Website Revamp

Paani Foundation is active on Facebook, Twitter, Instagram and YouTube.

As of January 2021, we have a total community strength of 7.3 million across these platforms.

In the last few months, owing to the lockdown and halted on-ground activity, we have had to reduce the overall frequency of social media sharing. However, since June 2020, this activity has picked up again.

From January 2020 to January 2021, here are some key reach and engagement figures:

1. Combined reach across Facebook, Instagram and YouTube (No. of people who see a post or view a video at least once): 19 million+
2. Combined total engagement across Facebook, Twitter and YouTube per month (No. of likes, comments, shares, etc.): 2 million+
3. No. of video views across YouTube, Instagram, Twitter and Facebook: 12 million+  
(Note: This is as per FB's and YouTube's standard for what counts as a video view. FB takes this as 3 seconds, while for YouTube, 30 seconds is the widely considered standard. This also includes YouTube video views in this time period for videos posted in the past.)
4. No. of hours of content viewed on YouTube (A key engagement metric as well): 466,342

### Website Revamp

In terms of strengthening community engagement and communication platforms, we also used this time to revamp the entire Paani Foundation website, in both English and Marathi. With this revamp, we were able to position the Spardha as our key initiative this year, and showcase the impact of the Water Cup succinctly and impactfully.

We also solved for some important tech and UX/UI issues such as phone compatibility, loading of media, etc. This revamp was undertaken after studying user journeys on the previous version of the website, and it aimed to showcase Paani Foundation's work succinctly and clearly, while making content discoverability easier.



## 12. Meeting with the Hon'ble CM of Maharashtra

In February this year, Shri Uddhav Thackeray, Hon'ble CM of the Govt. of Maharashtra, and Shri Eknath Shinde, Hon'ble Minister for State Urban Development, met with Mr. Aamir Khan, Ms. Kiran Rao and Mr. Satyajit Bhatkal to get an overview about the water conservation work done since 2016 and learn more about the Satyamev Jayate Samruddha Gaon Spardha. The CM shared his appreciation and offered his support for the Foundation's work.



## **12. Unlockdown**

As the Govt. of Maharashtra prepared to further reduce restrictions vis-a-vis the COVID-19 pandemic, we closely monitored the on-ground situation, and deployed our field team as per situational realities in every taluka. This was done after making provisions for health insurance amounting to Rs. 2 lakh per employee, covering hospital expenditure. We also created and distributed ID cards across the team, in case this is requested by any official while our team is on ground. Moreover, a comprehensive online training on how to initiate field work in this time was conducted for the entire team by the core team of Paani Foundation. This training also focused on necessary preventive measures as well as best practices to keep in mind.

Field work was thus gradually started, with necessary permissions from Collectors as well as Tehsildars in every talukas. Out of 41 Taluka Co-ordinators, 39 Co-ordinators were on ground as of July 2020. They visited villages which didn't have any cases, with the permission of the village Sarpanch and Gram Sevak.

## **13. Participation of team Paani in labor budget and annual action plan of MGNREGA scheme**

The taluka coordinators of Paani Foundation visited almost all villages across 39 talukas participating in the Satyamev Jayate Samrudh Gaon competition to take up the work related to agriculture and natural resources in the annual action plan under MGNREGA.

Our team is spreading more awareness of critical action points under MGNREGA, for which we have also made a special film. Before November 30, 2020, several villages submitted additional plans to their respective Collectors - which will list critical action points they wish to implement until March 31, 2021.

For their 2021-2022 plans too, Paani Foundation's team is introducing villages to important sections of the scheme under which they can implement the 6 pillars of the Samruddha Gaon Spardha - which are geared towards boosting yields, managing water and increasing family income. Past records show that there have been several instances of villages preferring to use MGNREGA for initiatives that don't directly impact village prosperity. With support and guidance this year, our aim is to help gram panchayats plan more effectively.



## 14. Conducting Online Trainings

Between September 30, 2020, and the first week of January 2021, three phases of the online trainings have concluded for the Samruddha Gaon Spardha. A fourth phase has been initiated.

- Phase 1 focused on welcoming the villagers to the Samruddha Gaon Spardha, inspiring them to think about the village of their dreams, and familiarising them with the marking guidelines of this new competition.
- Phase 2 focused on water management. Via an interactive model, it introduced villages to how groundwater is a shared resource. It provided a practical and scientifically proven way to gauge which wells share the same aquifer. By establishing how the water extraction from one well impacts another (sharing the same aquifer), it proved that water management requires community decision making.
- Phase 3 furthered the learnings of Phase 2, and focused on the importance of regular well measurement, how to measure wells and register the data. This has been detailed further in section no. 15.
- Phase four of the training focused on training Taluka Coordinators (TCs) to conduct a census of all wells and borewells as well as a survey of crops planted during Kharif, Rabi, and 12-monthly seasons. The TCs in turn will train Jalmitras to conduct these surveys in the villages.

This massive data collection connected to groundwater will not just lead to important analysis but the very process of measuring and surveying, will make Jalmitras sensitive to the behaviour of groundwater in their villages.

### Overcoming the Network Connectivity Challenge

A consistent challenge we have faced while conducting these trainings has been that of poor internet connections and low network. However, such has been the enthusiasm of the villagers that they have overcome these challenges with creativity and passion. Any location with a strong internet connection - such as a school, someone's verandah, a gym, the panchayat office and even an onion storage unit - has been converted into a makeshift training hall. In some villages, the trainees have gone to the extent of building a tin shed on a nearby hill, to ensure a strong internet connection, and participate in the live trainings effectively.

At a time, around 10 villages receive training from one facilitator. For this purpose, in every village, our taluka co-ordinator uses the setup of a projector, screen, laptop, speaker and dongle to bring the trainer live into the classroom. The trainees (maximum 8-10 people at a time), sit in

a socially distanced manner and attend the training. Their temperature is taken beforehand, and their hands are sanitised before they enter the class. They also wear masks throughout the training. For our trainers, we have created a studio setup in our Pune office. Using a high-quality camera in a well-lit room, they conduct the training live with 10 villages at a time.

Here are some glimpses of the online training:



15.



## **Well Measurements -- From Training to Action**

Phase 3 of the Samruddha Gaon Spardha online trainings focused on the critical importance of surveying the number of wells in a village, and measuring their water levels.

### **Why is this important?**

The Spardha emphasises on treating water and other natural resources as shared resources. It promotes community decision making regarding the management of these resources. In order to make data-informed and accurate decisions while creating a village's water budget, it is critical to first know the volume of water available. For decades, villages have worked with assumptions of this water availability, and a large-scale exercise of gathering well water measurements has never happened before. This activity therefore, will be essential towards creating a water budget and planning for which crops to grow in which season.

### **How will this activity help in crop planning and water management?**

Well water measurements are being taken before and after every cropping season, i.e., Kharif, Rabi and Summer. This is an ongoing exercise. Before every season, this data will enable farmers to get a good idea of the type of crop to grow, so as to pass through the sowing-harvesting process without facing water shortage. After each season, the data will enable farmers to solidify their understanding of the water required for the crop they've just harvested. Over time, this will enable farmers and villages to make better decisions on crop planning. Having this crucial data will also enable farmers to avoid water-guzzling crops, and over time, break the cycle of water tankers, debt and failed crops due to water shortage.

### **While this is an ongoing exercise, here are the numbers so far across 39 talukas of Maharashtra:**

- Total no. of wells surveyed (counting of wells): 3,699
- No. of villages that have measured the water levels of at least 1 well: 446
- No. of villages that have measured the water levels of at least 10 wells: 273

A few glimpses of this large-scale activity:





## **X-Ray Reports on Well Water Measurements**

After every village finishes surveying the number of wells, as well as measures at least 10 or more wells, Paani Foundation will generate a 'X-Ray Report', which will provide every village a comprehensive picture of the data gathered by them. The report will essentially enable villages to comprehend the data in an actionable manner.

### **Every X-Ray report will contain:**

1. A satellite image of the village with markers for the wells to be measured. The wells are segregated as (i) Those meant for farming / irrigation and (ii) Those meant for providing drinking water.
2. A list of the wells which the village has chosen to measure. This list contains the name of the well owner, as well as its Survey Number.
3. A bar graph of the water level (in mts.) in the chosen wells, as measured after the 2020 monsoons.
4. A list which shows what percentage of every well was filled post the rains. Based on this list, an average for the whole village is determined. Thus, villagers also find out the percentage till which the wells in the village must have been filled. For e.g., a report could mention: "The wells in X village were 80% filled, after the 2020 monsoons."
5. A bar graph that shows the reduction in the water levels, due to the water extraction for the Rabi season crop.
6. A list of the reduction in the water levels, in each of the chosen wells. Based on this, an average reduction of well water levels in the village post the Rabi season is derived.
7. A similar analysis of wells which have been segregated for drinking water.

Throughout this report, questions are posed to the villagers to enable them to critically examine and think about the results, and derive conclusions on ideal wells, the relationship between the type of crop and water usage, and more.

At the end of the report, a congratulatory note is also added, acknowledging the village's efforts to successfully carry out this exercise. It also encourages the village to keep its resolve steady and continue on the path of becoming prosperous.

Here's a glimpse of the cover page of the report:



## 16. Funders' Meeting: December 2020

On December 19, 2020, Paani Foundation's core team met with all funder representatives. Some members were physically present for this meeting in Panchgani, and the others joined via Zoom.

Here is a summary of the key discussion points:

- There was a unanimous agreement towards extending the Spardha duration to May 2022.
- The online hybrid training model was discussed, along with how it is necessary to make quick changes to it, based on feedback from the ground.

- Paani Foundation's Planeteers Workshop (Urban School Programme) was introduced. It will be a paid workshop (at a nominal fee), when it rolls out, so that it is taken more seriously by participants.
- Summary of Learnings document will be prepared for the Samruddha Gaon Spardha and shared with all the funders.





## 17. Appreciation by the Ministry of Jal Shakti

On September 9 and 11 respectively, the central Ministry of Jal Shakti as well as Shri Gajendra Singh Shekhawat (Union Minister of Jal Shakti), appreciated Paani Foundation's work on social media, and lauded the people's movement against drought in Maharashtra. Mr. Aamir Khan replied to both messages. Such acknowledgement is greatly motivating, and shows that the work done is being nationally recognised. Screenshots can be seen below:



Kiran and I would like to thank the Ministry of Jal Shakti, on behalf of every member of Paani Foundation, for acknowledging our efforts 🙏.

Thank you for highlighting this people's movement against drought in Maharashtra. This would not be possible without the support of our donors, and every Maharashtrian who has contributed to this effort, and has been a part of this journey 🙏.

Your kind words fill us with hope and strength. We remain steadfast in our efforts, and are humbled to be working alongside thousands of water heroes in Maharashtra.

Thank you 🙏

*From L to R: Message from the Ministry of Jal Shakti; Mr. Aamir Khan's reply*



**Gajendra Singh Shekhawat** ✓  
 @gssjodhpur

.@paanifoundation has done a remarkable job of generating the momentum to bring people together to manage their water resources wisely.

Hopefully, it will also inspire other entities working at the grassroots to follow it's lead.

Best wishes to  
 @aamir\_khan & #kiranRao

Thank you so much Shri Gajendraji 🙏.

On behalf of Kiranji, Satya, Dr Pol, Reenaji and each and every member of Paani Foundation I would like to thank you for your encouraging words.

Your words are an acknowledgement of the hard work and effort of every villager in Maharashtra, and every citizen in urban Maharashtra who has strived hard to contribute to making this journey fruitful 🙏

We are fully committed to remaining steadfast in our efforts.

Thank you sir 🙏

*From L to R:  
 Message  
 from the  
 Minister of  
 Jal Shakti;  
 Mr. Aamir  
 Khan's reply*

## ANNEX 1: Impact in Numbers

Sr. No.	Initiative	Impact
1	No. of villages participating in the Samruddha Gaon Spardha	944
2	No. of talukas associated with the Spardha	39
3	No. of villages who directly supplied their farm produce to cities	219 villages (supplied to 66 cities)
4	No. of villages Paani Foundation's field team interacted with to support them in MGNREGA programmes	635
5	No. of villages Paani Foundation's field team provided guidance to, with regards to the creation of Labour Budgets and Supplementary Budgets under MGNREGA	900+
6	No. of villages which have created grass nurseries and planted nutritious grass slips	45
7	No. of students engaged with as part of Nisargachi Dhamaal Shala 2020	30,000
8	No. of villages that participated in phase 1 of the online trainings for Samruddha Gaon Spardha	808
9	No. of trainees that participated in Phase 1 of the trainings	7613
10	No. of villages that participated in phase 2 of the online trainings for the Samruddha Gaon Spardha	773
11	No. of villages that participated in phase 3 of the online trainings for the Samruddha Gaon Spardha	621
12	Total wells measured	3699
13	Total number of villages which initiated the well measurement activity	452

14	Total number of villages which completed the well measurement activity	277
15	No. of schools engaged with as part of Nisargachi Dhamaal Shala 2020	800

## ANNEX 2: List of 39 Talukas

Region	District	Taluka
Marathwada	Aurangabad	Khultabad
	Aurangabad	Phumlambri
	Aurangabad	Waijapur
	Beed	Ashti
	Beed	Kaij
	Beed	Dharur
	Beed	Beed
	Beed	Ambejogai
	Nanded	Loha
	Hingoli	Kalamnuri
North Maharashtra	Jalgaon	Amalner
	Jalgaon	Jamner
	Nandurbar	Nandurbar
	Nandurbar	Shahada
	Ahmadnagar	Nagar
	Ahmadnagar	Parner
	Ahmadnagar	Sangamner
	Nashik	Sinnar
	Akola	Akot



Vidarbha	Akola	Barshitakli
	Amravati	Chikhaldara

Region	District	Taluka
Vidarbha	Amravati	Warud
	Nagpur	Narkhed
	Buldhana	Motala
	Wardha	Arvi
	Washim	Karanja Lad
	Washim	Mangrulpir
Western Maharashtra	Pune	Purandar
	Pune	Baramati
	Satara	Koregaon
	Satara	Khatav
	Satara	Maan
	Sangli	Atpadi
	Sangli	Jat
	Sangli	Tasgaon
	Solapur	North Solapur
	Solapur	Karmala
	Solapur	Barshi
	Solapur	Madha

### ANNEX 3: Extract of Annual Returns

[Click here](#) to download Paani Foundation's Extract of Annual Returns - MGT 09.