

### Annual Report December 2020 to December 2021

## **OVERVIEW**

The year 2021 was the second year of the Samruddha Gaon Spardha, and a crucial turning point for Paani Foundation. A deadly second wave of COVID led to many villages being impacted gravely, even causing deaths in some areas. This shifted priorities in these villages, where health, livelihood and survival took natural precedence over the competition.

Uncertainties posed by the pandemic, as well as the postponement of our 4-day residential training, also led to drop-outs in terms of participation. From 944 villages, the number of participating villages came down to 778, and from 40 talukas, we came down to 39.

However, the team and villagers remained steadfast in achieving our common mission of creating prosperous villages. For the first time since Paani's inception, the villages focused on activities which were not only related to water and soil conservation. They worked on community water and crop planning, increasing green cover, boosting agricultural productivity etc., as well as training in all of these aspects.

Shramadaan, which was the 'magic wand' for sustained engagement in the Water Cup, could only be done in short bursts, with fewer people. Therefore, it was a continued period of learning, unlearning and adapting to change. Observing the fatigue and despair caused by the pandemic, our adaptation strategies included hosting mini spardhas of short, doable activities, shifting residential trainings to online, hosting online gram sabhas and sheti shalas, and making full use of the short durations in which our team could travel to the villages. We also organised a felicitation ceremony to honour and acknowledge the efforts of villages which performed well in the first mini spardha.

This report details all the milestones of the people's movement in Maharashtra in 2021. We are certain that in 2022, with improvements vis a vis COVID, we will only boost the quality as well as the scale of the work done in 2022. We look forward to this time, with the power of knowledge, science, and most importantly, people, firmly by our side.

## 1. Samruddha Gaon Spardha - Phase 1

Since the timelines of the Samruddha Gaon Spardha and COVID overlapped starting early 2020, it was difficult to maintain sustained levels of excitement on ground. Therefore, once the first wave had subsided and we had adapted to COVID, we launched the first 'Mini Spardha' as part of the larger competition. This mini competition was hosted from December 2020 till February 2021. It gave the villagers measurable targets to achieve in a fixed period of time, and created a spurt of enthusiasm on ground. This spardha accounted for a total of 120 marks. Out of a total of 944 villages, 594 villages scored 70 or more marks, thus making them eligible to receive the award.

Some of the key aspects the villagers worked on were:

- Water management and saving (For Rabi and annual crops 2020-21)
- Well and borewell census and survey
- One round of well measurement (Post monsoon 2020)
- Record / Report of crops sowed (For kharif, rabi and annual crops 2020)
- Survey of existing watershed structures
- Installation of rain gauges and maintaining rainfall records
- Increasing tree and forest cover + Land allocation for protected grasslands
- Clean drinking water (Oct 2020)

On March 22, 2021, World Water Day, we hosted a digital felicitation ceremony for all of these villages. Later in the year, on-ground felicitation ceremonies were also hosted at the taluka level, which were presided by the Collector of the respective district. For the digital ceremony, Mr. Uddhav Thackeray, Hon'ble CM of Maharashtra, presided over the event as the chief guest. Maharashtra's Agriculture Minister, Shri Dadaji Bhuse, and the Minister of Soil and Water Conservation, Shri Shankarrao Gadakh, also joined. Mr. Sitaram Kunte, Chief Secretary of the Government of Maharashtra, was also present. Moreover, Collectors from 18 districts joined virtually, along with representatives from each one of the 594 villages. The event was live-streamed online, and received coverage on popular Marathi news platforms such as Lokmat, TV9Marathi, ETV Bharat, Krushi Pandhari, etc.

#### Impact in Numbers:

Total no. of views on Paani FB + YouTube (Full event + Video snippets)	758,222
Total no. of views of the 'Majha Katta' episode on ABP Majha (on FB and YouTube)	81,373



## **GAURAV SOHLA** SATYAMEV JAYATE SAMRUDDHA GAON SPARDHA (PHASE 1)

#### Outlook THE NEWS SCROLL

22 Menth 2021 Contraposed at 10 21 Pm2 Source: PTI

#### World Water Day: Maharashtra CM praises Paani Foundation

Mumbai, Mar 22 (FTI) It is possible to create prospensus villages through teamwork and affinity towards a scheme, Chief Minister Uddhav Thackeray said on Monday as he referred to the "Sotyamey Jayate" competition of Paani Foundation.

Thockeray made the remarks on the occession of World Water Day at an event of the foundation, started by actor Aamir Khan and his wife Kiran Ran

## CMO Maharashtra 😨

जागतिक जल दिनाचे औदित्य साधून पाणी फाऊंडेशनच्या सत्यमेव जयते समृद्ध गाव स्पर्धेचा गौरव सोहळा मुख्यमंत्री उद्धव ठाकरे यांच्या उपस्थितीत संपन्न झाला. पाणी नियोजनाचा हा संस्कार गावाला आणि महाराष्ट्राला समृद्ध करणार असल्याचेही मुख्यमंत्री यावेळी म्हणाले.





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#### महाराष्ट्र में जल संचयन की सीख दे रहा पानी फाउंडेशन wifte winds / that March 23, 2021

नेश्वजन दिनश के अनवर पर मुख्यमंत्री निनाश पर राजमेंन जगते राम्यूह गांन स्मर्ध में भाग लेने ताले जिलेल गांतों की पोषण हुई। इस मौके पर पानी प्राउडियन के संस्थापक अमिर सान, उनकी पती किरण राव और पानी पनसंडेबान की टीम भी मोजूद थी।



AIR News Pune

#जागतिकजलदिन पाणी फाऊंडेशनच्या सत्यमेव जयते समृद्ध गाव स्पर्धेचा (पहिला टप्पा) गौरव सोहळा मुख्यमंत्री उद्धव ठाकर्रे यांच्या उपस्थितीत संपन्न. कृषी मंत्री दादाजी भुसे, जलसंधारण मंत्री शंकरराव गडाख , पाणी फाऊंडेशनचे संस्थापक आमिर खान. किरण राव उपस्थित होते



MAHARASHTRA DGIPR

### #जागतिकजलदिन

पाणी फाऊंडेशनच्या सत्यमेव जयते समृद्ध गाव स्पर्धेचा (पहिला टप्पा) गौरव सोहळा मुख्यमंत्री उद्धव ठॉकरे यांच्या उपस्थितीत संपन्न. कृषी मंत्री @dadajibhuse, जलसंधारण मंत्री @GadakhShankarag, पाणी फाऊंडेशनचे संस्थापक आमिर खान, किरण राव उपस्थित,

## 2. Water Management A Milestone Activity of the Spardha

#### "You may have land ownership documents to divide land, but how will you stake ownership on the water below the land?"

Water is a community resource. Wells may be owned by individuals, land may be owned by individuals... but groundwater knows no boundaries. In the Water Cup, we worked with villages on conserving rainwater and increasing groundwater levels. And as a part of the Samruddha Gaon Spardha, our focus is to motivate villagers to manage the usage of the water they have worked tirelessly for. For this, it's important to inculcate and cultivate a mindset which recognises groundwater as a shared, community resource. Thereby, its management and usage is also a community-led activity.

As a part of the training of the Spardha, we hosted sessions on community management of water as well as on (i) Conducting well and borewell surveys and (ii) Measuring well water levels before and after major cropping seasons, as well as before and and after the monsoon. This understanding supports villagers in making data-informed decisions, on aspects such as (i) Which crops to grow considering the water availability (ii) How to ensure availability of drinking water throughout the year and (iii) How to create a water budget that the village can follow and maintain.

Post this training, villagers across 734 villagers set off to measure 10 the water levels of 10 representative wells in the village. This was probably the largest bottom-up, decentralised activity of this kind undertaken in rural Maharashtra.

In the year 2021, three rounds of well water measurement were undertaken.

The first round was in Jan-Feb 2021, just after the Rabi season. The second was in May-June 2021, pre-monsoon and after the summer crop season. The third round was in Oct-Nov 2021, post-monsoon and after the Kharif crop season.

The Paani Foundation app has supported them in keeping a firm record of this data. Our team has analysed the data for each village, and provided them with an 'X-Ray Report' on their water usage. This report breaks down the findings in a succinct way, displays historical and current water usage trends, and arrives at how 'water healthy' a village is. It is a ready reckoner for a village which supports them in creating or tweaking their water budget, and making informed decisions on the viability of their crop and/or allied farming activities for the season.

#### In Numbers (From Oct-Nov 2020 till Oct-Nov 2021):

No. of participating villages in well measurement activities	734
No. of unique wells measured	7,359
No. of times the water levels of these wells were measured	18,649

## 3. Decentralised Crop Survey

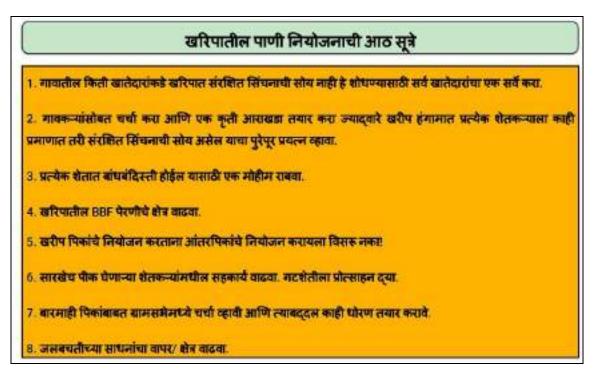
After conducting the well water measurements, and surveying wells in a village, the logical next step was to map the water available and water extracted, with the crops grown. In Feb-March 2021, 600 villages took up the mammoth task of surveying all common crops grown (for Kharif, Rabi and annual seasons - 2020-21). They recorded the area under cultivation for that crop, as well as the type of irrigation (drip, sprinkler, or flood).

It helped villagers determine (i) How much water their farms consumed each season (based on crop water requirements published by WALMI) and (ii) Whether they should make a switch towards more water-efficient crops.

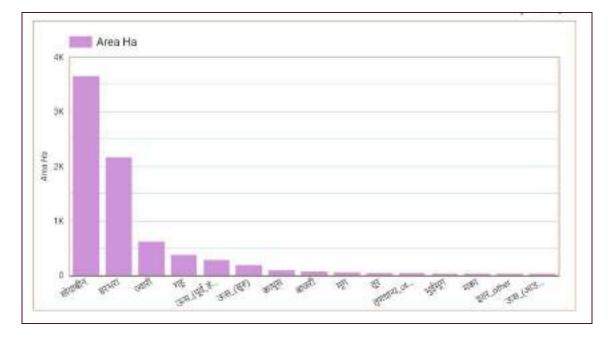
This exercise was also crucial for the Paani Foundation team because it helped us determine:

- All commonly grown crops in our areas of engagement
- Water availability v/s crop pattern in our areas of engagement
- Possible value addition opportunities, which we could incubate for the villages
- Possible opportunities to work with experts for best practices for some crops

An X-ray report was also sent based on the crop survey. It enabled villagers to plan for the Kharif cropping season, as it provided recommendations for water management, climate change resilience, best cultivation practices, etc.



Recommendations of 8 best practices to manage water usage for the Kharif 2021 season



A snapshot of the area-wise cultivation of major crops in Ambajogai taluka in Marathwada

## **4. Training and Capacity Building** With Knowledge, Towards Prosperity

As with the Water Cup, training remains at the heart of the Samruddha Gaon Spardha as well. However, owing to COVID, we have had to adapt to different formats and platforms for carrying out effective training sessions - with the villagers, as well as with our own team members.

A 2021 highlight was the one-day offline training organised across 39 talukas. For the first time after 1.5 years, people from different villages physically congregated for the training, met with each other, and participated keenly in all the in-person activities. This was a day of nostalgia, bonding and cheer, apart from being one full of learnings and engaging discussions.

778 villages out of 944 participated in this one-day offline training. A total of 6,024 villagers attended.



A warm welcome. The act washing a trainee's feet before entering the training centre is both an gesture of welcome, as well as one that breaks social barriers and inhibitions right from the get-go.



Following COVID protocol - Every trainee's temperature was measured before entering the training centre. They also sanitised their hands, and were given masks if needed.



Training in progress.



Games and activities act as ice-breakers, get crucial messages across without lecture-baazi, and make the sessions fun and immersive.

Here is a breakdown of some other key trainings organised with the villagers:

On Amrut Pattern Cotton Sheti Shala (Online)	10 farmers engaged every week + their progress monitored
Samwad Yatra with women SHGs (Offline)	3000 women across 75 villages engaged
On using an Excel-powered water calculator to measure the usage of water in the village	2735 villagers across 547 villages engaged
On record keeping and maintaining a farmers' diary	8596 villagers engaged across 813 villages
Meeting and discussion on X-ray report 2	2646 villagers engaged
On non-pesticide farming (Gram Sheti Shala)	30 farmers engaged every week + their progress monitored

Here is a list of the internal team trainings organised in 2021:

- Offline training of trainers (On how to conduct the the villagers' one-day training)
- Online training on best practices of bamboo plantation
- Offline training on water management (using the water calculator + conducting the Gram Sabha)
- Offline workshop of field team to discuss the journey of the Spardha
- Offline training of new taluka co-ordinators
- Online training of field team on MIS (internal reporting system)
- Online training of field team on farmers' diary
- Online training of field team on crop income-expense survey
- Online training of field team on Ideal Watershed Planning

#### Mahila Samwad Yatra Empowering women to be entrepreneurs

Towards the end of 2021, a Paani Foundation team led by women trainers, set off on a mission to engage with rural women and women-led SHGs. The purpose of these visits was to discuss entrepreneurship, and gauge the interest of the women in starting a sustainable, local enterprise. In the initial round of meetings, our team spoke to the women about their current activities, work under MGNREGA, and gauged their interest in different livelihood options. Then, a second round of meetings was organised with a sharper focus - to discuss the possibility of setting up vermicompost enterprises led by women SHGs. This round was limited to the areas of Nandurbar Motala, Arvi and Chikhaldara, where cowdung, the primary substrate for making vermicompost, is available at a low cost. The purpose was to introduce a small, humble business opportunity to the women, and encourage them to chart their entrepreneurial journey. Vermicompost can prove to be an additional source of revenue, and lead to a boost in the entire family's income.

So far, 116 women have started their entrepreneurial journey in vermicompost. If the need arises, Paani Eco will buy the vermicompost at a minimum support price from the SHGs.



Meetings in progress, in Nandurbar and Chikhaldara.

## **5. Soyabean Sheti Shala** Digital trainings on end-to-end cultivation

On May 20, 2021, we launched our largest digital training initiative yet - the Soyabean Digital Sheti Shala (Soyabean Digital Farming School). This was a week-by-week digital training on the end-to-end cultivation of soybean, which overlapped with the actual season of cultivation. We received an overwhelming response for this initiative - a whopping 46,316 registrations in just 18 days! The word was spread via Paani Foundation's social media, WhatsApp groups and networks on ground. No paid media strategy was adopted to achieve these registrations.

Out of the 46,000+ people who signed up, it is noteworthy that 34,588 farmers belonged to talukas which are not a part of the Satyamev Jayate Samruddha Gaon Spardha. From talukas participating in the Spardha, we received 11,710 registrations. We also received 16 registrations from Karnataka and 2 from Telangana. As the Shala progressed, we also had people from other states such as Gujarat joining us.

Our taluka-wise crop survey had shown that soybean is the most cultivated Kharif crop. Therefore, we launched our farming school with this crop, and are determined to make best practices readily accessible.

#### Key Aspects of the Digital Sheti Shala:

- Weekly Updation and New Content: New training videos were released every week covering all cultivation aspects in detail - from seed treatment, to soil preparation to IPM to harvest.
- LIVE Interaction and Viewing: A YouTube LIVE every Sunday, with Mr. Aamir Khan, Ms. Kiran Rao, Mr. Satyajit Bhatkal, core team members of Paani Foundation, and experts. Villagers attended these lives, and participated in live discussions about the stage of cultivation they were in.
- Connecting Directly with Experts / Interactive Q&A: Villagers received a platform to connect with team Paani Foundation and experts every week, wherein they posted their questions on chat, and heard live from experts.
- 4. **Taluka-wise WhatsApp interaction:** We created 197 WhatsApp groups to share video links, key information, as well as address questions. These were all managed internally by team Paani Foundation.
- 5. Paani Foundation's Partnership with Experts: All the training videos were checked and vetted by experts at the Mahatma Phule Krushi Vidyapeeth, Rahuri, which is Maharashtra's leading agricultural university. Moreover, government agriculture officers as well as experts from the Vasantrao Naik Marathwada Agri University (Parbhani) vetted the content as well.



Posters announcing the inauguration and first LIVE of the Soyabean Digital Sheti Shala

#### A Glimpse of the Sheti Shala in numbers:

Total no. of Sheti Shala registrations	46,316
Total no. of Sheti Shala LIVES	13
Total views on the videos of the LIVES	2,49,509
Total no. of Sheti Shala training videos	23 (20 in-depth videos + 3 shorts)
Total views on training videos	124,706
Total views on all Sheti Shala videos (Training + LIVES)	374,215
No. of total live chat comments, questions, reactions	5000+
Net increase in YouTube subscribers within 1.5 months of launch	13,300
No. of WhatsApp groups created for farmers to interact with each other, and share questions for experts	197

#### Experts and stakeholders who have joined the LIVE sessions include:

- Mr. Eknath Dawale: Secretary of Agriculture, Maharashtra Government
- Mr. Sharad Gadakh: Director, Mahatma Phule Krushi Vidyapeeth, Rahuri
- Mr. Vilas Shinde: Founder, Sahyadri Farms
- Dr. Anil Durgude, Soil Scientist, Mahatma Phule Krushi Vidyapeeth, Rahuri
- Dr. Hemant Vasekar: CEO, Maharashtra State Rural Livelihoods Mission
- Dr. Sachin Mahajan: Plant Pathologist, Kasbe Digraj, Sangli
- Dr. Rajiv Ghavde, Plant Pathologist, PDKV, Akola
- Dr. Nita Khandekar: Acting Director, ICAR Indian Institute of Soybean Research
- Dr. Nandu Kashiram Bhute: Asst. Entomologist, MPKV Rahuri
- Mr. Shankarrao Totawar: District Superintendent Agriculture Officer (Washim), and Divisional Joint Director of Agriculture, Amravati
- Dr. Milind Deshmukh: Soyabean Breeder, Mahatma Phule Krushi Vidyapeeth, Rahuri
- Mr. Srikrushna Gangurde: Managing Director, Avee Broilers
- Dr. Rajendra Jadhav: Asst. Prof. of Entomology, Soybean, AICRP
- Mr. Vasantrao Naik: Marathwada Krushi Vidyapeeth, Parbhani

#### SOYAWIN COMPETITION

#### **Gamifying Digital Trainings**

In an attempt to increase engagement and incentivise participants to watch the training videos carefully, we created the exciting and unique 'SoyaWIN competition'. We created a digital form with questions based on a few videos. Every participant was sent the form. Interested participants watched the videos and answered the questions. From every district, 3 winners were chosen - who were given innovative and useful prizes, as well as certificates signed by Mr. Aamir Khan.





Winners were given interesting prizes such as a cycle weeder, sticky traps and lure traps. These implements help keep off weeds and insects, and boost the growth and health of the crop.

#### SoyaWIN Competition in numbers:

No. of total participants	2262
No. of participants who qualified for digital certificates	855
No. of district Rank 1 holders	64
No. of district Rank 2 holders	95
No. of district Rank 3 holders	132

#### The certificate signed by Mr. Aamir Khan:



#### **Glimpses of Change:**



Pushpa Godse from Pemgiri village, Sangamner taluka, learned about lure traps and sticky traps, and installed them as a natural method of managing insects and pests.



Rameshwar Gite from Wadzire village, Sinnar taluka, worked on seed treatment before sowing, and expects a great harvest. He learned about seed treatment from the Sheti Shala.

#### Links of the Sheti Shala videos:

#### **Training Videos:**

- 1. <u>Video 1:</u> Introduction
- 2. <u>Video 2:</u> Pre-Cultivation
- 3. Video 3: Seed Selection
- 4. <u>Video 4:</u> Preparation for Pest Management
- 5. <u>Video 5:</u> Record Keeping
- 6. <u>Video 6:</u> Seed Treatment
- 7. <u>Video 7:</u> Sowing
- 8. <u>Video 8:</u> Preparing Organic Fertiliser (Jeevamrut)
- 9. <u>Video 9:</u> Using Organic Fertiliser (Jeevamrut) Appropriately
- 10. <u>Video 10:</u> Introduction to Spraying Liquid Fertilisers
- 11. <u>Video 11:</u> Weed Control
- 12. Video 12: Introduction to Integrated Pest Management (IPM)
- 13. Video 13: Getting to Know Different Types of Pests / Insects
- 14. Video 14: Making Organic Pesticides from Neem and other Trees, for IPM
- 15. DIY: Making Bird Perches
- 16. <u>DIY:</u> Making Sticky Traps
- 17. Video 15: Using Pheromone Traps and Sticky Traps (IPM)
- 18. Soybean Cultivation Calendar
- 19. <u>Video 16:</u> Water Management
- 20. <u>Video 17:</u> Trichocard
- 21. Video 18: IPM Organic Pesticides
- 22. <u>Video 19:</u> IPM Chemical Pesticides
- 23. Video 20: Harvesting, Threshing and Storage

#### LIVES:

- 1. Inauguration: Soybean Digital Sheti Shala
- 2. Film Screenings with Aamir
- 3. <u>Question Hour 1</u>
- 4. Question Hour 2
- 5. <u>Question Hour 3</u>
- 6. Question Hour 4
- 7. <u>Question Hour 5 and Introducing SoyaWIN</u>
- 8. <u>Question Hour 6</u>
- 9. Question Hour 7
- 10. Question Hour 8
- 11. <u>Question Hour 9</u>
- 12. Question Hour 10
- 13. <u>Question Hour 11</u>
- 14. Question Hour 12
- 15. <u>Question Hour 13</u>

Based on the response garnered by the Sheti Shala, the Paani Foundation team created a book which will soon be published and shared online. This compendium comprises (i) Messages from the key government officials as well as (ii) Answers from experts on the 320 questions which were discussed in the live sessions and on the WhatsApp groups.

A copy of the book can be downloaded from this link.

Here are some other key links:

- Playlist link of Soyabean Digital Shala Trainings
- Playlist link of Sheti Shala LIVES
- Website page

## 6. Miyawaki Magic Fast-Growing Forests to Fight Climate Change

In 2018, Paani Foundation created a Miyawaki forest (a fast-growing, dense plantation as per the technique of Japanese ecologist Akira Miyawaki) in the village of Jaypur, in Satara district. This forest was created in partnership with award-winning NGO, SayTrees, which is an expert in this method of plantation. The area covered by the plantation was just 0.17 acres, as it was an experiment to see how it would grow in a span of 2 years. In 2020, the plantation blossomed into a dense forest, and is self-sustaining today. It is also the pride of the villagers of Jaypur, who have tended to it with love and care over these years. Inspired by this success, we decided to scale this initiative in partnership with SayTrees. This initiative ties in to one of the key aims of the Spardha - increasing green cover and aiding environment restoration efforts. This is significant especially at a time when the world is waking up to the effects of large-scale deforestation and climate change.

In 2021, three new forests were created in partnership with SayTrees and Samruddha Gaon villages. As part of this partnership, the village provides the land (and all supporting documentation for the same), as well as water to irrigate the forest for 2 years. Villagers also offer shramadaan on the days of plantation. SayTrees brings forth the funds for soil preparation and other essentials, as well as provides the agronomic expertise.

Today, across 4 villages, a total of 4+ acres of land is under Miyawaki plantation.







#### Videos and Stories on the Miyawaki forests:

- 1. From Barren Land to Dense Forest (Hindi with Eng. text)
- 2. From Barren Land to Dense Forest (Marathi)
- 3. Miyawaki Blossoms in just 4 Months!
- 4. Miyawaki Forest Takes Root in Washim

## 7. Sapling Plantation Drive

Starting August 2021, a massive plantation drive was carried across 39 talukas of Maharashtra. For the first time since COVID, villagers gathered in large numbers (following protocol), and planted bamboo saplings as well as other saplings on the banks of nalas and streams.

Pre-monsoon, villages participating in the Spardha had worked on the crucial watershed management activity of nala widening and deepening. These nalas had also been de-silted to let rainwater accumulate and percolate. A key activity to allow for water conservation while preventing silt accumulation and soil erosion, is that of cultivating local vegetation along the banks of the nalas. Locally available bamboo is one such grass.

It has a wide root structure and thus possesses the capacity to hold soil firmly. Bamboo also becomes the base for creepers and vining / climbing vegetables to grow effortlessly. In three years, it can be harvested for economic gains as well. It also holds the power to multiply quickly on its own, creating a dense, natural fence which can prevent erosion of the banks of nallas and hence prevent silt accumulation. Studies also show that it releases 30% more oxygen into the atmosphere compared to an equivalent mass of trees.

Therefore, planting bamboo along the nala banks will result in:

- 1. Creation of mini oxygenation zones
- 2. Prevention of soil and water loss
- 3. Prevention of land deterioration
- 4. Increase in groundwater level
- 5. Access to an economically viable commodity for the gram panchayat

A total of 1,50,000+ bamboo saplings were planted across 39 talukas, and a total of 1,00,000+ saplings of other varieties were also planted. All of these saplings were made available to the villages at no cost, through partnerships with the social forestry department, government nurseries, NGO SayTrees, NGO Rainmatter Foundation and NGO Bharti Foundation.



# 8. Residue-Free Methods of Farming Safer food for humans and the planet

#### Chana / Harbhara / Gram Chickpea

In the first week of November 2021, Paani Foundation launched an experiment with a total of 30 farmers across Jaypur and Garavadi villages in Satara district. The mission was to grow residue-free chana (gram chickpea), which would be cultivated with minimum soil disturbance, and minimal chemical pesticides. As far as possible, farmers are working on manual methods of weed control such as deweeding by hand, or using equipment such as a deweeding cycle. The chemical spraying (if required) is also done in a way that it dries up completely before harvest, thus creating a batch of chana, which is better for the environment, as well as safe for human consumption. In the next month or so, we will be able to learn the market realisation of this produce. Depending on the results, we aim to expand such experiments to other regions and crops as well.





## **9. Grasslands** Restoring nutritious and palatable green cover

Over the past many years, several nutritious and palatable grasses have been endangered in Maharashtra. The reason? Over-grazing, mismanagement of pastures and human overuse.

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 created a three-acre grass nursery in Purandar taluka, Pune district. In a period of just 5 months, each root slip multiplied. In 2020 and 2021, farmers in Samruddha Gaon villages were sensitised on the power of nutritious grasses, and creating protected grasslands.

Today, 614 villages are committed to creating protected grasslands. Many of these have obtained root slips for free, from the Paani Foundation nursery in Purandar.



## **10. Success with Cotton Farming**

Cotton is the primary crop in the area of Marathwada, and is widely grown across Maharashtra. Paani Foundation had created a 47-min-film documenting an innovative cotton farming method called the 'Amrut Pattern'. It is the brainchild of farmer Amrutrao Deshmukh from Vidarbha. This experimental method has led to bumper yields for Mr. Deshmukh, and this too was shown in the video. Inspired by this film, 10 farmers from 3 talukas of Aurangabad district expressed their desire to try out this method. They reserved small plots of land, and asked the Paani Foundation team if they could receive expert help and guidance.

Our team organised them in a WhatsApp group and started conducting weekly Zoom trainings with them. Every Tuesday, the farmers would log in from their farms itself and present to an expert as well as each other, which stage of the Amrut Pattern method they were working on. This mode of organisation and communication created a healthy support group, as well as some healthy competition!

Farmers implemented several methods to bring down pesticide costs as well. At the time of harvest, where other cotton farmers in the area had a yield of 5-7 quintals per acre, these farmers recorded 11+ quintals! One farmer also recorded a 16+ quintals of yield. They also received a favourable market price of Rs. 10,100 per quintal.



## **11. Planeteers Workshop** Empowering young eco champions

In 2019 and 2020, as part of the Water Cup, we hosted a workshop across 1900 Zilla Parishad schools, and engaged with 65000 students. The aim was to sensitise students towards water and environment issues, using fun games, activities, discussions and films. These young students then went on to inspire entire villages, and motivated adults to perform well in the Water Cup. Several stories of change emerged from the enthusiasm and spirit of these young minds.

The result of this workshop proved to us that young people and students can't be left behind especially when it comes to a movement for environment and climate change. Their energy and curiosity is truly infectious. Moreover, it is this generation who will grow up to inherit a world plagued with the worst impacts of climate change. Therefore, we believe it is our responsibility to empower them with information and tools today, so that they may be better prepared to make informed decisions about their lifestyle and the environment, as they grow up.

With this is mind, in the pandemic, we launched a digital version of this programme in English, geared towards urban school students. Called Paani Foundation's Planeteers Workshop, this 4-hour experience (conducted over 4 days; 1 hour each day on Zoom), proved to be a key conservation starter about climate change and the role of humans in causing as well as mitigating the crisis.

Total no. of students engaged	3,000+
Total no. of schools engaged	20+
Geographies	Ladakh, Bangalore, Jodhpur, Rajkot, Surat, Pune, Navi Mumbai, Bhopal, U.S., Canada, Siliguri, Delhi-NCR, and more



Director SACNE, Jodhpur

## MEERA SINGH

The workshop gave the students a renewed sense of responsibility towards the environment and the imperative need to save it.



Student Fountainhead, Surat

## HITANSH SAVANI

The workshop was full of mind blowing facts and amazing films. It didn't feel like school because we were having so much fun!!

The workshop received positive feedback from both, teachers as well as students.



Every participant received a digital certificate of participation.

## **12. Creation of Films** Communication for Change

One of the key strengths and guiding principles of Paani Foundation has always been 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 Samruddha Gaon Spardha, our team has working on a series of videos which focus on demand management of water and ecological restoration. These videos have been scripted in co-ordination with agriculture experts, and have been finally vetted by them as well.

Below, please find a list of the videos made with training and information sharing in mind. Many more videos are underway and will be uploaded soon.

- 1. <u>Silage:</u> How to make silage at home and beat fodder shortage
- 2. Lamkani Case Study: How one village restored nutritious grasses and achieved prosperity
- <u>Record Keeping for Farmers</u>: Effective usage of the Paani app section on maintaing a farmer's diary
- 4. Ideal Watershed Planning: A live training by Agricultural Officer, Mr. D. L. Mohite
- 5. <u>Amrut Pattern:</u> A successful experiment on increasing cotton yields
- 6. <u>Rain Gauge:</u> DIY video on making a low-cost rain gauge at home
- 7. <u>Maujilal Case Study</u>: A story of a farmer whose smart and innovative cropping pattern ensures he earns every month ('A field that pays a salary')
- 8. <u>Guidelines for Tree Plantation</u>: Scientific and best practices for plantation a video which was released prior to the mass plantation drives starting August 2021

These videos were released in addition to the Gaurav Sohla videos as well as all the Sheti Shala training films and live videos.

## 13. Mini Spardha 2

After the one-day offline training which concluded in October 2021, we launched another mini spardha as part of the overall competition. This mini competition was launched on November 1, 2021 and it concluded on February 10, 2022. It focused on crucial aspects such as use of water saving tools, well water measurement, crop planning and implementation, farm record keeping, etc.

All the aspects covered in this competition amounted to a total of 210 marks. Out of the participating villages, 719 scored non-zero marks. And 592 villages scored an impressive total of over 135 marks. This performance made all these 592 villages eligible to receive a trophy as a symbol of recognition. At the moment, we're planning a ceremony to publicly acknowledge, celebrate and recognise the efforts of these villages, and present them with their award.

Sr. No.	Section	Marks
1	Using water-saving tools (For Rabi 2021, Annual crops 2021-2022)	15
2	Well water measurement (Oct-Nov 2021, Jan-Feb 2022)	2.5
3	Record-keeping of Rainfall (Monsoon 2021)	5
4	Protected Irrigation Survey	7.5
5	Crop Planning (For Rabi 2021 and annual crops)	15
6	Tanker-free Village (Summer 2021)	10
7	Clean Drinking Water (Oct 2021)	5
8	Farm Record Keeping (Work done + Costs)	30
9	Group Farming	15
10	Membership of SHGs	10
11	Livelihood through SHGs	15
12	Wastewater Management	10
13	Ideal Watershed Planning	10

14	Protected Grasslands	15
15	Increasing Tree and Forest Cover	30
16	Restoring Soil Health	15
	Total	210

## 14. App Updation

Since the Water Cup, the Paani Foundation app has played a crucial role in data collection, record keeping and monitoring the progress of work. With over 10,000 downloads since 2020 and a consistent rating of 4.8 stars, the app is a key tech intervention that has bolstered our work.

For the Samruddha Gaon Spardha, this app went through a significant upgrade in 2021. We worked with leading tech company, Persistent Systems, to upgrade and update our app. Several bug fixes were made following feedback from the villagers and our field team, and the app continued to be updated with changes in the competition's framework and targets, mainly owing to COVID. The current version of the app also allows for adding new films dynamically, without an update required in the Google Play Store. This ensure ease of usage for the villagers.

## **15. Felicitation and Recognition**

#### WOMEN WATER CHAMPIONS

In July 2021, three women who led Water Cup initiatives in their villages, were selected and felicitated as 'Women Water Champions' by the National Water Mission, UNDP in India and Stockholm International Water Institute (SIWI). They were among 41 women felicitated and recognised across India! UNDP opened up applications to several organisations and initiatives across the country, and all entries submitted by Paani Foundation were selected. Each of them was sent a memento of appreciation, and their work was acknowledged on social media.

- 1. Ms. Sunita Ravindra Patil Village: Wavad, Taluka: Nandurbar
- 2. Ms. Kaminibai Rajguru Village: Ubalkhed, Taluka: Motala
- 3. Ms. Meenakshi Sunil Bhor Village: Kansewadi, Taluka: Sangamner



## Meenakshi Bhor

Kansewadi Village. Ahmednagar District, Maharashtra

Increased community awareness and mobilized women and youth to build watershed structures to harvest rainwater to tackle the issues of water shortage in her village. This led to the availability of water in the village.

Associated with: Paani Foundation



#### MOTHER TERESA MEMORIAL AWARD

In December 2021, Paani Foundation received the Mother Teresa Memorial Award for Social Justice, from the esteemed non-profit, Harmony Foundation. On behalf of the team, Dr. Avinash Pol, our Chief Advisor, received this award in a ceremony hosted at the residence of Hon'ble Maharashtra Governor, Shri Bhagat Singh Koshyari.



## **16. Impact in Numbers**

#### (i) Participants Overview and Field Team Overview

No. of participating villages	944
No. of talukas	39
No. of districts	18
No. of villages which attended the one-day training	778
No. villagers who participated in the one-day training	6.024
No. of villages eligible for the prize in Mini Spardha 1	594
No. of villages eligible for the prize in Mini Spardha 2	592
Regional Co-ordinators in the Paani field team	8
Taluka Co-ordinators in the Paani field team	47
Master Technical Trainers in the Paani field team	6

# (ii) Well Measurements (Oct-Nov 2020 to Oct-Nov 2021) and Water Storage Capacity

No. of wells surveyed	36,237
No. of borewells surveyed	24,395
No. of participating villages in well measurement activities	734
No. of unique wells measured	7,359
No. of times the water levels of these wells were measured	18,649
No. of villages which showed an increase in water storage capacity (via shramadaan)	169

### (iii) Crop Survey and Crop Planning

No. of unique crops surveyed	93
No. of unique villages which participated in the survey	600
No of villages who prepared PPTs for Gram Sabhas to approve crop plans for Rabbi 2021 season and for annual crops	265

### (iv) Soybean Digital Sheti Shala

Total no. of Sheti Shala registrations	46,316
Total no. of Sheti Shala LIVES	13
Total views on the videos of the LIVES	2,49,509
Avg. live viewers in the Q&A sessions	7019
Total no. of Sheti Shala training videos	23 (20 in-depth videos + 3 shorts)
Total views on training videos	124,706
Total views on all Sheti Shala videos (Training + LIVES)	374,215
No. of total live chat comments, questions, reactions	5000+
Net increase in YouTube subscribers within 1.5 months of launch	13,300
No. of WhatsApp groups created for farmers to interact with each other, and share questions for experts	197
No. of farmers who attended the SoyaWIN felicitation ceremony	286

## (v) Mini Spardha 1 Felicitation Ceremony

No. of district collectors attending live	18
No. of villages attending live	At least 594
Avg. no. of villagers awarded	11,880
Total no. of views on Paani FB + YouTube (Full event + Video snippets)	758,222
Total no. of views of the 'Majha Katta' episode on ABP Majha (on FB and YouTube)	81,373

#### (vi) Mini Spardha 2

No. of villages which scored non-zero marks	719
No. of villages eligible for the prize	567

#### (vii) Grasslands and Sapling Plantation

No. of villages who are creating grasslands	614
No. of bamboo saplings planted	1,50,000+
No. of other saplings planted	1,00,000+

### (viii) Highlights: Social Media Reach

Social media community strength (Across FB, YouTube, Twitter, Instagram and LinkedIn)	7,364,723
No. of total YouTube video views in 2021 (including old and new videos)	8,030,775
Total watch time on YouTube	442,795 hours