2. Akrale

Intent of the Visit:

To understand the **awareness level of the people in the village and the water usage trend in agriculture** there.
Also to understand the **factors, which if addressed can drive away the village from water crisis.**

About the Village:

- Located in **Dindori Tehsil**
- 6km from Dindori HQ and 26km from Nashik HQ
- Population: **1688; 346 houses**
- **50-60% people do labour since agriculture is seasonal**
- Has an average rainfall **of 600mm**
- Nearest dam(**Pazhar talav**) **around 1.5 km far**
- Small farmers generally grow **tomato and wheat, while big farmers grow grapes, capcicum,tomato**
- All the **disputes are solved inside the village** and none is taken to the police

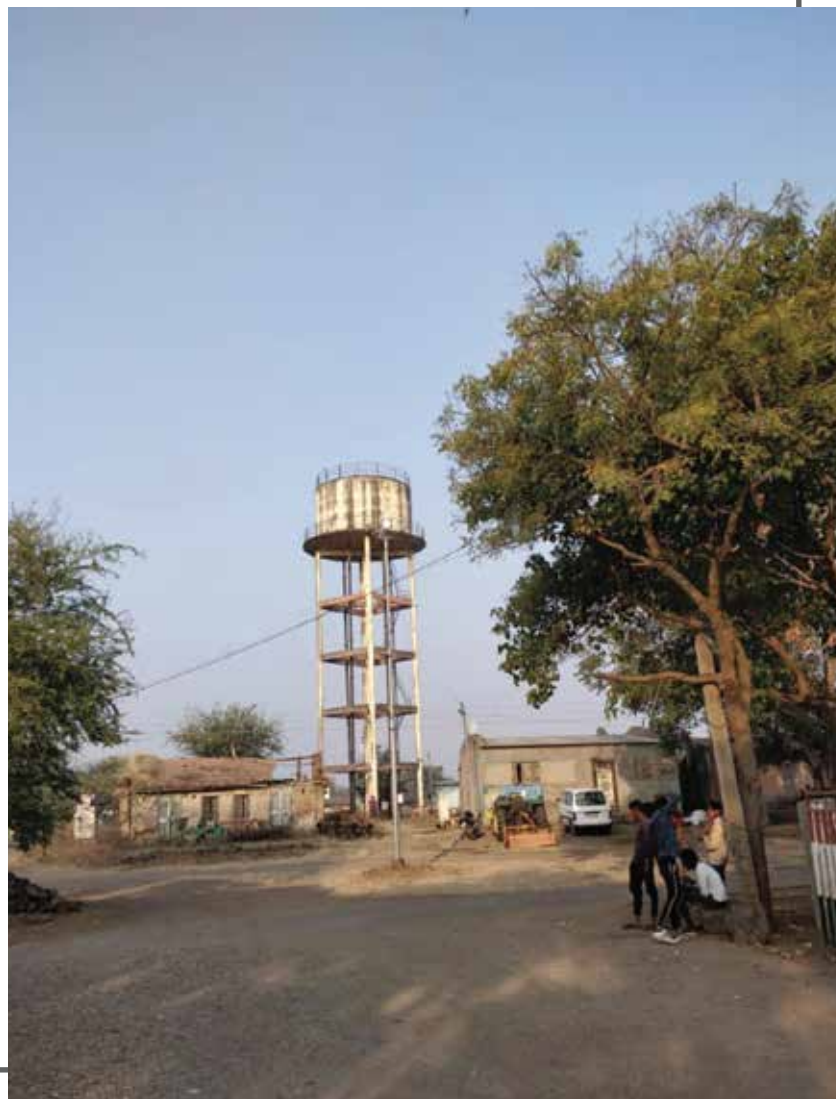
Sources: A 2012 study by International Water Management Institute

Whom did we meet?

- Hiraman Falane: Deputy to Sarpanch of the village
- Nitin: A graduate who currently works with Sarpanch in the gram panchayat
- Manoj: A friend of Hiraman Falane

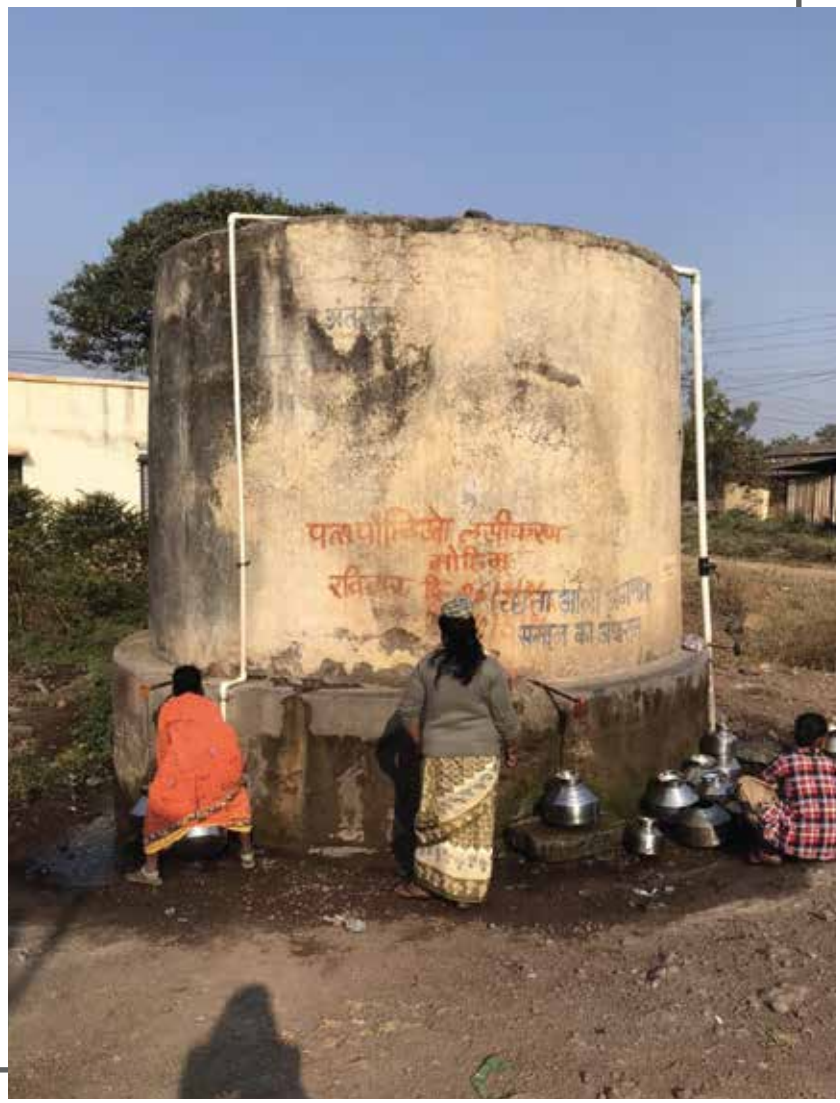
Current Situation

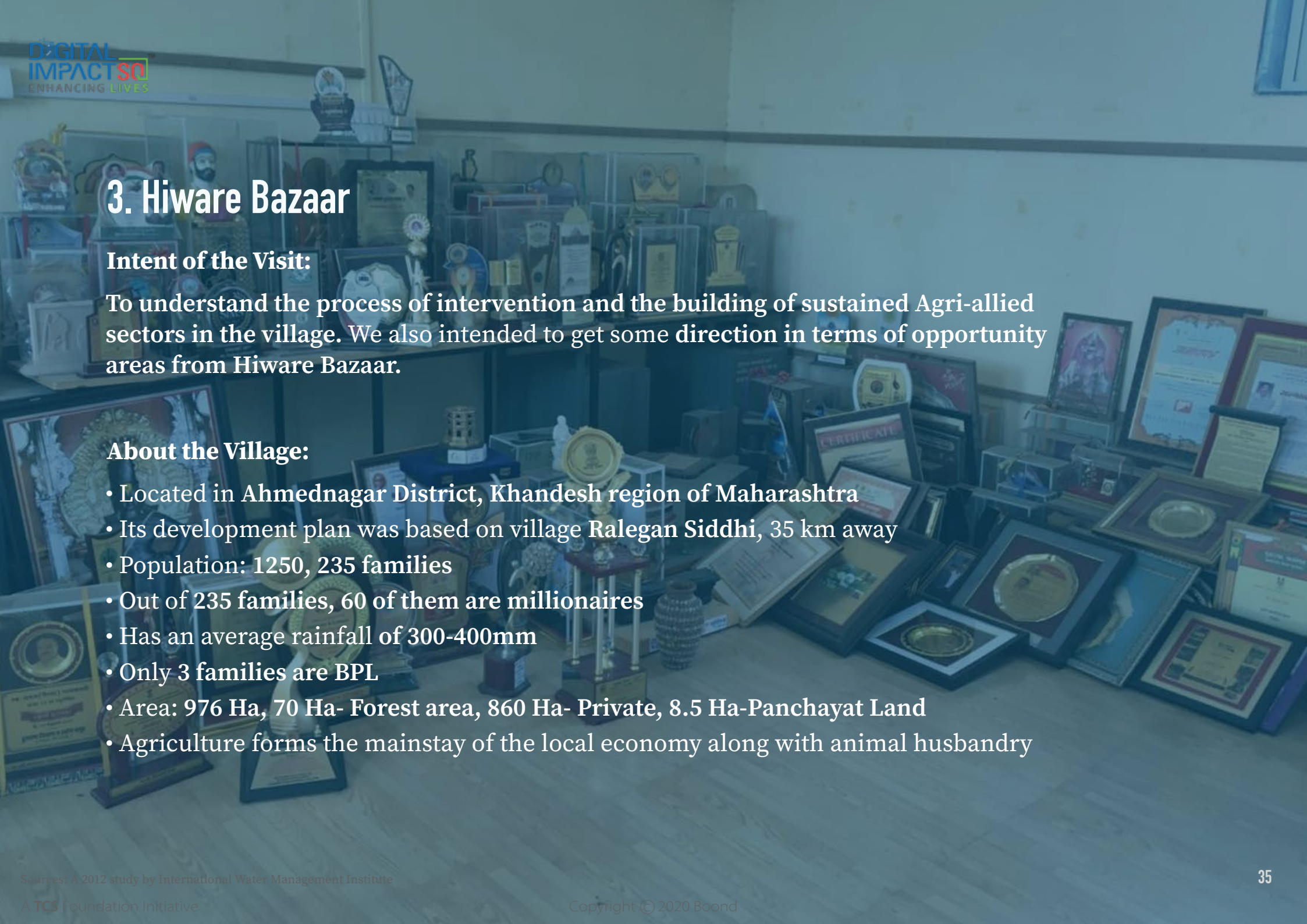
- **Seasonal agriculture**
- Water for **irrigation is through wells and borewells. Some rich farmers have their personal ponds.**
- **2 overhead tanks** which provide **water for drinking.** The water is **filled in these from the bore wells**
- **High water scarcity by the month of February.** Need to **call water tankers for satisfying drinking water needs**
- They get **4-8 hours of electricity. 3 days in the morning and 3 days in the night.**



Current Situation

- **Water tax of Rs 240 needs to be paid every year irrespective of the amount of water used**
- Water is **not available through tap** at every house.
- The **Pazhar Talav built has excessive leakage due to which water is not stored for long**
- **Shramdaan is currently being used to make a digital school in the village.**





3. Hiware Bazaar

Intent of the Visit:

To understand the process of intervention and the building of sustained Agri-allied sectors in the village. We also intended to get some **direction in terms of opportunity areas from Hiware Bazaar.**

About the Village:

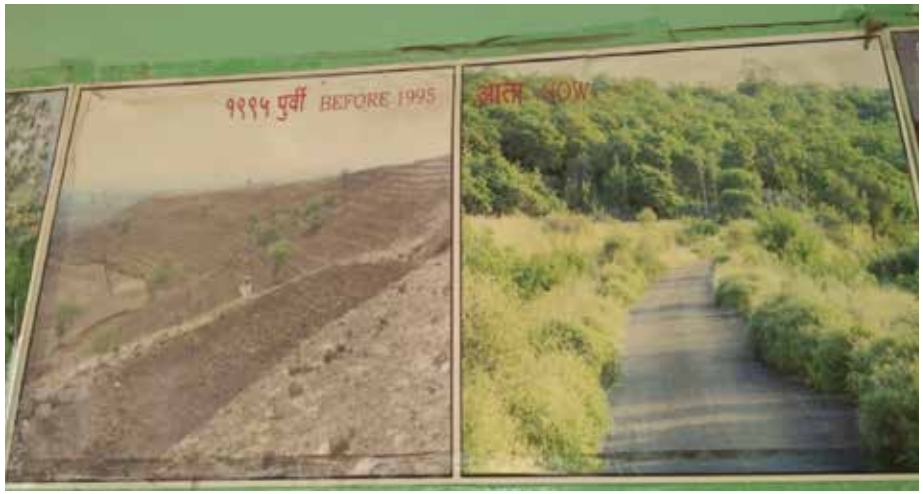
- Located in **Ahmednagar District, Khandesh region of Maharashtra**
- Its development plan was based on village **Ralegan Siddhi**, 35 km away
- Population: **1250, 235 families**
- Out of **235 families, 60 of them are millionaires**
- Has an average rainfall **of 300-400mm**
- Only **3 families are BPL**
- Area: **976 Ha, 70 Ha- Forest area, 860 Ha- Private, 8.5 Ha-Panchayat Land**
- Agriculture forms the mainstay of the local economy along with animal husbandry

Sources: A 2012 study by International Water Management Institute

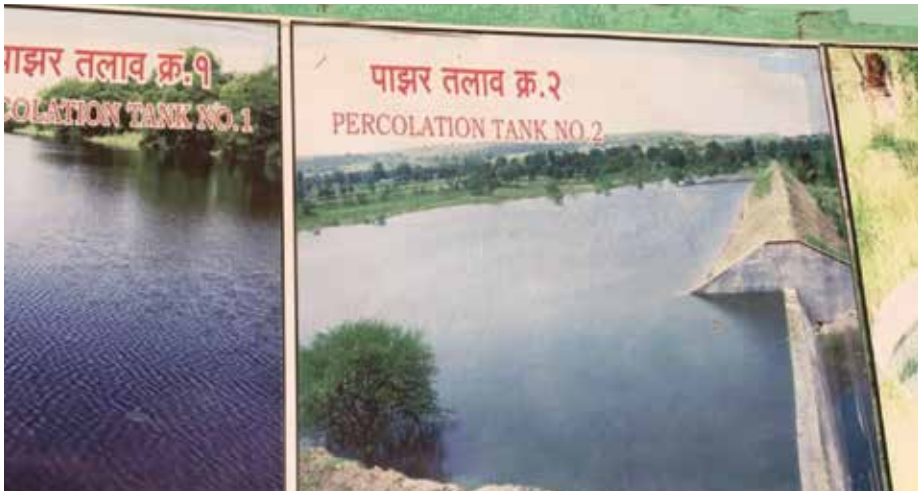
Whom did we meet?

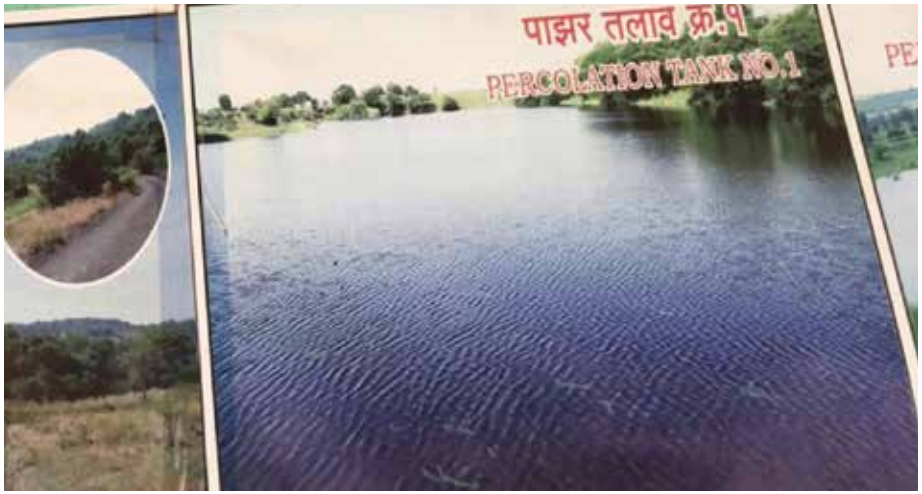
- **Popatrao Pawar:** Ex Sarpanch, under whose leadership the village became a model village.
- **Habib:** A member of water committe who has closely worked with Popatrao Pawar
- **Amrute Sir:** Yashvant Madhyamik Vidhyalaya Headmaster
- **Gulab Gaikwad:** Technical Person

Before & After of Water Infrastructures

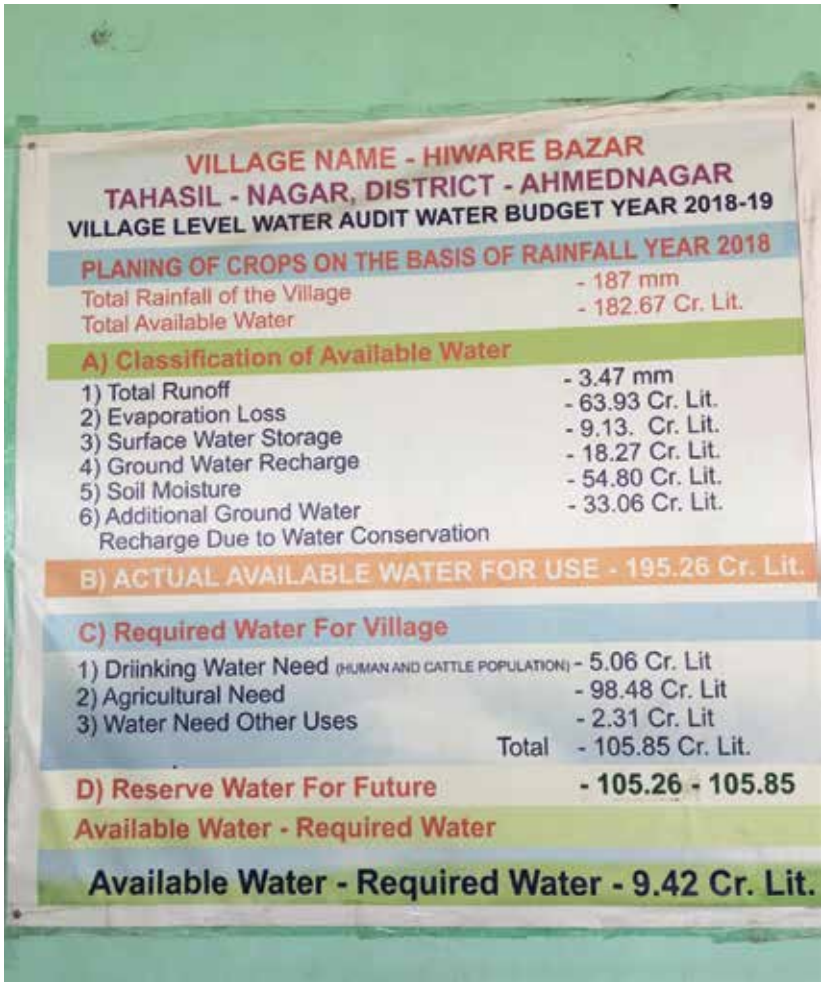


Before & After Water Infrastructures





Water Budgeting Hiware Bazaar



VILLAGE NAME - HIWARE BAZAR
TAHASIL - NAGAR, DISTRICT - AHMEDNAGAR
VILLAGE LEVEL WATER AUDIT WATER BUDGET YEAR 2018-19

PLANING OF CROPS ON THE BASIS OF RAINFALL YEAR 2018

Total Rainfall of the Village	- 187 mm
Total Available Water	- 182.67 Cr. Lit.

A) Classification of Available Water

1) Total Runoff	- 3.47 mm
2) Evaporation Loss	- 63.93 Cr. Lit.
3) Surface Water Storage	- 9.13. Cr. Lit.
4) Ground Water Recharge	- 18.27 Cr. Lit.
5) Soil Moisture	- 54.80 Cr. Lit.
6) Additional Ground Water Recharge Due to Water Conservation	- 33.06 Cr. Lit.

B) ACTUAL AVAILABLE WATER FOR USE - 195.26 Cr. Lit.

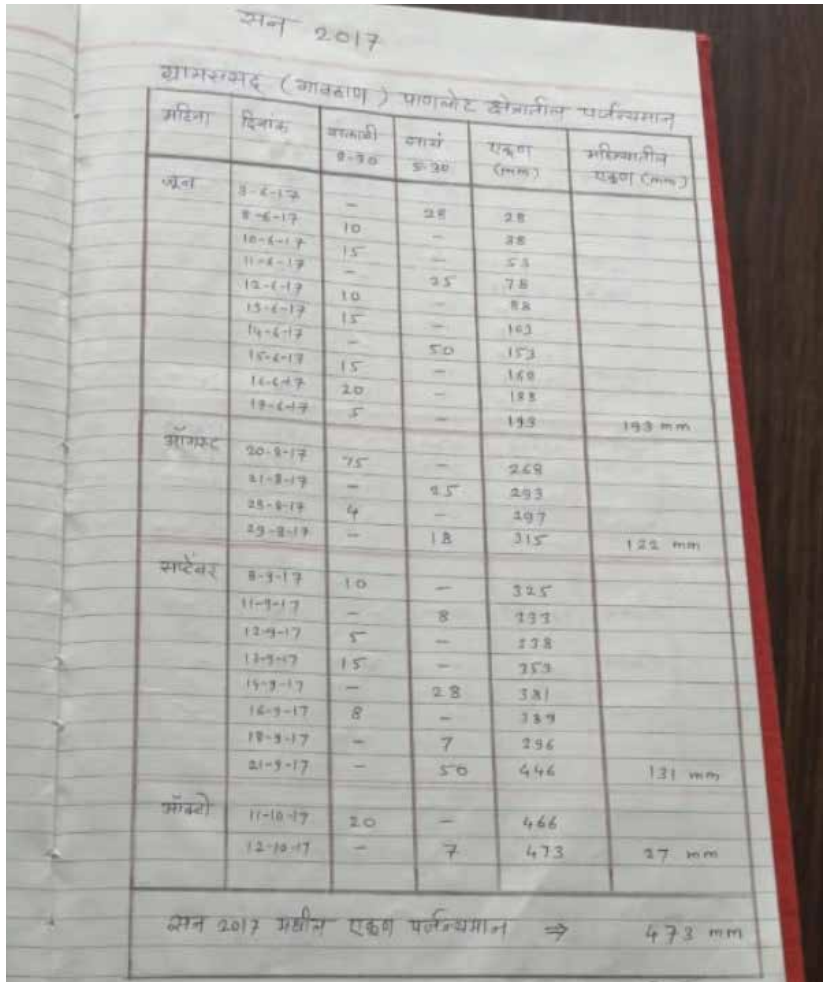
C) Required Water For Village

1) Driinking Water Need (HUMAN AND CATTLE POPULATION)	- 5.06 Cr. Lit
2) Agricultural Need	- 98.48 Cr. Lit
3) Water Need Other Uses	- 2.31 Cr. Lit
Total	- 105.85 Cr. Lit.

D) Reserve Water For Future - 105.26 - 105.85

Available Water - Required Water

Available Water - Required Water - 9.42 Cr. Lit.



सन 2017

ग्रामसभेद (जावळण) पाणलोट क्षेत्रातील पर्जन्यमान

महिना	दिनांक	बाष्पीभवन 8-30	गळती 5-30	एकूण (mm)	महिन्यातील एकूण (mm)
जून	3-6-17	–	28	28	
	8-6-17	10	–	38	
	10-6-17	15	–	53	
	11-6-17	–	25	78	
	12-6-17	10	–	88	
	13-6-17	15	–	103	
	14-6-17	–	50	153	
	15-6-17	15	–	168	
	16-6-17	20	–	188	
	18-6-17	5	–	193	193 mm
ऑगस्ट	20-8-17	75	–	268	
	21-8-17	–	25	293	
	28-8-17	4	–	297	
	29-8-17	–	18	315	122 mm
सप्टेंबर	8-9-17	10	–	325	
	11-9-17	–	8	333	
	12-9-17	5	–	338	
	13-9-17	15	–	353	
	15-9-17	–	28	381	
	16-9-17	8	–	389	
	18-9-17	–	7	396	
	21-9-17	–	50	446	131 mm
ऑक्टो	11-10-17	20	–	466	
	12-10-17	–	7	473	27 mm

सन 2017 मधील एकूण पर्जन्यमान ⇒ 473 mm

Insights

Konambe	Akrale	Hiware Bazaar
There is a communication gap between the villages & through social media they want to bridge the gap	Shramdan is focused on building digital schools.	All their practices & interventions are experience based.
Awareness in the youth is good that they are ready to do everything on their own nothing to be enforced upon them.	Water scarcity is not seen as a man-made cause but rather considered as a natural phenomenon.	Youth identified the need of the hour spread awareness & tackled the crisis.
Community based intervention is playing a vital role than the Government subsidies & policies.	In this village, water related structures are influenced by the political scenario.	Agri-allied sector grew in the village, which increased the income.
Crop pattern is influenced by market demand.	Not aware about any water conservation techniques	They have made internal committees which resulted in better implementation and use of resource as well as have increased transparency.

Insights

Konambe	Akrale	Hiware Bazaar
They are not able to create an economy around because they do not have the training nor are they aware of the market place to sell them.	They do not consider water as a problem hence no work is done towards it	Quality is preferred over quantity where people are ready to contribute both monetarily & physically
They analysed the root cause & worked on it, i.e. cropping pattern.	They are solving all the disputes in the village itself.	
Even though government made the dam, they treated it like community property & maintained it.	Water stealing is not considered unethical, if the situation demands, a person can steal the water.	
They are becoming self- reliant		

Insights

Konambe	Akrale	Hiware Bazaar
Technical aspects & topology is considered before constructing any new structures in and around the village		
Their main aim is to solve the problem, it doesn't matter how far they have to go for it.		
They are implementing new technologies by amending their rules.		
If the rainwater is conserved in every village, the water crisis can be solved.		

Gaps

Konambe	Akrale	Hiware Bazaar
No proper monitoring system of how much water is withdrawn by the farmers from various water sources like dams, wells etc.	No awareness amongst the farmers regarding water conservation techniques.	Water budgeting is on experiential basis
Still following traditional methods to measure the water level in dams which are inaccurate.	Water budgeting system not implemented.	Manual way of measuring water level in water sources
No digital technique to keep a check on the maintenance of the various water structures	No leader to drive the community towards water conservation.	

Attributes

Attributes	Konambe	Akrale	Hiware Bazaar
PEOPLE			
Awareness among the youth	✓		✓
Empowering the youth	✓		✓
Visionary leadership	✓		✓
Sustained leadership			✓
Mental awareness among the people to utilize the resources judiciously	✓		✓
Willingness of people to accept change	✓	✓	✓

Attributes

Attributes	Konambe	Akrale	Hiware Bazaar
RESOURCES			
Assured allied agri sector			✓
Water resources available	✓		
Proactive on knowing schemes & usage	✓	✓	✓
Transparency in decisions and fund utilization			✓
Shramdaan given priority	✓	✓	✓
Literacy			

Attributes

Attributes	Konambe	Akrale	Hiware Bazaar
GEOGRAPHICAL AREA			
Good Topography	✓ Saucer Shape		
Rainfall	600mm	600mm (Dindori)	300-400mm

Opportunity Areas

- All the water budgeting remains on paper and is being practiced on experiential basis. For a new village to understand water Budgeting and use it in the most efficient way shouldn't take the same time it took for model village. So a technology which can accurately measure the groundwater level and accordingly suggest water budgeting could be made.

- No digital method to measure and monitor the water level in any water structures be it dams, canals and Wells. The measurements of Wells were initially being done by children but then due to safety reasons needed to be stopped. To tackle these a digital method of measuring water structures can be made

- Build a water budgeting platform that acts as an accelerated program by not only assisting in water budgeting techniques but also by giving the farmer a look into the future, which shows how their current practices might make their future look

- Develop a platform for sharing the best practices followed by any village with other villages so that they can get inspired.

Way Forward

Now we have a macro-level understanding of the rural water ecosystem and the process of intervention.

In order to dig deeper and get insights from various stakeholders we are planning to:

1. Go to the academic/ research institutions like WOTR, NWA.

2. Visit Paani Foundation to understand their video on Samrudh Gaon (building Economy around water).

3. Meet Farmers.

DIGITAL IMPACT SQ
ENHANCING LIVES

THANK YOU