EKATVAM Innovations Pvt.Ltd.

Ekatvam Innovation presents,

Water Resource Status of KUNDALIYARA

JANUARY 2023

Season - KHARIF

Taluka - RAJULA

Our Village's detailed monthly water report

Collaboration with -

CSPC Coastal Salinity Prevention Cell
AN INITIATIVE OF TATA TRUSTS, AKRSP(I) AND ACF

+

MIDAS

Know our Village Demographics.

Village Population

12	123	131	1
Humans	Cattle	Sheep	Poultry

Temperature

10 ° C	33 ° C
Minimum	Maximum

Wind Speed

3312 Km/hr

Unit Conversations

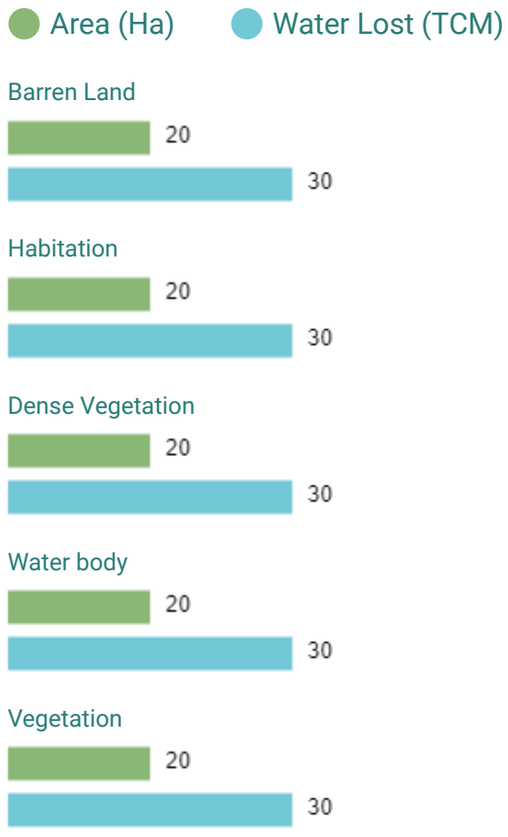
1 TCM = 10 Lakh Litres = 0.1 Crore Litres.
1 Hectare(Ha) = 2.47 Acre = 5.92 Bigha

The Village map with **Land division** boundaries.

*Estimated as per satellite image of year 2023.

Area under the village

47 Ha (hectares)



How much rainfall did our village recieve?

Rainfall recieved till January.

231 mm (milli meters)

Rainy Days

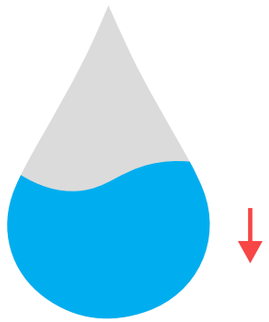
29

Rainfall till now

32 mm (milli meters)

Total Rainwater (Volume)

3325 TCM



Average Village Rainfall

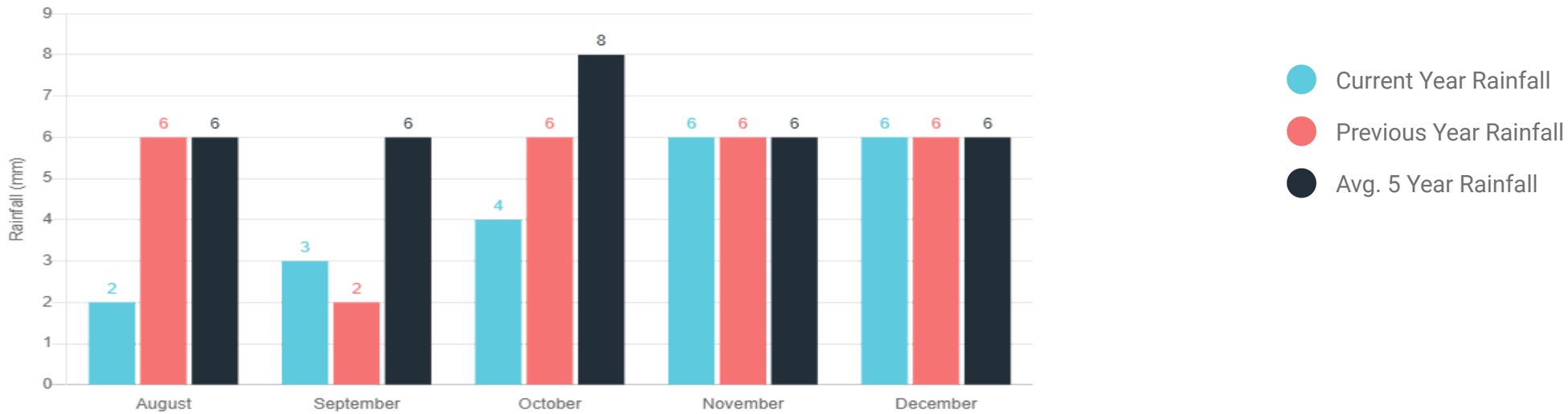
124 mm (milli meters)

Avg. Rainy Days

73

Overall Rainfall recieved till **January** is **LESS than 80 %** than the Average rainfall.

Graph showing monthly comparison of Rainfall Data



What happens to our Surfacewater Runoff ?

Total runoff generated till January.

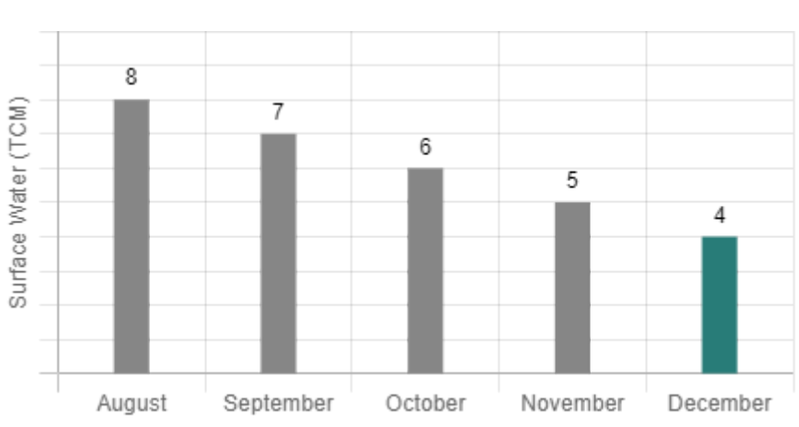
323 mm

Surfacewater bodies filled as of January.

39

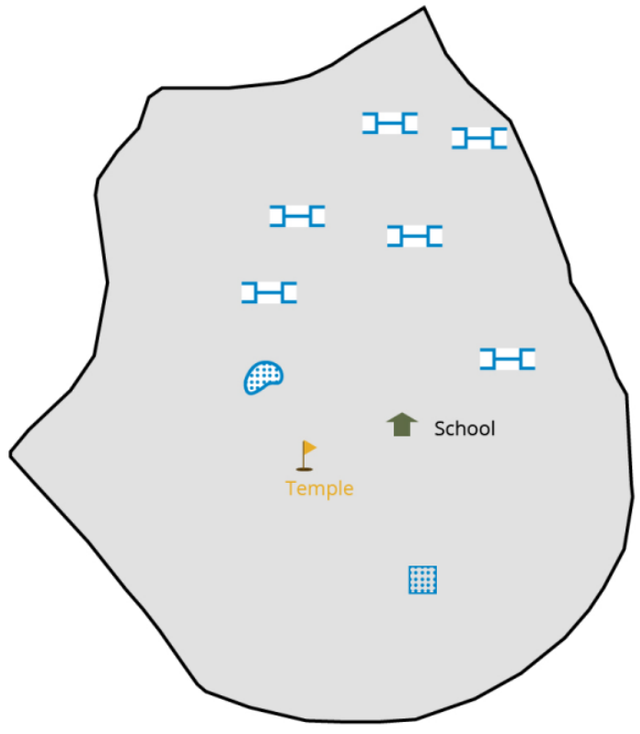
Total Surfacewater as of January.

739 TCM



Legend	
Check Dam	11
Percolation Tank	12
Village Pond	13
Farm Pond	14

The Village map with Surface Water Bodies Locations.



What is our village Groundwater Level ?

Note:- Groundwater is our invisible resource and is highly dynamic in nature, so it needs to be used judiciously.

Soil Moisture + Ground Water in January

199 mm

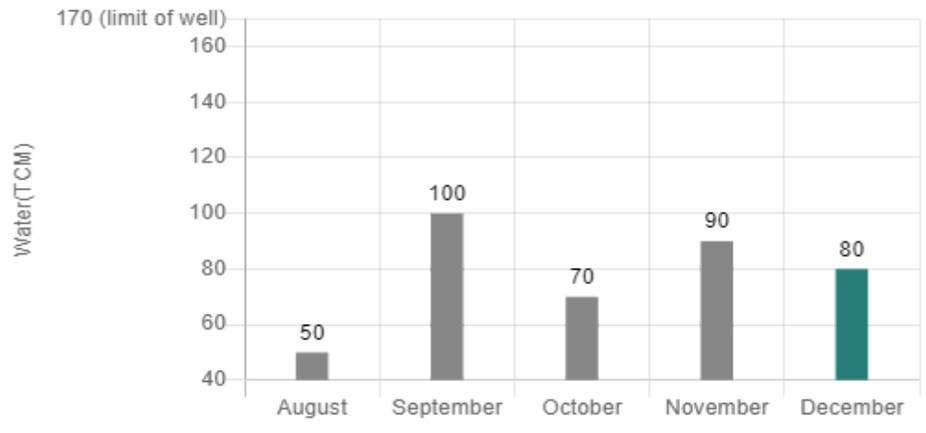
Total Observation Wells

683 mm

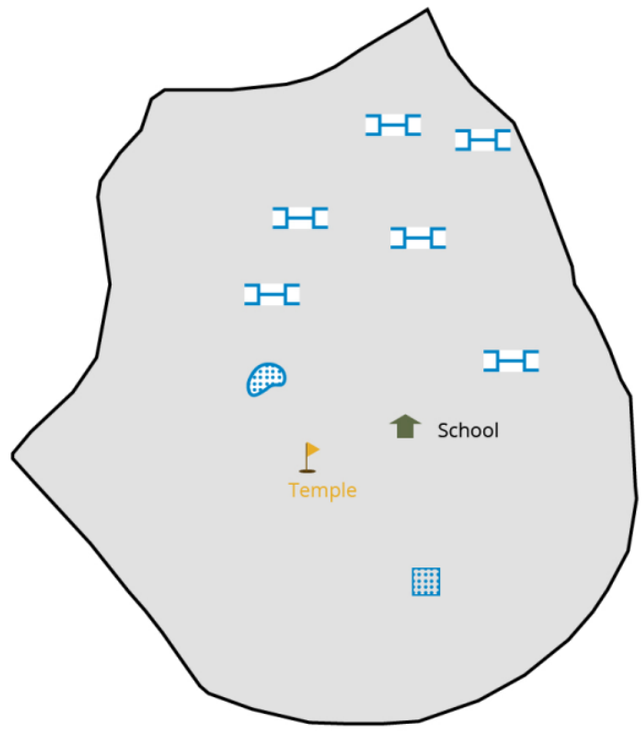
Average water level as of January.

82 m Bgl (Meters Below Ground Level)

Graph representing **Monthwise Groundwater Level.**



The Village map with **Observation Wells** Locations.



How much water did our village crops use?

Water consumed by crops till January

5839 TCM

Area Under Crops

3321 Ha (Hectares)

Types of Crops being grown are,

Bar and % represents Areawise Drip implemented

Represents water consumed by the crop

Kharif

Mango 431 Ha — 23% — 901 TCM

Mango 432 Ha — 64% — 902 TCM

Mango 439 Ha — 94% — 902 TCM

Mango 431 Ha — 63% — 901 TCM

Mango 432 Ha — 64% — 902 TCM

Mango 432 Ha — 64% — 902 TCM

Mango 431 Ha — 63% — 901 TCM

Mango 432 Ha — 64% — 902 TCM

Mango 433 Ha — 64% — 902 TCM

Mango 431 Ha — 63% — 901 TCM

Mango 432 Ha — 64% — 902 TCM

Mango 432 Ha — 64% — 902 TCM

Rabi

Mango 133 Ha — 84% — 202 TCM

Summer

Mango 133 Ha — 84% — 202 TCM

How much water does our Households use ?

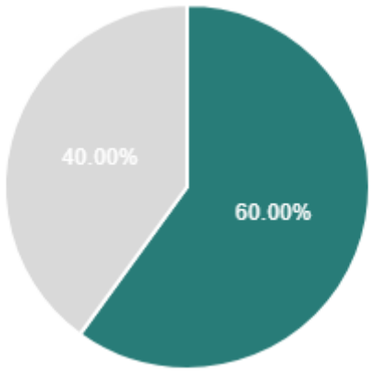
Domestic Water consumed till January

3891 TCM

Annual consumption of the Village

2210 TCM

Pie chart showing Annual Domestic consumption



Water is consumed by,

67%	32%	48%	19%	91%
Humans	Cattle	Sheep	Poultry	Industries

Who have a population of,

2144	1921	9212	3410	1109

What is our WATER BALANCE ?

Supply

Water available in the beginning of January.

2231 TCM

Surfacewater
4462 TCM

+

Soil moisture &
Groundwater
1252 TCM

+

Rainfall
5924 TCM

Demand

Water available in the beginning of January.

4910 TCM

Domestic requirement
3910 TCM

+

Crop Requirement
1429 TCM

+

Evaporation &
Evapotranspiration
2952 TCM

+

Surface Runoff
9942 TCM

Water Balance

Water available in the beginning of January.

2331 TCM

Surfacewater
4462 TCM

+

Soil moisture &
Groundwater
5252 TCM

+

Rainfall
1924 TCM

Glossary

Term	Page No.	Meaning
Water Lost	2	Total evaporation of water from waterbodies, Barren lands, Dense vegetation and Grasslands have been considered.
Surface water	4	Volume of water in various water conservation structures as observed in satellite images obtained in the month of **January** .
Groundwater + Soil Moisture	5	The estimated volume of water computed using groundwater levels of observation wells measured n the service.
Crop water requirement	6	Total water that has been cosumed by the crops till **January** .
Domestic Consumption	7	Amount of water consumed by Humans, Sheep, Cattle, Poultry & Other Industries as per the Indian Standard norms.
Supply	8	Volume of water present in various forms like Surfacewater, Groundwater and Rainfall till **January**
Demand	8	Volume of water consumed for irrigation, drinking water purposes and total evaporation till **January**
Water Balance	8	Volume of water remaining after the consumption (Supply - Demand) in **January**

Thank You.

This report is presented to you by
Ekatvam Innovations Pvt. Ltd. The Data has been derived from Primary and Secondary Sources:

- Primary Sources being the Field Visits conducted by Team Ekatvam in the Service.
- Secondary Sources being the Satellite images and Government Records.