## SUITABILITY OF GROUNDWATER FOR IRRIGATION PURPOSES AT MEWAT, HARYANA (INDIA) Mamta Bisht, Ph.D. Scholar, IARI, Pusa, New Delhi (India) Introduction Results Groundwater quality plays an important role in influencing the agricultural sustainability particularly in arid and semi arid of the country. **Study area-** Mewat region, Haryana, India 77°30'0"E 28°20'0"N-20'0"N Mewat district, Haryana, India India 28°10'0"N 28°10'0"N Harvar Sampling Point Sampling Point 28°0'0"N 8°0'0"N District Map District Map ampling location ampling location C(u/cm) Valu C(u/cm) Value Administrative Blocks 0-2.000 27°50'0"N 27°50'0"N 2.000 - 12.000 2.000 - 12.000 Taoru 12.000 - 22.000 12,000 - 22,000 Nuh 22,000 - 32,000 22,000 - 32,000 Nagina 5 10 32,000 - 51,000 32,000 - 51,000 FP Jhirka Punhana -27°40'0"N 27°40'0"N Aravalli Ranges 1. Salinity hazard (a) Pre-monsoon, (b) Monsoon Objective

➢To analyze the groundwater suitability for irrigation purposes > To give an idea about working experimental model

i.e. pressurized recharge well for tackling the groundwater salinity at Mewat region

## Methodology

To study the impact of monsoon on groundwater quality, twenty three groundwater samples were collected

The quality of groundwater samples including EC, pH, alkalinity sodium (Na<sup>+</sup>), potassium (K<sup>+</sup>), sulphate (SO4<sup>2-</sup>),fluoride (F<sup>-</sup>), Nitrate (NO<sub>3</sub><sup>-</sup>), calcium (Ca<sup>2+</sup>), magnesium (Mg<sup>2+</sup>) were analyzed by standard methods.









respect to RSC. major challenge.





## Pressurized recharge well

## Conclusion

The pre-monsoon and monsoon data were compared to understand the effect of monsoon on groundwater quality. There was almost no change in groundwater quality with

The model has high potential in those regions with saline ground water and in coastal areas where sea water ingress poses a