

EFFORTS TO CONSERVE THE HISTORICAL TREASURE HOUSE OF WESTERN U.P.

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The Problem

Meerut is one of the important industrial towns of the western Uttar Pradesh.

The city of Meerut well represents the worsening water scarcity situation in the country.

It once had abundance of irrigation canals.

Due to ever increasing population there has been an abnormal growth in the demand for water.

This in turn has led to the construction of tube wells and thus groundwater table is decreasing at an accelerated rate.

The abuse of pesticides and chemicals in agriculture is the primary cause for groundwater pollution in rural areas.

Natural Water Resources — Solution for Water Crisis

Our forefathers knew that the growing population would lead to an increased demand for water in the future.

Today we have civil engineers, hydrologists and architects, who have acquired knowledge to preserve water.

Natural Water Bodies in Western U.P.

Western Uttar Pradesh-a region which was once known for its gifted abundance in water resources is nearing a water crisis.

Our historical resources are losing their identity and existence.

People are hardly aware about the facilities lying at hand.

EFFORTS OF JANHIT FOUNDATION

DOCUMENTATION OF THE WATER BODIES OF WESTERN UTTAR PRADESH

100 page book titled 'Pashchimi Uttar Pradesh Ki Aitihasik Virasat' has been published in the context of western U.P providing indepth details of more than 60 water bodies within this region with the support of Royal Netherlands Embassy.

STUDY CONDUCTED ON THE EXISTING SITUATION OF THE WATER BODIES



Study was conducted in 2012 to verify the existence of the natural water resource structures in 663 villages of Meerut districts of Western U.P

Support by Ministry of Water Resources (Government of India).

Outcomes mapped on a GIS platform for policy makers and planners.

OBJECTIVES OF THE STUDY

- * To verify the existence of the natural water resources structures.
- * To conduct water quality and quantity analysis of water available in the existing water bodies.
- * To analyze parameters for water quality of water bodies.
- * Outcomes mapping on a GIS platform for e-governance of water bodies.
- * Awareness amongst user groups about threat being faced by traditional water bodies.

METHODOLOGY OF THE STUDY

- * Revenue records obtained for all the 12 blocks and Meerut Municipal Corporation.
- * Survey undertaken to verify whether water bodies still existed or not as mentioned in the revenue records obtained.
- * 4-5 water bodies selected for sample collection through grab (catch) sampling method in each block.
- * Samples analyzed by National River Water Quality Laboratory, Central Water Commission, New Delhi.
- * The outcomes finally mapped on a GIS platform for policy makers and planners.

FINDINGS OF THE STUDY

| S. No. | Description | Figures on September, 2011 |
|--------|--|----------------------------|
| 1 | Total Number of Ponds in revenue records | 3306 |
| 2 | Ponds physically present | 3276 |
| 3 | Number of encroached ponds out of those existing | 1232 |
| 4 | Number of dry ponds | 1039 |
| 6 | Total number of wells | 1700 |
| 7 | No. of wells with water | 212 |
| 8 | No. of dry wells | 1488 |
| 9 | No. of India Mark II hand pumps | 22347 |
| 10 | No. of tube wells | 47159 |

WATER QUALITY PARAMETERS

| Parameters analyzed | Maximum | Minimum | Mean |
|---|---------|---------|---------|
| pH | 8.97 | 7.42 | 7.99 |
| Electrical Conductivity $\mu\text{Mhos/cm}$ | 17630 | 1212 | 2756.16 |
| Turbidity NTU | 92 | 3 | 20.68 |
| Arsenic $\mu\text{g/L}$ | 24.32 | 0.5 | 5.62 |
| Lead $\mu\text{g/L}$ | 114.2 | 6.62 | 20.44 |
| Chromium $\mu\text{g/L}$ | 166.23 | 4.72 | 24.52 |
| Cadmium $\mu\text{g/L}$ | 10.85 | 0.05 | 0.74 |
| Copper mg/l | 0.35 | 0 | 0.05 |
| Iron mg/l | 6.35 | 0.19 | 1.77 |
| Nickel mg/l | 0.17 | 0 | 0.02 |
| Zinc mg/l | 7 | 0 | 0.29 |
| Chemical Oxygen Demand (COD) mg/l | 1904 | 336 | 744.96 |

CONCLUSION & RECOMMENDATIONS

- *The high concentrations of the pollution parameters - poisonous for human consumption.
- *Village health and sanitation committees take appropriate action
- *Central Pollution Control Board & State Health Department should take up pro-active measures for reducing contamination and increasing public awareness.

POND REVIVAL BY JF

- * Pond in Kishoripura village under Mawana block.
- * Pond in Kalyanpur and Alamgirpur villages under Rohta block.
- * Pond in Mohammadpur Dhoomi under Jani block.
- * Kutte Ka Talaab in Chipyana village of Ghaziabad
- * Siddh Baba Kodiya Talaab in Machri village of Modinagar.

A high-speed photograph of a water splash against a light blue background. The water is captured in mid-air, forming a complex, swirling shape with many small droplets and bubbles. The word 'THANKS' is superimposed in the center of the splash in a bold, black, sans-serif font. The text has a subtle drop shadow, making it stand out from the water.

THANKS