

# WATER

## Introductory Thoughts



### The Jodhpur Initiative

#### 1. BACKGROUND

The City of Jodhpur was suffering from major water *shortage* till early 1990s, when the water from Punjab through the *Indira Gandhi Canal*, and thereafter by the *Rajiv Gandhi Canal* reached water to the city. Sociological changes happened thereon - people of the city of Jodhpur used the canal water (which became easily available in taps in each house) in place of drawing water from traditional wells spread throughout the city. Alongside, the city did not develop the mechanisms to take the storm water, waste water and sewage from each household and treat them - even today most of the water is left into the ground. Over the last two decades of getting the canal water, the ground water table has risen - at an alarming rate of about 1m per year in some places, and lesser in some. But, for sure, the ground water is polluted with sewage. Numerous test of ground water quality at different locations have established this emphatically - in many cases, the contamination of Nitrates, Fluorides, Sulphates and Phosphates (from the sewage) are well beyond acceptable levels. It is a matter of loss of human dignity in the city of Jodhpur... with sewage contaminating the ground water and the ground water filling basements of houses in the city of Jodhpur.

#### 2. ACTIONS

TJI will work on four tracks:

- (1) Quantifying the source of water, and planning the water availability for next two decades,
- (2) Managing the supply, distribution and monitoring of the drinking water to the households,
- (3) Reviewing *Waste Water Handling and Treatment Strategies*, and re-engineering the *Management strategies*, and
- (4) Understanding the possibilities of re-structuring the governance and legal aspects of water and waste water management in the city.

Clearly, the work along the above four tracks will be *technology driven*, and involve significant effort towards online monitoring through sensors (a) canal water monitoring to understand the losses along the canal length, (b) along distribution lines for the supply, use, theft and wastage of water), and (c) GPS sensor based monitoring of water tankers delivering water to the city household (from the point of view of water quality).

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