

Rethinking Piped Water Supply: Water Access and Infrastructure Changes in Hubli-Dharwad, India

Emily Kumpel
Civil and Environmental
Engineering
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Intermittent Water Supply

Centrally treated surface water from municipality piped supplied to neighborhoods rotationally every 3-4 days

Intermittent supply is the norm for Indian cities and towns





Multiple Sources and Delivery Options



piped · private tubewell · public tap (pipied or groundwater) · tanker (government or Private) · door-to-door vendors · surface · bottled

Coping Strategies



pumps · underground tanks (protected or open) · rooftop storage · indoor storage · household treatment

Storage and Behavior Changes



“24/7” Water Supply

- Transition to continuous water supply – seen as “gold standard”
- World Bank-funded
- 10% of Hubli-Dharwad now on continuous water supply, operation within last 2 years
- Plans to scale



Advantages of 24/7

- Minimize water loss
- Cost recovery
- Water quality
- Life of infrastructure
- Reduction in user-borne coping costs

Criticisms of 24/7

- Can't or won't reach everyone, especially the poor
- Insufficient water
- Benefits aren't sufficient to justify investment

Research Questions

- What are the goals of a water supply for urban households and institutions (health and education) in Hubli-Dharwad? How can these be measured?
- How is water currently accessed using a combination of coping strategies?
- How do household and institutional buildings with 24/7 compare with those without?
 - What are changes in water use? Where will 24/7 have the largest impact?
 - How do combinations of coping strategies for those with intermittent piped supply compare according to the indicators?