

## 24x7 Urban Water Supply at Jamshedpur

\*\*\*\*\*

Experience on PPP in Urban Water Supply and sanitation sector

Presentation

To

Working Group on Urban & Industrial Water Supply FOR 12<sup>TH</sup>  
Five Year Plan ( 2011-2017) , Nirman Bhawan , N.Delhi on  
18.03.2011



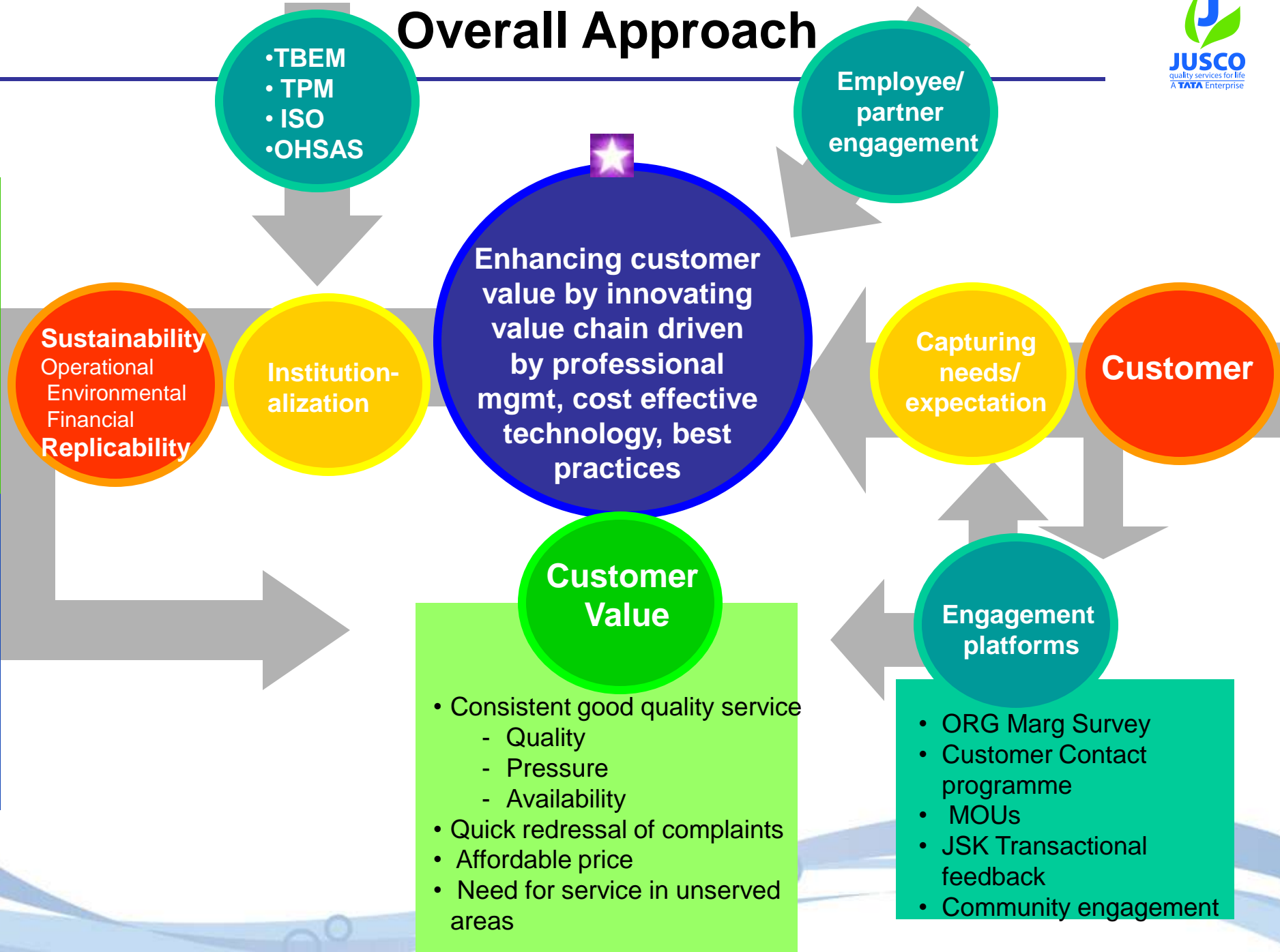
- **Corporatisation of Municipal water services: Jamshedpur Model**
- PPP vehicle and Replication of Jusco experience

# Need for change: Issues and constraints faced

1. **Moderate Coverage** (less than 67%) and declining service levels
2. **High NRW** > 36% due to physical losses and unauthorized connections
3. **Flat tariff regime** based on area with negligible levels of metering
4. **Manual and decentralized customer management**
5. **Financial constraints** - Deficit towards 2004 rose to US\$ 8 million annually
6. **Operational** - Home-grown operation and limited exposure to 'best' practices

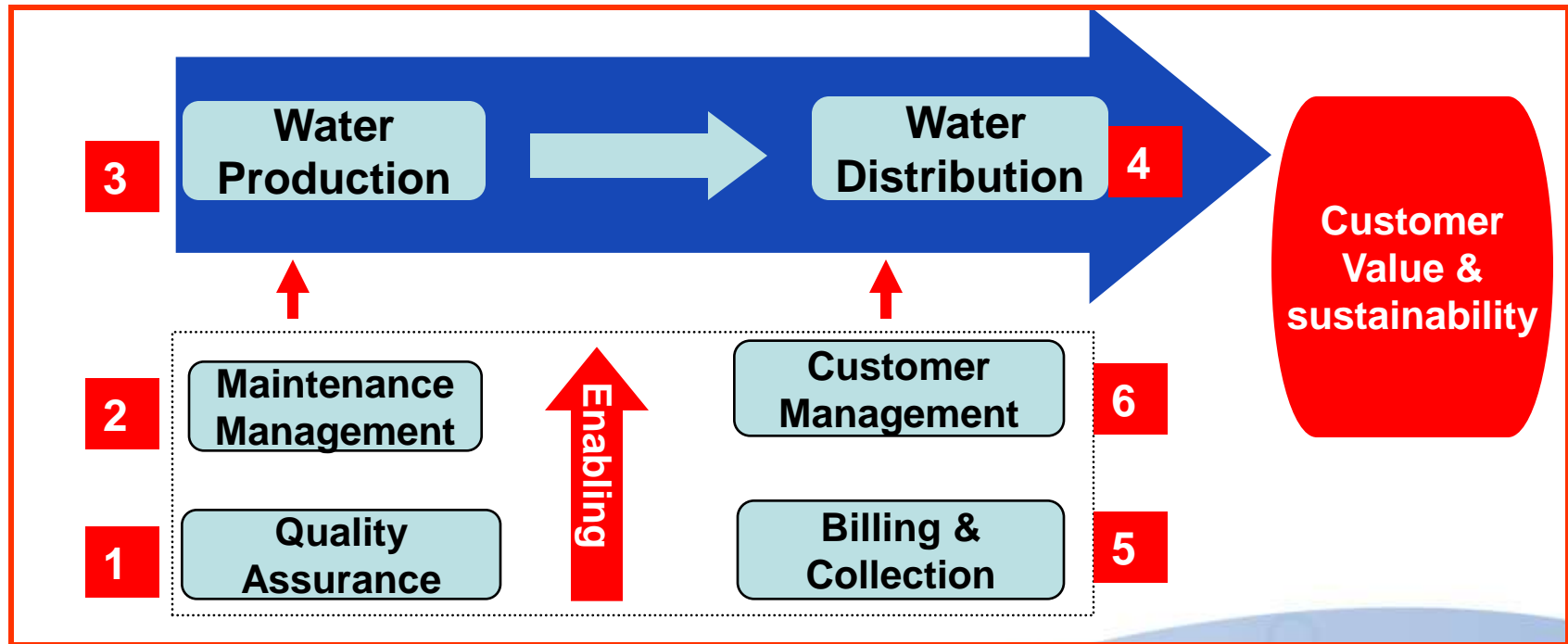
A cost-centre mindset and limited exposure to technology and management practices imposed operational and financial constraints.

# Overall Approach



# JUSCO: Water Value Chain

## Management Process driving Excellence



# Underlying drivers of change..1

1. **Independence and autonomy** – *Shift away from a cost-centre mindset*
2. **Articulation of a larger Vision** – *Quality Services for Life*
  - *To succeed elsewhere, you had to be a world-leader at home*
3. **Meticulous benchmarking** - *information-led improvement*
  - *Use of Balanced Scorecard and wide array of tools for information capture, analysis and improvement*
4. **Sharp consumer focus**
  - *Quick shift to a centralized customer management – JUSCO Sahyog Kendra*
5. **Adoption of Technology and Management practices**
  - *Innovative use of TPM – a manufacturing best practice in a utility context*
  - *Adoption of a wide range of technologies – leak detection, metering, energy conservation, SCADA, GIS and Hydraulic modeling*

# Underlying drivers of change..2

## 6. Tackling NRW head-on

- *Two pronged actions focused on physical losses and illegal connections*

## 7. Telescopic tariffs and demand management

- *Affordable lifeline supply tariffs to achieve buy-in for metering*

## 8. Innovative approach to expand coverage

- *Commercially sustainable cost sharing with consumers for expansion of network*
- *Nearly 18,000 consumers added through this approach*

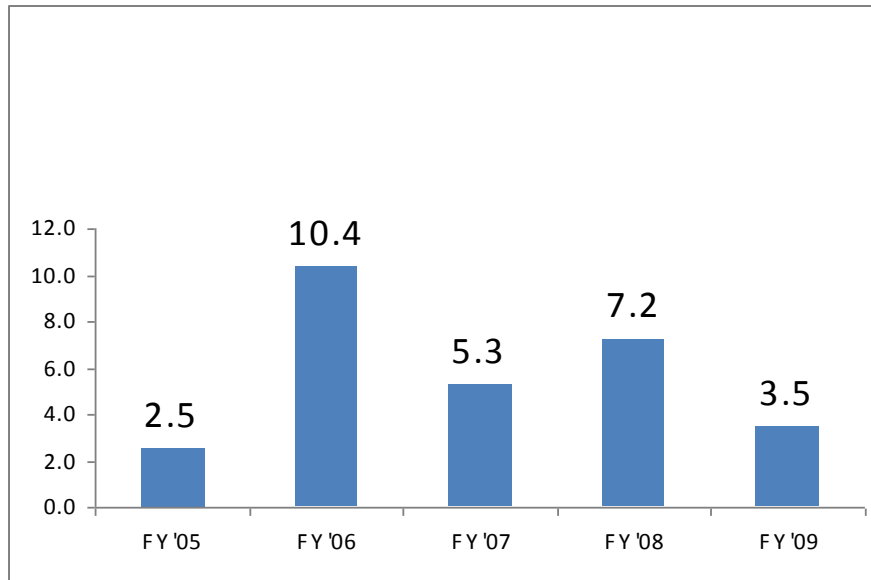
## 9. Partnerships and collaborations

- *Veolia Water, Ranhill, TPM Institute Japan, Twinning arrangements...*

## 10. Leveraging / building on the 'TATA legacy'

- *8-hour working (1912), medical aid (1915), provident fund scheme (1920)*
- *Compassionate capitalism and building on Tata Steel's legacy of community engagement*

## Impact on process efficiency due to use of Technology & good practice adoption



Investment on Technology - Rs. crore

**Reduced NRW**

**Reduced SPC**

**Reduced SCC**

**Improved Quality**

**Increased Availability**

**Reduced Failure**



# Process efficiency drives financial sustainability

**Reduced NRW**

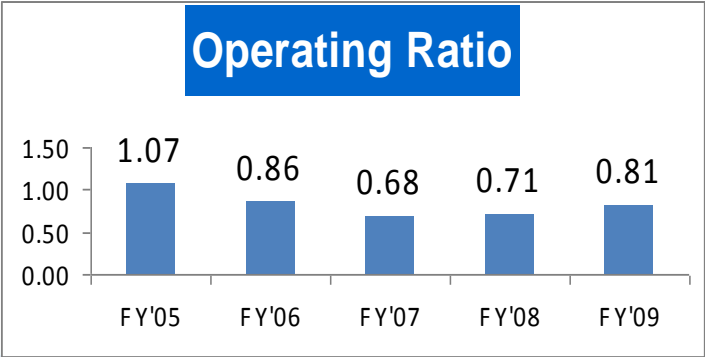
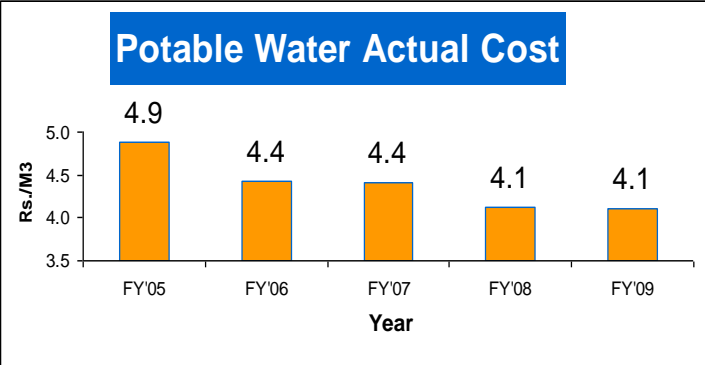
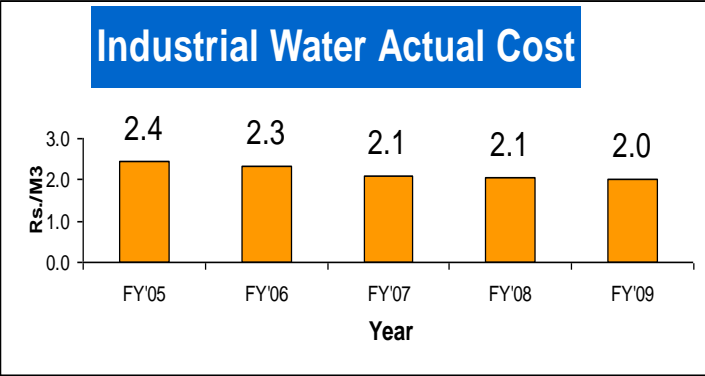
**Reduced SPC**

**Reduced SCC**

**Improved Quality**

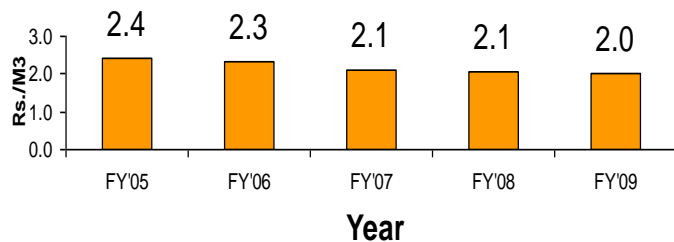
**Increased Availability**

**Reduced Failure**

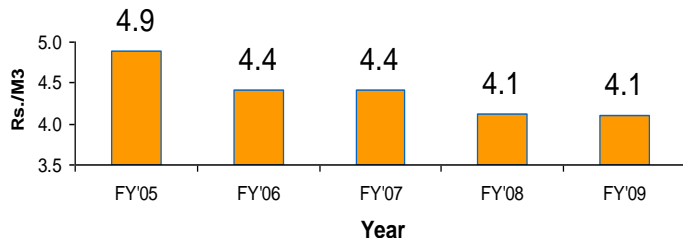


# Financial sustainability drives customer value

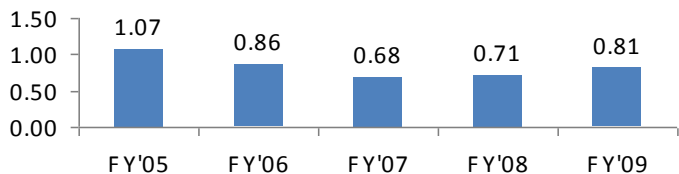
## Industrial Water Actual Cost



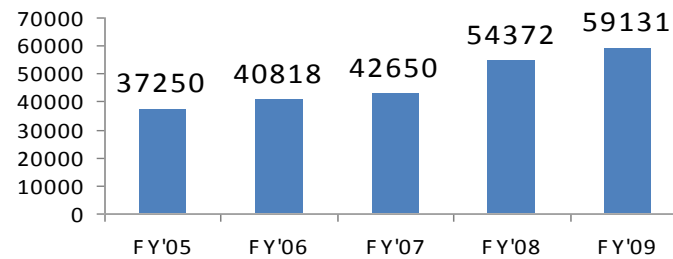
## Potable Water actual Cost



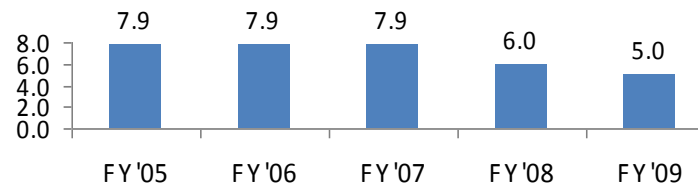
## Operating Ratio



## Number of Customers

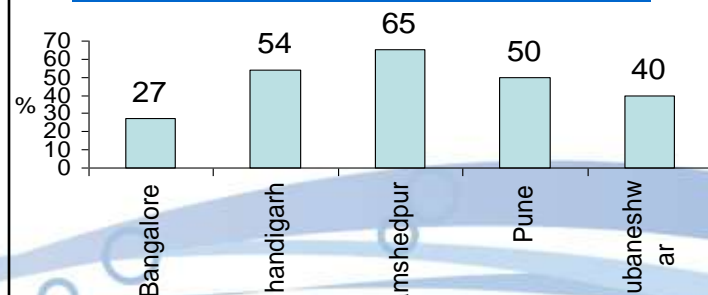


## Potable water tariff (Rs./KL)



Sustenance volume tariff: 30KI/Month

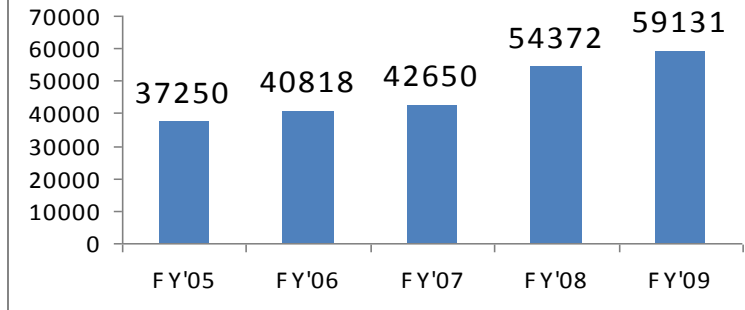
## Satisfaction level of consumers - Water tariff



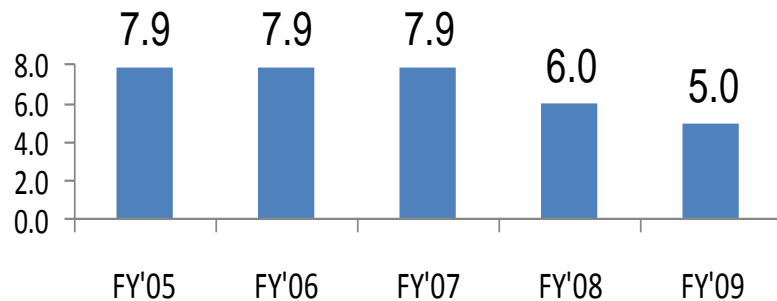
Source: Survey by AC Nielsen ORG Marg in 2006

# Customer value in turn drives financial sustainability

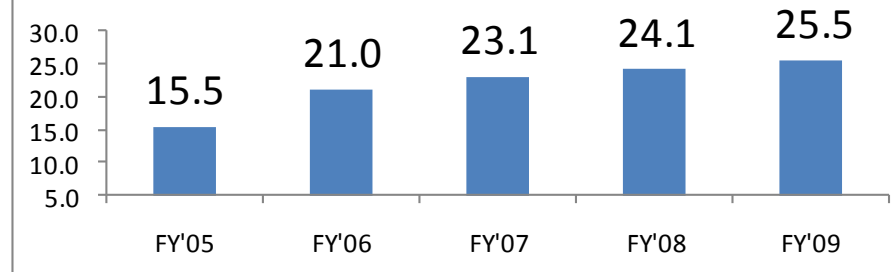
## Number of Customers



## Potable water tariff (Rs./KL)



## Total Water Revenue (Rs. crores)



# Impact of Corporatisation

Parameter	Unit	2005	2010
<b>Coverage, Metering and NRW Reduction</b>			
Population covered	<i>% of Total</i>	67%	<b>85%</b>
Connections	<i>Nos.</i>	35,000 +	<b>60,000 +</b>
Water Consumption	MLD	215	<b>322</b>
Metered Connections	% of Total connections	Neg.	<b>30 %</b>
Non Revenue Water	%	36%	<b>9.5%</b>
<b>Water Quality conformance</b>			
Bacteriological quality	<i>% of samples</i>	93%	<b>100 %</b>
Free Chlorine level	<i>% of samples</i>	86%	<b>99.7 %</b>
<b>Customer Focus</b>			
Index value	<i>Score – Max 5</i>	3.75 (2004)	<b>4.2</b>
Service Guarantee Compliance	% of total	77%	<b>99%</b>
Repeat Complaints	% of total	3.2%	<b>0.03%</b>
<b>Water Treatment – Closing the loop</b>			
Sewage Network Coverage	% of population	57%	<b>72%</b>
<b>System Improvements</b>			
Failures in water systems	<i>Nos. Per month</i>	44	<b>1.1</b>
Energy Consumption	<i>KWH / MLD</i>	332	<b>274</b>
<b>Financial Management and Human Resources</b>			
Operating Ratio	<i>Op. Cost/Revenue</i>	1.07	<b>0.82</b>
Staff / 1000 connections	<i>nos.</i>	> 8	<b>4.03</b>

# International & National Recognition.....



ISO:9001



OHSAS:18001



ISO:17025



ISO:14001



“....organisation has achieved

- a most effective production system
- Implementation of TPM activities has brought about remarkable results in productivity, product quality, cost reduction & company culture improvement”

The only company in the utility services domain in the world to achieve the distinction of getting the JIPM TPM excellence award.

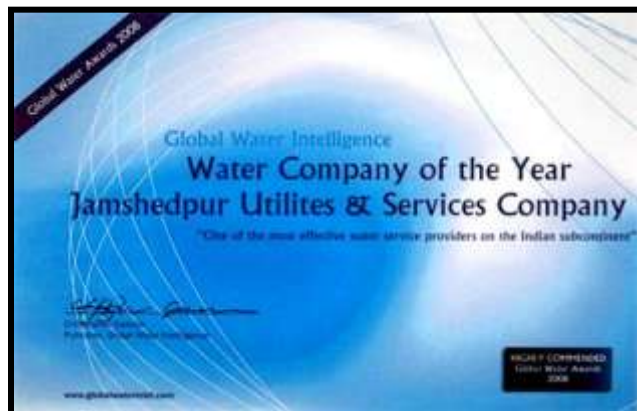
## Asian Water Management Excellence Award 2008 & Industry Category



*Recognised as the most prestigious water industry biennial awards in Asia.*

***JUSCO recognised for its contribution to the development of the water industry in Asia.***

*Among the past winners include PUB Singapore, Perpamsi, Penang Water Supply, Puncak Niaga and SEAWUN & Manila Water.*



***JUSCO receives Global Water Intelligence Award 2008 held in London***

*JUSCO has been conferred with Highly Commended Certification as “One of the most effective water service providers on the Indian Subcontinent” during the GWI Global Water Award 2008 function held on 21 April 2008 in London.*





**2009 :** *National Urban Water Awards 2009 for “Citizen Services & Governance” presented by the Hon’ble President of India at New Delhi*

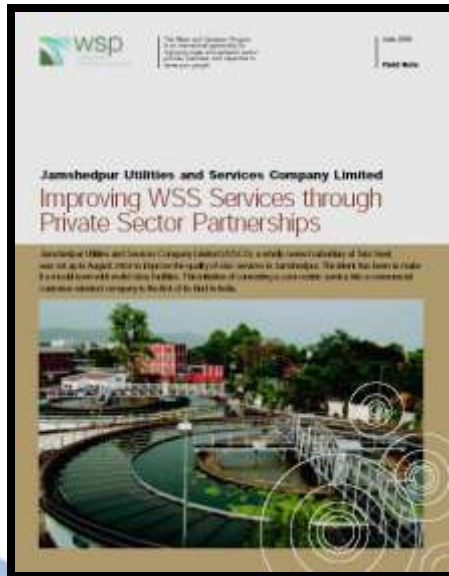


## CRISIL Award 2004-05

‘Excellence in Improving service delivery through Corporatisation’

*“JUSCO’s is probably the ‘first of its kind’ initiative in the country demonstrating the shift of urban services from a mere obligation to a viable business activity....*

*....The initiative has the potential to leave a mark in the history of Urban India’s developmental landscape....”*



## WSP- World Bank Study on JUSCO

*“World Bank Field Note seeks to capture the initiative of JUSCO in converting a cost-centric service into a commercial and customer-oriented company. Based on its successful home operations, the private operator is also exploring options for expanding its expertise beyond its own operating areas to other interested towns and cities, while continuously improving services in Jamshedpur ”*

Replicability

**PROOF OF THE PUDDING IS IN  
EATING.....**

# Agenda

- Corporatisation of Municipal water services: Jamshedpur Model
- **PPP vehicle and Replication of Jusco experience**

# FORMS OF PUBLIC PRIVATE PARTNERSHIPS:

## Allocation Of Key Responsibilities



Types of Contract	Asset ownership	Capital Investment	O & M	Commercial Risk	Duration (yrs)
<b>Service Contract</b>	Public	Public	Private & Public	Public	1-2
<b>Management Contract</b>	Public	Public	Private	Shared	3-5
<b>Lease</b>	Public	Public (with limited private)	Private	Shared	8-15
<b>Concession/ BOT</b>	Public	Private	Private	Private	25-30
<b>Divestiture</b>	Private or Private & Public	Private	Private	Private	Indefinite (license may set term)

# Mysore 24x7 Water Supply Project



<b>Name of Project</b>	<b>24X7 Water Supply performance based management contract in Mysore city</b>
<b>Job Description</b>	Conversion of intermittent to 24/7 continuous water supply system through systematic improvements and network rehabilitation
<b>Client</b>	Mysore City Corporation & Karnataka Water Supply & Drainage Board (KUWSDB)
<b>Salient Features</b>	<ul style="list-style-type: none"><li>• Hydraulic modeling, Network design and preparation and implementation of Capital investment plan</li><li>• Rehabilitation of citywide water distribution network – About 800km of pipeline (dia. 65- 350mm), 14 Booster Pump houses, 14 substations &amp; related electrical works</li><li>• Operation &amp; maintenance of citywide water distribution system for 6 years with fixed &amp; performance linked remuneration</li><li>• 100% deputation of govt staff to Jusco</li><li>• Billing &amp; Collection leading to increased revenue collections</li><li>• Establishment and Management of 24/7 Customer Complaint centres</li></ul>
<b>Value</b>	Rs. 1620 million
<b>Completion Time</b>	72 Months

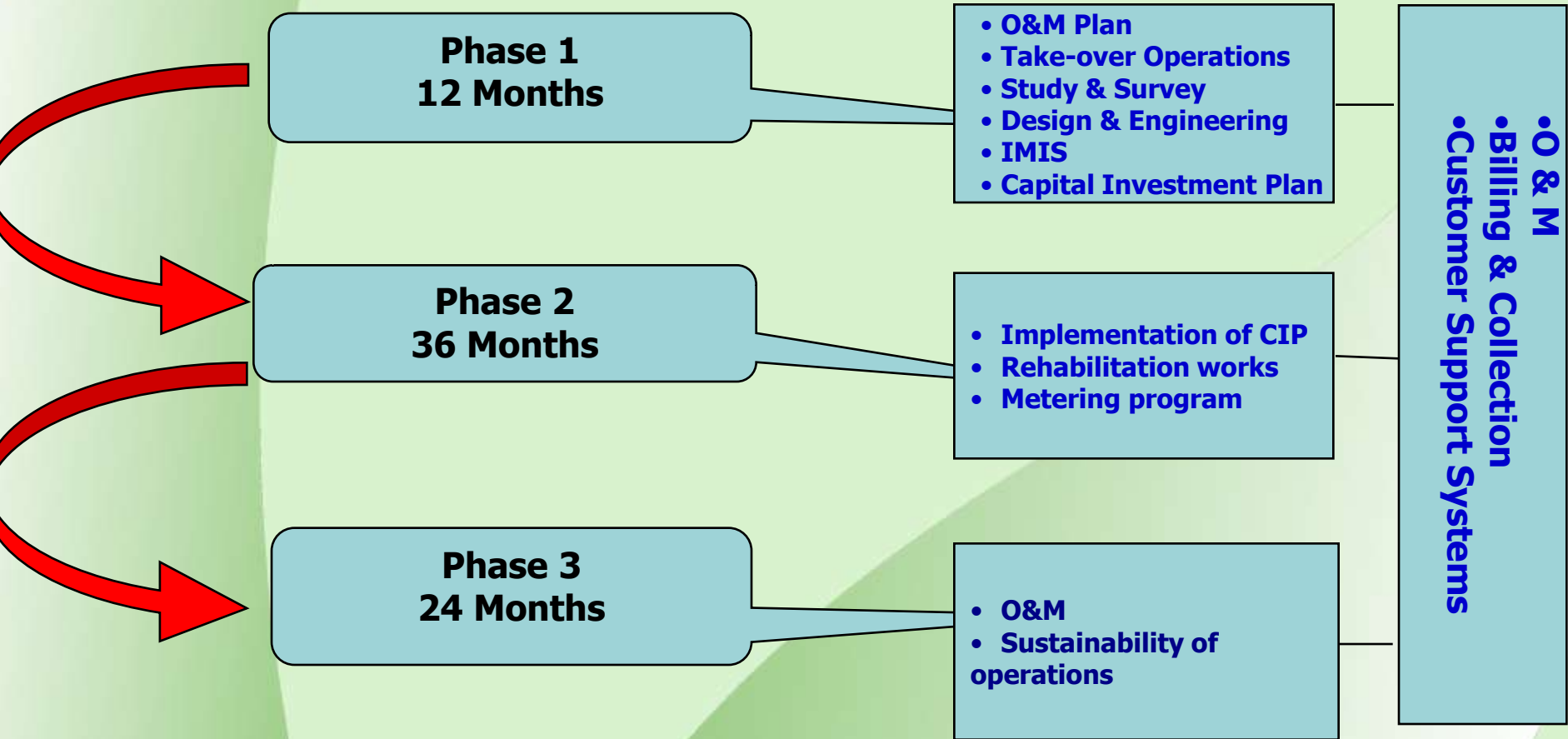
**India's largest water management P-P-P Project till date covering million plus population and 150,000 service connections**

# Mysore Water Supply system - Facts



<b>Present Population</b>	9.0 Lakhs
<b>Municipal Area</b>	129 sq. km
<b>No. of house connections</b>	1,75,000 (Approx. 60,000 un-authorized)
<b>Water availability</b>	42.5 MGD
<b>Net quantity available for supply</b>	32.63 MGD
<b>Total demand of water</b>	35.25 MGD (@135 lpcd)
<b>Water Supply Coverage</b>	85 %
<b>Total no. of wards</b>	65
<b>Tariff details</b>	Increasing block tariff structure (80% of the water meters are not working)
<b>NRW</b>	>50%
<b>Frequency of water supply</b>	2-3 hours (daily & alternate day supply in different areas)
<b>Distribution system</b>	1900 km length pipelines of PVC (>60%), AC, GI and CI

# The Three Phases





# Performance Measures

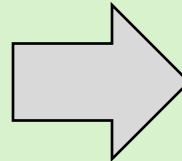


Performance Parameter	Weightage
Number of connections with 24x7	30%
Revenue Improvement	30%
Revenue Water in 24x7 area	10%
Resolution of Complaints on service in 24x7 area	10%
Resolution of Complaints in entire zone	5%
Leakage levels in 24x7	5%
Quality compliance in 24x7 area	5%
Pressure compliance in 24x7 area	5%

# Project Structuring Summary

- **Performance based Management Contract**

- ❖ Phase 1: Study Phase (Baseline study)
- ❖ Phase 2: Rehabilitation Phase
- ❖ Phase 3: O&M Phase
- ❖ Remodeling & Rehabilitation of distribution network, establishing DMAs to convert intermittent to 24/7 continuous water supply
- ❖ Fixed & Performance based fees



- **Sharing of Risks between Operator and ULB**

- ❖ Investment (JNNURM)
- ❖ Revenue collection Risk with Operator (limited)
- ❖ Performance Risk with Operator
- ❖ Design & Construction Risk with Operator
- ❖ Operation Risk with Operator

**1. Tariff to be fixed by MCC**

**2. Operator to bill, collect and pass on the revenues to MCC**

# Sector - V, Salt Lake Project

<b>Name of Project</b>	<b>Development &amp; Management of Water &amp; Sewerage Network at Salt Lake Sector-V (Kolkata) on BOT basis for 30 years</b>		
<b>Client</b>	NDITA, Kolkata (KMDA as Tech. Facilitator)		
<b>Job Description</b>	<ul style="list-style-type: none"> <li>• Design and Construction of clear water UGR, Pump House, ESR, Laying of Clear Water Transmission Main &amp; Distribution Network, Installation of bulk &amp; consumer meters</li> <li>• Design and Construction of STP, IPS, Sewerage Network, O&amp;M of all water &amp; sewerage assets.</li> <li>• Billing and collection</li> </ul>		
<b>Salient Features</b>	<ul style="list-style-type: none"> <li>• JUSCO-VOLTAS Consortium shall design, plan, develop, finance, construct, administer, manage, operate and maintain the Project,</li> <li>• Part-financing of project (65%); Balance 35% by JNNURM</li> <li>• lowest water-cum-sewerage charges per KL criteria for bidder selection.</li> <li>• Construction period - 19 months</li> </ul>		
<b>Value</b>	<ul style="list-style-type: none"> <li>• Water Supply</li> <li>• Sewerage System</li> </ul>	<ul style="list-style-type: none"> <li>–</li> <li>–</li> </ul>	<ul style="list-style-type: none"> <li>Rs. 260.7 million</li> <li>Rs. 340.7 million</li> </ul>
<b>Concession Period</b>	30 Years		



**1st Water Sector P-P-P Project sanctioned under JNNURM Program**

# Key Contract Features

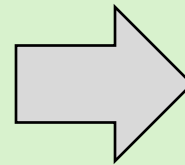


- ✓ SPV - Naba Diganta Water Management Ltd. - JUSCO & VOLTAS
- ✓ NITA shall make treated water available of adequate quantity conforming to the Quality Standards from the Kolkata Municipal Corporation (KMC) network to JUSCO @ Rs.5.00 per KL
- ✓ Land available for construction of pumping station, elevated reservoir and STP free of cost
- ✓ Tariff Escalation @ 10% at every 5 years shall be applicable
- ✓ Allowing JUSCO to levy 'water-cum-sewerage charges' @ Rs.25.00 per KL of water supplied (Rs.15 for water supply and Rs.10 for sewerage) to the premises connected to water supply network.
- ✓ Allowing JUSCO to take one-time connection charges @ Rs.10.00 per sft. of built up area of the premises
- ✓ Capital subsidy to JUSCO to the extent of 35% of the capital cost of the Project through JN-NURM.
- ✓ Project awarded in Nov'07 & Asset creation completed and inaugurated on 4<sup>th</sup> Jan'11. O&M services commenced

# Project Structuring Summary

- **Concession / BOT**

- ❖ Investment
- ❖ Water & sewer network Development
- ❖ Operation & Maintenance
- ❖ Increasing service coverage and Retail distribution
- ❖ Bulk & consumer Metering
- ❖ Billing & Collection



- **Major Risks with the Operator**

- ❖ Investment risk
- ❖ Demand Risk
- ❖ Revenue Risk
- ❖ Performance Risk
- ❖ Construction Risk

# Water Supply Project, Haldia



<b>Name of Project</b>	<b>Design, Development, Operations &amp; Maintenance of water supply system in Haldia on Lease (of existing assets) and BOT basis (of new assets) for 25 years</b>
<b>Client</b>	Haldia Development Authority, Haldia
<b>Job Description</b>	<ul style="list-style-type: none"> <li>• O&amp;M of the existing 113.5 MLD water treatment plant, service of tube well of 13.62 MLD capacity and existing network.</li> <li>• Construction of new 113.5 MLD water treatment plant in 2 equal modules and subsequent O&amp;M of the plant.</li> <li>• Intake structure on river Haldi, Raw water pump house, DI conveyance main for raw water, dissolved air floatation based water treatment plant.</li> <li>• 100% existing staff deputed to Jusco</li> <li>• Billing and collection from consumers.</li> </ul>
<b>Salient Features</b>	<ul style="list-style-type: none"> <li>•JUSCO is the lead partner in the project SPV with 60% stake. Ranhill Utilities is the partner with 40% stake.</li> <li>•Construction &amp; O&amp;M of new and existing WTP (25 MGD) and distribution network leased to the project SPV</li> <li>•Financing of project.</li> </ul>
<b>Duration</b>	25 years
<b>Project Cost</b>	Rs. 1000.00 million (Approx.)

**25 years  
Water Supply lease  
and BOT project for  
Haldia Industrial  
Township**



**1st Water Sector P-P-P Project in West Bengal based on unique structure of Lease cum BOT**

# Key Contract Features

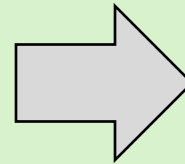


- SPV – Haldia Water Management Ltd. – 60:40 JV between JUSCO and Ranhill Utilities
- Tariff to be set by HDA with mim 3% y-o-y increase
- Operator to sell water and earn his revenue which goes into an escrow account
- Disbursements – Statutory levies, license fee, o&m and power cost, debt servicing costs; Balance would be SPV's profit.
- Investments to be entirely borne by SPV for meeting contract obligations including defined SLGs
- License fee quoted by the parties was discounted @ 12% and the Net Present Value (NPV) was calculated. The party with highest NPV was selected as the preferred bidder
- Guaranteed income to HDA over the concession period is estimated to be Rs1,220 crore.
- The entire facility shall revert back to HDA at no cost, on the expiry of the concession period.

# Project Structuring Summary

## Lease Cum BOT

- ❖ Leasing of existing assets for a committed license fee
- ❖ Investment in new assets & systems by concessionaire
- ❖ Source Development / Augmentation
- ❖ Remodeling & Rehabilitation of distribution network
- ❖ Increasing water sales through new industrial consumers
- ❖ Bulk & consumer Metering, NRW Reduction
- ❖ Billing & Collection
- ❖ License fee to be paid every year as per commitment



## • Major Risks with the Operator

- ❖ Investment risk
- ❖ Demand Risk
- ❖ Revenue Risk
- ❖ Performance Risk
- ❖ Construction Risk
- ❖ Operations risk



# The Haldia Story: Before



Unsafe working Platforms



Unsafe Pump couplings



Frequent leaks and poor management of leaks



Poor house keeping



Unsafe Stairs



Unsafe Electrical Facilities



Badly corroded equipments



Absence of Preventive Maintenance, Plant & Employee Safety, Poor house keeping leading to Low Employee Morale & Productivity



No Maintenance of equipment



No Prev maintenance of Civil Structures



No Personal protective equipments

# ❖ Initiatives taken

- ❖ Taking over the whole utility from PHED on 1<sup>st</sup> Nov 2008.
- ❖ Understanding the plants & equipments, pipe network, manpower and the customers including the bottlenecks in the system.
- ❖ Condition and performance analysis of all the equipments done.
- ❖ Finalized the immediate and long term Renovation and Replacement plan for the whole utility.
- ❖ Comprehensive maintenance plan for different facilities and equipments.
- ❖ NRW Reduction plan in place with concrete immediate actions for NRW reduction.

# ❖ Initiatives taken contd.

---

- ❖ Wage agreement with the mazdoor union of the contract workers.
- ❖ Establishing a latest state of art Laboratory compatible with NABL requirements.
- ❖ Skill Gap analysis of all workers and making different training modules.
- ❖ Imparting regular training to all workers as per the requirement.
- ❖ Identification of all the unsafe conditions in the plants and the remedial actions.

# ❖ Initiatives taken contd.

- ❖ Special focus on safety with 100% enforcement of PPEs.
- ❖ Implementing several good IR practices for employees motivation.
- ❖ Total preventive maintenance launched.
- ❖ Process strengthening initiatives taken. ISO -9001: 2008 implemented and OHSAS -18001 implementation in progress.
- ❖ JUSCO customer care, for single window customer complaint management.
- ❖ Services for under privileged community.

# The Haldia Story: After two years journey



Changed over view of WTP



Clean and safe plants



Equipped Laboratory



TPM Deployment



TPM at Geonkhali



Class room training to workers



Hands on JISHU HOZEN



Visual Management



Basudevpur pump house



Employees participation

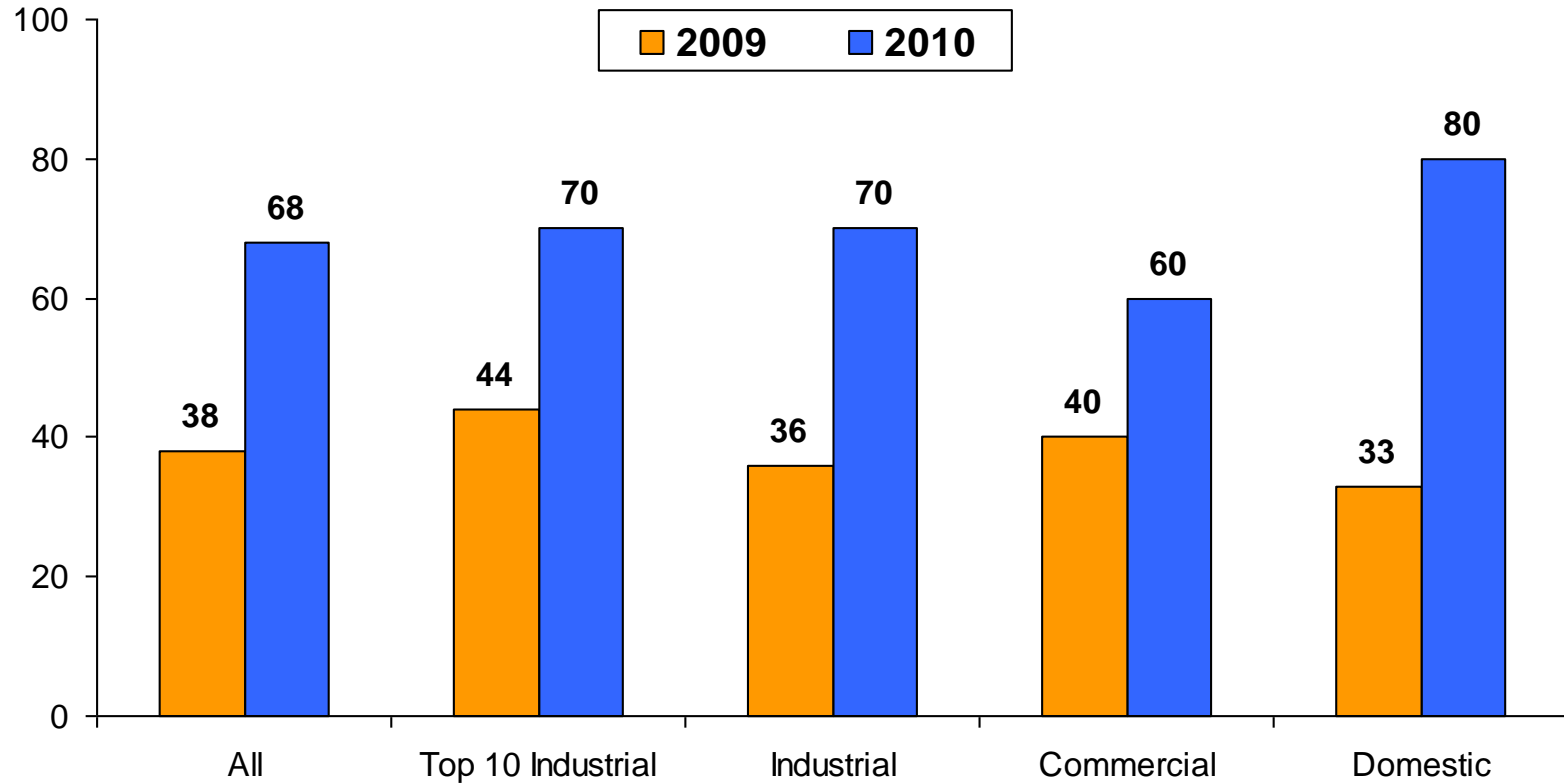


Safe working platforms

Transformation through Introduction of Best practices, TPM, Employee engagement, Skill enhancement, Safety Systems etc..

# Quality of Water Supply (2010 Vs. 2009)

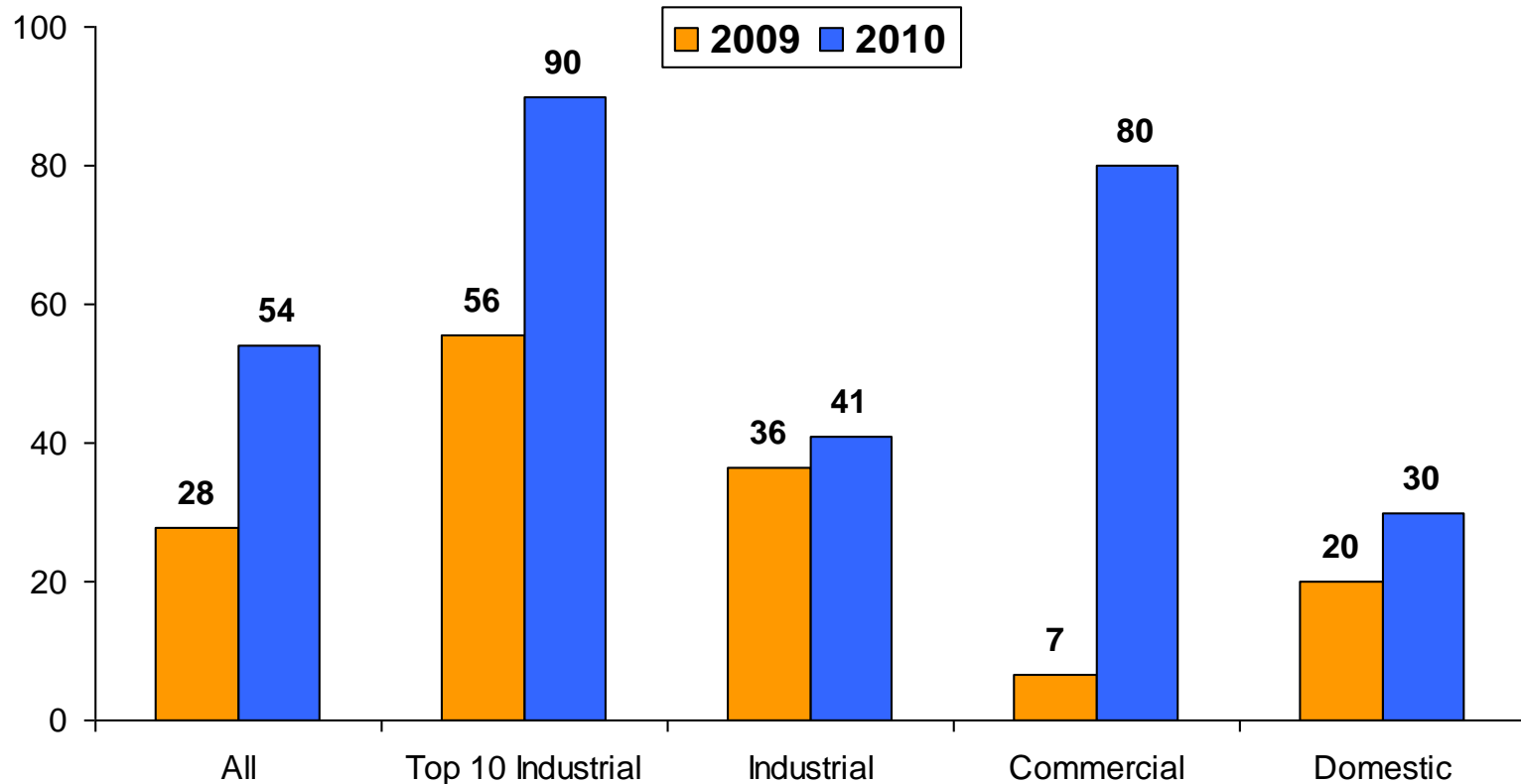
~ Also significant improvement across all segments



(Figs indicate top 2 box % - extremely or somewhat satisfied)

# Availability of Water Supply in terms of Number of Hours (2010 Vs. 2009)

- ~ Significant improvement in terms of water availability
- ~ The top 10 industrial customers and the commercial customers more satisfied as compared to the rest

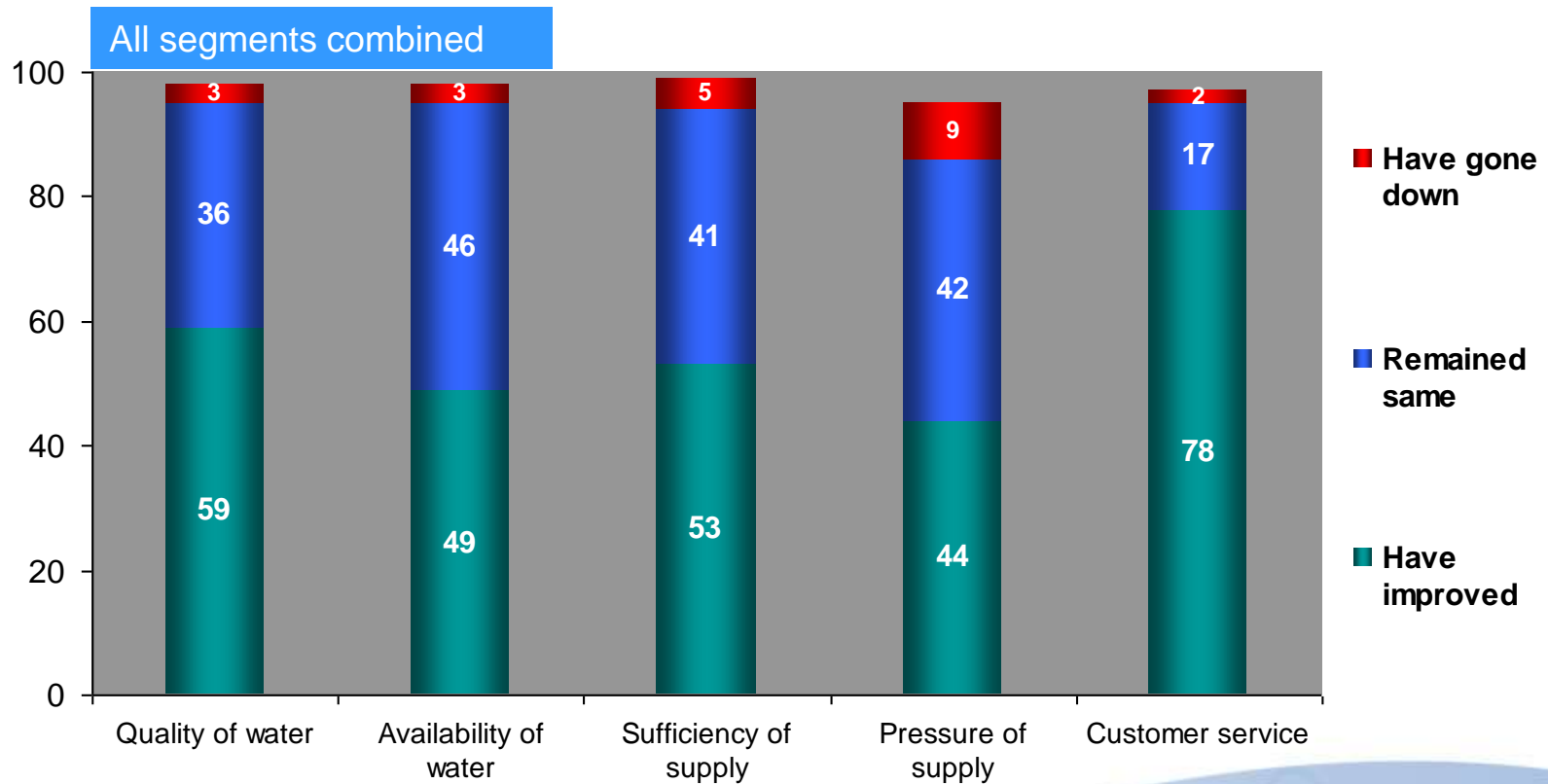


(Figs indicate top 2 box % - extremely or somewhat satisfied)

# Has there been any improvement after JUSCO has taken over?

~ Across all service aspects, the customers feel that there has been an improvement – maximum improvement perceived in terms of customer service, followed by water quality

~ Pressure of supply needs to be improved to increase the overall satisfaction levels

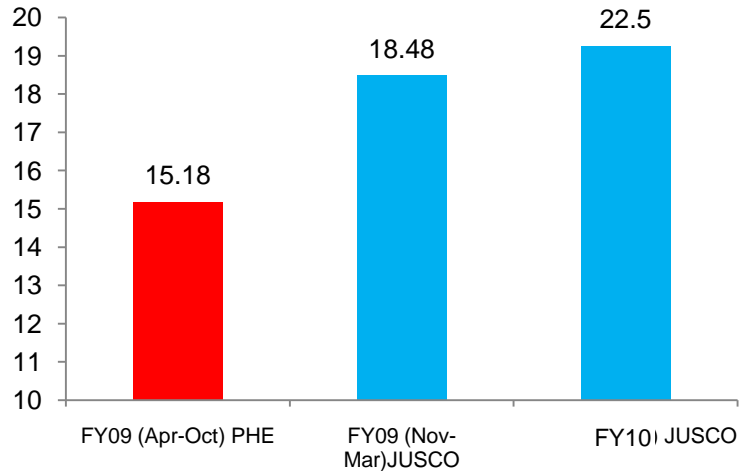


(Figs in %)

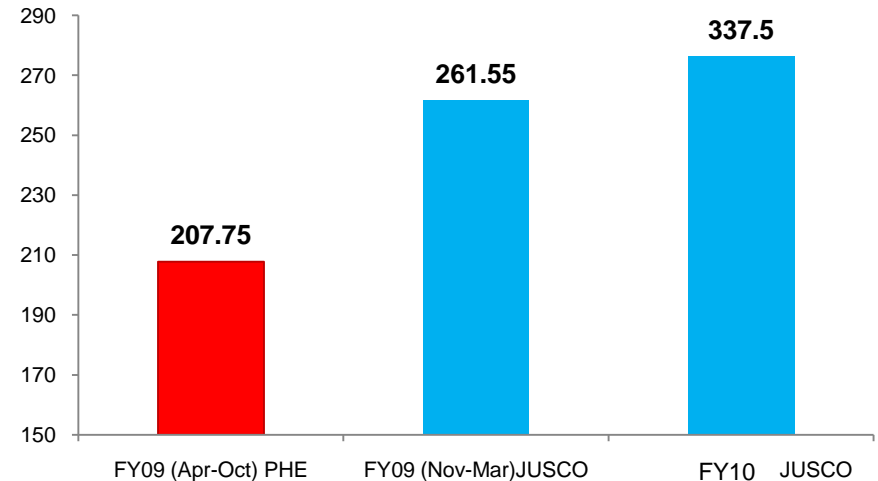


# The Haldia Story : The Impact

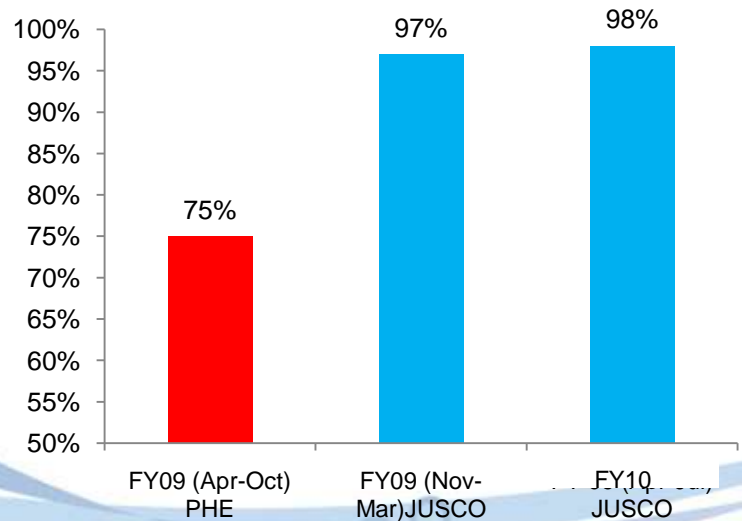
## Sale Volume (MGD)



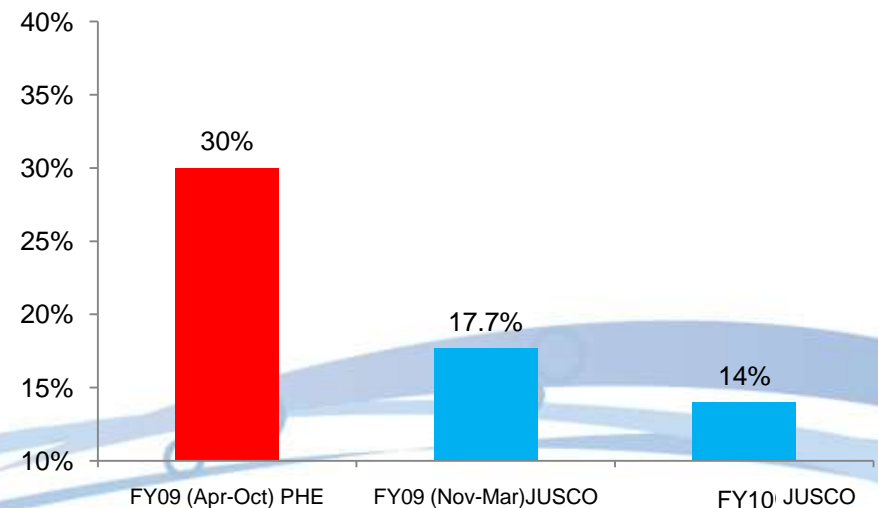
## Avg. Monthly Revenue (Rs Lakhs)



## Collection Efficiency (%)



## NRW by Volume(%)





# Customer feedback



PLANT :  
POST BOX NO. - 12, DURGACHAK  
HALDIA - 721602  
DIST. PURBA MEDINIPUR  
WEST BENGAL, INDIA  
TEL : +91 (03224) 272786  
274400/877881/882/007  
FAX : +91 (03224) 274420/861/880/272750

August 16, 2010

Mr R K Singh  
Chief ( O&M ), Water Management, Haldia  
Jamshedpur Utilities & Service Company Ltd.  
Durgachak, Haldia - Purba Medinipur

**Sub. : Appreciation**

Dear Sir,

We would like to appreciate the performance of JUSCO, who has changed the entire system of Haldia Water Supply and improved a lot as a professional organization after taking charge of Operation & Maintenance of Haldia Water Management.

We convey our warm and heartiest congratulations to entire JUSCO - Haldia Team for bringing professionalism and also aligning with customer.

Hope, you will continue such improving effort and maintain Haldia Water Supply System as a model one

Thanking you,

Yours truly,

For Haldia Petrochemicals Ltd.

*A.K. Gosh*  
(A K GOSH) 16/8/10.  
Head Manufacturing & Dy. Plant-Head



Hindustan Unilever Limited  
Haldia Detergent Factory  
P.O. Durgachak, Haldia,  
Purba Medinipur - 721 602  
Tel : +91 (03224) 272786,  
274400, 272750  
Fax : +91 (03224) 272751  
Web : www.hul.com

Dated : 25<sup>th</sup> August 10

To  
The CEO  
Haldia Water Management Limited  
Durgachak Super Market, 3<sup>rd</sup> Floor

**Subject: Appreciation of your Water Service**

Dear Sir,

We would like to appreciate the performance of your water service to our Plant. Presently we are getting good quality of water as per our demand from your side.

We convey our warm congratulation to the entire team of JUSCO for the better service.

Hope you will continue this service and fulfill our requirement.

Regards

For Hindustan Unilever Limited

*Swar*  
Mr. Anand Kashikar  
Factory Engineer  
Hindustan Unilever Limited  
Haldia Detergent Plant.

*Chief (O&M), JUSCO  
with Amal Kashikar to Mr  
to Mr. Anand Kashikar  
16/8/10*

Regd. Office  
Hindustan Unilever Limited  
257/26, Sector-5, New Market  
Pune - 411 001

Regd. Office : 1, Aurobind Place, Kolkata 700 017, INDIA Tel. : (033) 2283-1640/1643/1645, 2281-2611/12/13, Fax : +91 (033) 2283-1654  
ARDC : 54/A/1, Block DN, Sector V, Salt Lake, Kolkata 700 091, INDIA Tel. : +91 (033) 2367 3061/3062/3492, Fax : +91 (033) 2367 0890

## Haldia Petrochemicals Ltd. Hindustan Unilever Ltd.

# Customer feedback



Mr. R K Singh  
Chief CS&M, Water Management, Haldia  
Jambhwal Utilities and Services Company Limited  
Durgachak, Haldia,  
Purba Medinipur

Ref: (HMC/WML/P-003/131/10)

Sub: appreciation.

Dear Sir,

We would like to appreciate you and your team for the dedicated effort to provide consistent services to us for water supply in terms of quality and quantity. Being a professional organization, JUSCO has shown great capability to change entire scenario in the field of water management and Customer Orientation here at Haldia.

We convey our heartfelt congratulations to team JUSCO and hope you will continue with the philosophy of continual improvement in future as a benchmark process.

Thanking you

Yours truly

  
(H.K. Mishra)  
Head Engg. Services.

**TATA STEEL LIMITED**  
Nagbhui Mat Cakra Division

Kolkata-700 014, Haldia-721 005, Purba Medinipur, Haldia, PIN-721 005, West Bengal, India  
Tel: 03224 201541 Fax: 03224 251 902  
Registered Office: Bhadrak Road, 24 Haldia, Medinipur District, West Bengal, India.

**Ruchi SOYA INDUSTRIES LTD.**

Banyanbata, Ward No. 8, P.O. & P.S. Durgachak, HALDIA-721002  
Dist - Purba Medinipur, W.B. - India  
Tel : 03-81-3224-253959, 253979  
Fax : 03-81-3224-253962  
E-mail : ruchi@ruchi@ruchigroup.com



RSIL/HR/2010

Date – 20.09.2010

To,  
MED,  
Haldia Water Management (JUSCO),  
Haldia.

Sub:- Appreciation of your services.

Sir,

We have witnessed a marked improvement in supply of water quantity and other related services of water supply in last one and half year of your services at Haldia.

We appreciate your team's effort for the hard work and for bringing in the improvements for the benefits of the customers like us and we also convey our warm and heartiest congratulations to entire JUSCO – Haldia Team for bringing professionalism and also aligning with customers.

We hope your continuous effort and efficient services will continue for the benefit of Ruchi Soya Industries Ltd. and other customers in Haldia.

Best Regards,

For Ruchi Soya Industries Ltd.,

  
(Sandip Ganguly)  
General Manager

Makers of: **Nutrifla, Soyumol & Mahakosh** products

**Tata Steel**

**Ruchi Soya**

# Critical Success Factors for Successful PPP

- Enabling environment for private operator to manage the system
- Single agency functional co-ordination between “Private Partner” AND Water Board ,LUB & UDD etc .
- Provision to be made in the agreement for mandatory review of financial performance of the “Private Partner” in case of variation in to the demand pattern as projected in the concession agreement .
- Flexibility in the structure of concession fees to be made compatible for “Private Partner” for sustainability & viability of business during tenure.
- Timely release of funds linked to proportionate contribution by ULB in case of JNURM funded projects.

## ..2

- Responsibility matrix w.r.t compliance of various statutory provisions applicable for the concerned scheme to be detailed & finalized in the PPP model to avoid problems at a later stage .
- Govt. agency must shoulder responsibility for collection user charges as “Private Partner” may not force the issue to users on its own.
- Land ,Forest & Environment clearance be taken by Authority prior to signature date of agreement.
- Incentives for efficient performance to Deputed ULB Staff should be part of the contract.

# PPP Water... Private Sector Perspective

- Most developers are into other infrastructure sectors as well
- Water Projects considered risky for investment
- Insignificant Private Investment – grant funding in most projects
- “Payment Security Mechanism” and “Low Tariff” are key constraints
  - Ability of City Government to guarantee payments
  - Tariff as function of capital and O&M costs

Comparison is always with Power Sector and calls for equivalent of Electricity Regulatory Commission and Electricity Act

# PPP in Water Sector (last 20 years)

Project / City	Year of Award	Developer / Operator	Current Status
Tiruppur	1993	IL&FS / MIDL / UU	Ongoing with very low demand offtake
Vizag	2000	IL&FS/ L&T	Scrapped
Radius Water	2000	Soni Engineering	Scrapped post Phase 1
CMWSSB Twinning	2000	Veolia	Completed
Chandrapur	2004	Gurukrupa Associates	Ongoing
Hubli-Dharwad-Belgaum-Gulbarga (Pilot Projects)	2005	Veolia	Ongoing
Chennai Desal (1)	2006	Befasa / IVRCL	Ongoing
Dewas bulk water supply	2006	MSK Projects	Ongoing
Salt lake Sector 5	2007	JUSCO / Voltas	Ongoing
Nagpur pilot project	2007	Veolia	Ongoing
Latur	2008	SPML / Hydrocomp	Work suspended



# PPP in Water Sector (last 20 years)

<b>Project / City</b>	<b>Year of Award</b>	<b>Developer / Operator</b>	<b>Current Status</b>
Bhiwandi – Nizampur	2008	SPML / Hydrocomp	Financial closure in 2010
Haldia	2008	JUSCO / Ranhill	Ongoing
Madurai pilot project	2008	SPML / Hydrocomp	Work suspended
Mysore	2008	JUSCO	Ongoing
Naya Raipur Bulk Water Supply	2009	Jindal	CA signed in Nov '09
Khandwa	2009	Vishwa	CA signed in Aug' 09
Shivpuri	2009	Doshi Ion	CA signed in Oct' 09
Surat TTP	2010	Triveni	L1 bidder
Chennai Desal (2)	2010	VA Tech / IDE	L1 bidder

# PPP Projects...Key Characteristics

- Momentum building up since 2007
- Very few city-wide distribution projects – most are either pilot projects or bulk water supply projects
- “Payment Security Mechanism” and “Low Tariff” are key constraints for full-fledged citywide projects
- Lack of regulation viewed as a constraint in sustainability of water operations (relevant even for public utilities)

- Independent body (can be even at state/city level) for ratification of Utility's business plan, including capex deployment
- Development and monitoring of KPIs
- Tariff setting based on business plan and Utility's performance
- Payment Security Mechanism

Bridge the expectations mismatch between Customers and the Utility

---



**Thank You**

