

Water Supply & Sanitation Good Governance Initiatives

Some *Dreams*
are worth the wait.



PRESENTED BY :
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Every journey begins with a single step

Presentation Outline

1. **The Need** – Pre-Project Scenario Analysis
2. **The Vision** - State Government's vision & purpose
3. **Implementation Strategy**
 - Adoption of 5 point framework
 - SWAp Approach– A Paradigm Shift
4. **Novel Initiatives** – Project's Best Practices



THE NEED - Situational Analysis of Drinking Water as in April 2008

1. Total Population - Over 27.7 million
2. Rural population - 17.3 mn (62% of total 27.7 mn)
3. Water sources - Tube well (80%) Canal network (20%)
4. Potable water availability - around 40 LPCD
5. Potable water requirement - 70LPCD
6. Less than 20% households had individual house connections
7. Wastage of potable water among users due to absence of household taps
8. Deficient supply at tail end due to inadequate pressure
9. Over exploited shallow aquifers



Prevailing System as in April 2008- IRREMEDIABLE

Prevailing system had high operation and energy costs due to issues such as-

1. No reliable system for monitoring complaints and issue resolution
2. No Involvement of users/beneficiaries in the planning process
3. Non-performing staff leading to delay in fixing defects and leakages
4. Unfair flat rate tariff system affecting low income families
5. Over dependence on Govt. to meet O&M cost (90% cost met by govt. through undependable budgetary allocations)
6. Manual billing system, high water wastage (due to hoarding) and unauthorized water connections

Current system was not scalable for a state wide implementation requiring timely resolution & empowering key stakeholders



Govt.'s Vision & Purpose

“To develop an eco system that provides 24X7 water supply coverage to all villages in Punjab with higher service standards and Individual household service connections coupled with modern underground waste water collection and disposal system”

Adoption of 5 point framework to realize the vision

1. Rural local governments with user groups to be responsible for upgradation and management of all intra-village RWSS facilities & services
2. DWSS to be responsible for managing complex multi village water supply schemes with improved fiscal & operational performance, and provide support to Gram Panchayat Water Supply & Sanitation Committees (GPWSCs) for single village schemes
3. Introducing partial capital cost sharing by users as an expression of their demand & personal involvement
4. Realization of user charges & funding for recurrent O&M cost from the user community
5. Redefining DWSS role from direct service delivery to facilitation and partnership

THE VISION

Vision is the art of seeing things invisible



A New PPP Initiative...

Prosperity by Partnering with People



Paradigm Shift

Need Based to Demand Based Water Supply Scheme

- Adopting Sector Wide Approach (SWAp) for all Schemes implemented under MTP with **partial capital cost sharing by users**

Role of Governance from Provider to Facilitator

- Changed role of DWSS to **effectively manage and monitor** the use of participatory processes and demand responsive approach
- Establish a **state of art governance system** to address complaints as per service standards
- Work closely with empowered PRIs and local communities

Financial and Operational Sustainability of Scheme

- **Empowerment of villages & GPWSCs** by using creative social recognition & Capacity Building programs

A Watershed Development

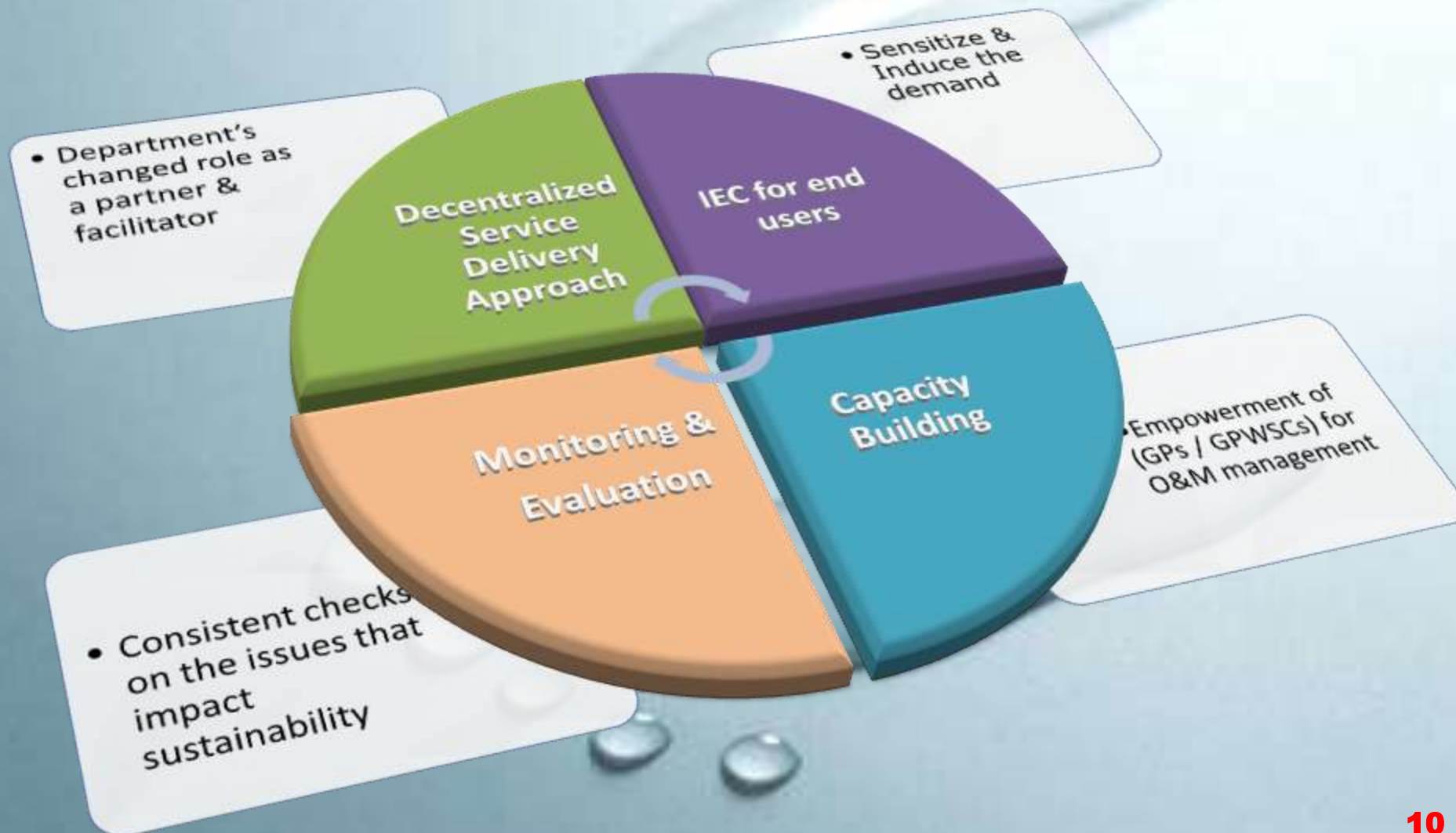
Before PRWSS Project

1. Top Driven
2. No Community contribution, Govt. ownership of all assets
3. More than 90% Govt. contribution in O&M
4. No Communities with more than 70% House Connections
5. No Communities with 24x7 Piped water supply
6. No transparent Complaint redressal mechanism.
7. Alternative system to tackle difficult areas non-existent

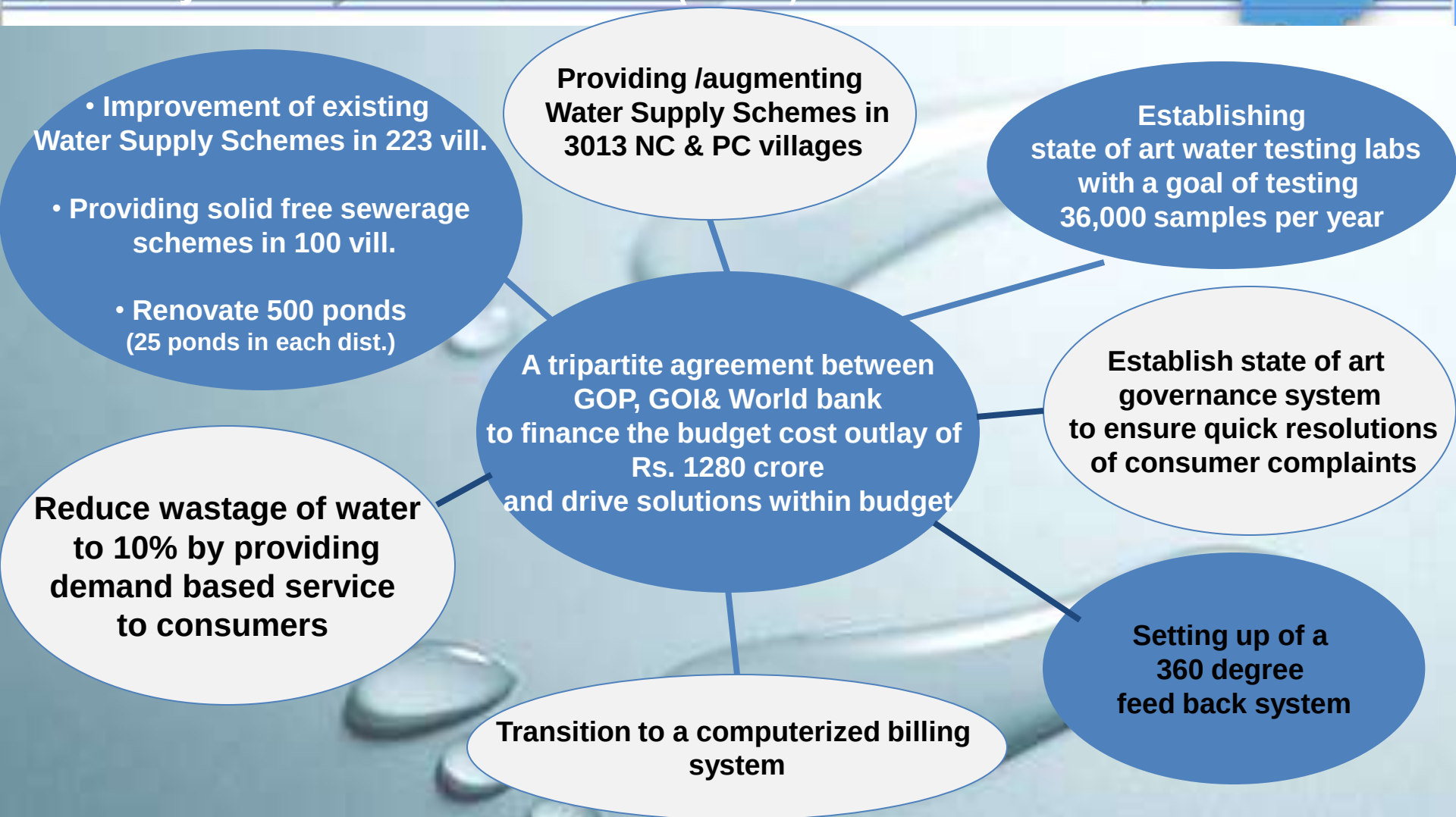
With SWAp mode PRWSS Project

1. Demand Driven
2. Community contribution, Community Ownership of new assets
3. Negligible Govt. contribution in O&M
4. More than **2415** Communities (and number growing)
5. **14** Communities (and number growing)
6. 24x7 Toll free Centralized Complaint Redressal through telephone
7. Introduction of RO system in PPP mode to provide potable water in difficult areas (installed 1803, under installation 21)

Implementation Strategy for Sector-wide Approach



8 Key Performance Indicators (KPI's)



Decentralized Service Delivery Approach

Orientation of DWSS role from Civil to Social Engineering role through:

- Overall RWSS program management including IEC and M&E of activities, outcomes and impacts
- Planning and construction of community sanitation schemes with active participation of GPs and households
- Organizing social, technical and management support to GPs and GPWSCs for all intra-village RWS schemes



IEC Tools

- For inducing **Behavioral Change**



Communication Tasks(Phase wise)-

- ❖ **Pre-Planning Phase :** The initial phase wherein the stake holders need to be made aware about the project
→ Sensitize the stakeholders/ Target Groups to clean water & hygiene aspect & the scheme
- ❖ **Planning Phase :** In this phase, the influencers need to galvanize the end users to come forward by way of contributing their share to the scheme
→ Build Sense of Ownership amongst Target Groups & Influencing Key Opinion Leaders (Capacity Building) for the project
- ❖ **Implementation Phase:** In this phase, the scheme gets the real shape and the installation and erection of the machinery and pipe laying civil works are done
→ Inform & Educate about the rights & duties to the stake holders & sensitize them on O&M issues
- ❖ **Post-Implementation Phase:** In this phase the scheme has to be made running and sustaining. The major task is O&M.
→ Develop the sense of Collective Responsibility and long term commitment of self sustainability





IEC Activities at a glance



Year	School Rallies	Water Quality Tests	Puppet show	Muniyadi	Exposure visits	Social mapping
2009-10	402	1762	125	540	146	151
2010-11	396	1742	107	935	351	239
2011-12	298	1854	120	1140	473	81
2012-13 (upto Jan 13)	222	1803	85	1203	358	-
Total	1318	7161	437	3818	1328	471



***Give a man a fish and you feed him for a day.
Teach a man to fish and you feed him for a lifetime.***

Capacity Building of Stakeholders

Harnessing stakeholder for the new roles

Orientation of (GPs / GPWSCs) for:

- Planning, technology selection
- Procurement, construction
- O&M management of water supply schemes

Tools employed:

- Training of PRIs on PRWSS project
- Training on Operation and Maintenance
- Training for women empowerment
- Training of village technician, Plumber, Operator waterworks and GPWSC members
- Training on Quality Aspects



Community Mobilization/Capacity Building Activities (Water Supply Schemes)

CB TRAININGS	CB programmes undertaken		
	Upto March 2011	upto March 2012	upto January 2013
Orientation on SWAp concept and Principles and Role of GPWSC/GP/ in pre-planning and planning stages	2434	1470	2294
Training on Quality aspects in Implementation phase at village level	1766	1527	2301
Training on sustainable O&M aspects at village level	1308	2205	
Hands on training to Technician, Accounts Person and Pump Operator on O&M aspects etc.	232	285	242
Need based community mobilization for village sanitation (sewerage/pond renovation) including environmental sanitation or any other important aspect.	-	71	307
Training programmes for under-performing GPWSCs	-	60	196
Total	5740	5618	5340

Community Mobilization/Capacity Building Activities (Sewerage Schemes)

CB TRAININGS	Up to January 2013
Awareness generation about solid free sewerage system	300
IEC activities	248
Focus on roles/responsibilities, Do's and Don'ts about Solid free sewerage system	300
Focus group meetings	347
Exposure Tours	36
Total	1231



IEC & CB PAYS

- Physical Achievements as CB & IEC results



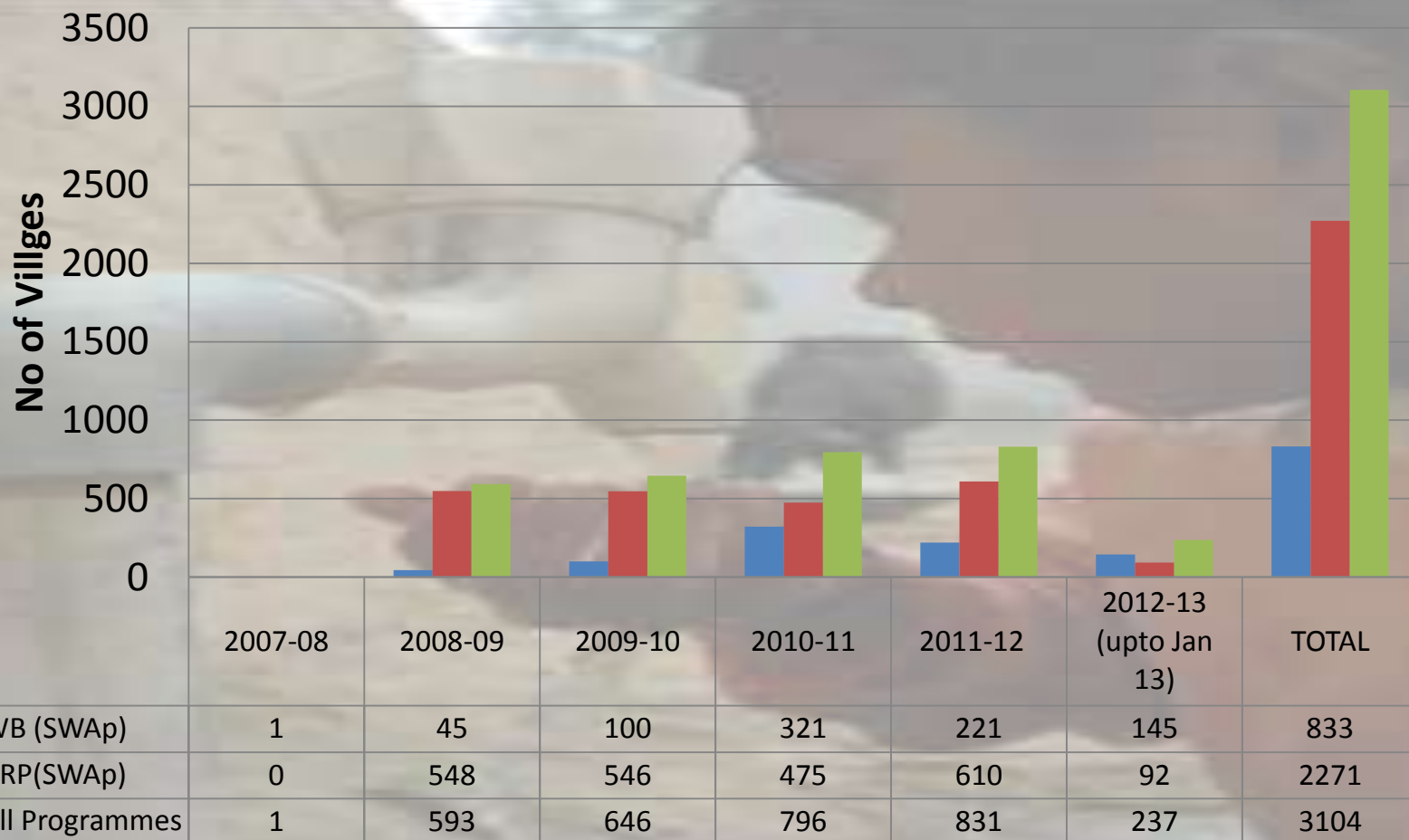
Status of Rural Water Supply at a Glance



A	Total Habitations as on 1.4.2008 (12258+2912)					:	15170 habitations
		NC MH	PC MH	(NC+PC) OH	Total		FC MH+OH
		2394	4578	2108	9080		6090
B	Coverage up to 31.1.2013 (since April 2008)					:	5893 habitations
		NC	PC	OH	Total		FC
		2124	2757	1012	5893		11983
C	Balance habitations to be covered up to March 2014					:	3187 habitations
		NC	PC	OH	Total		FC
		270	1821	1096	3187		

NOTE : All the remaining Habitations are proposed for coverage up to March 2014.

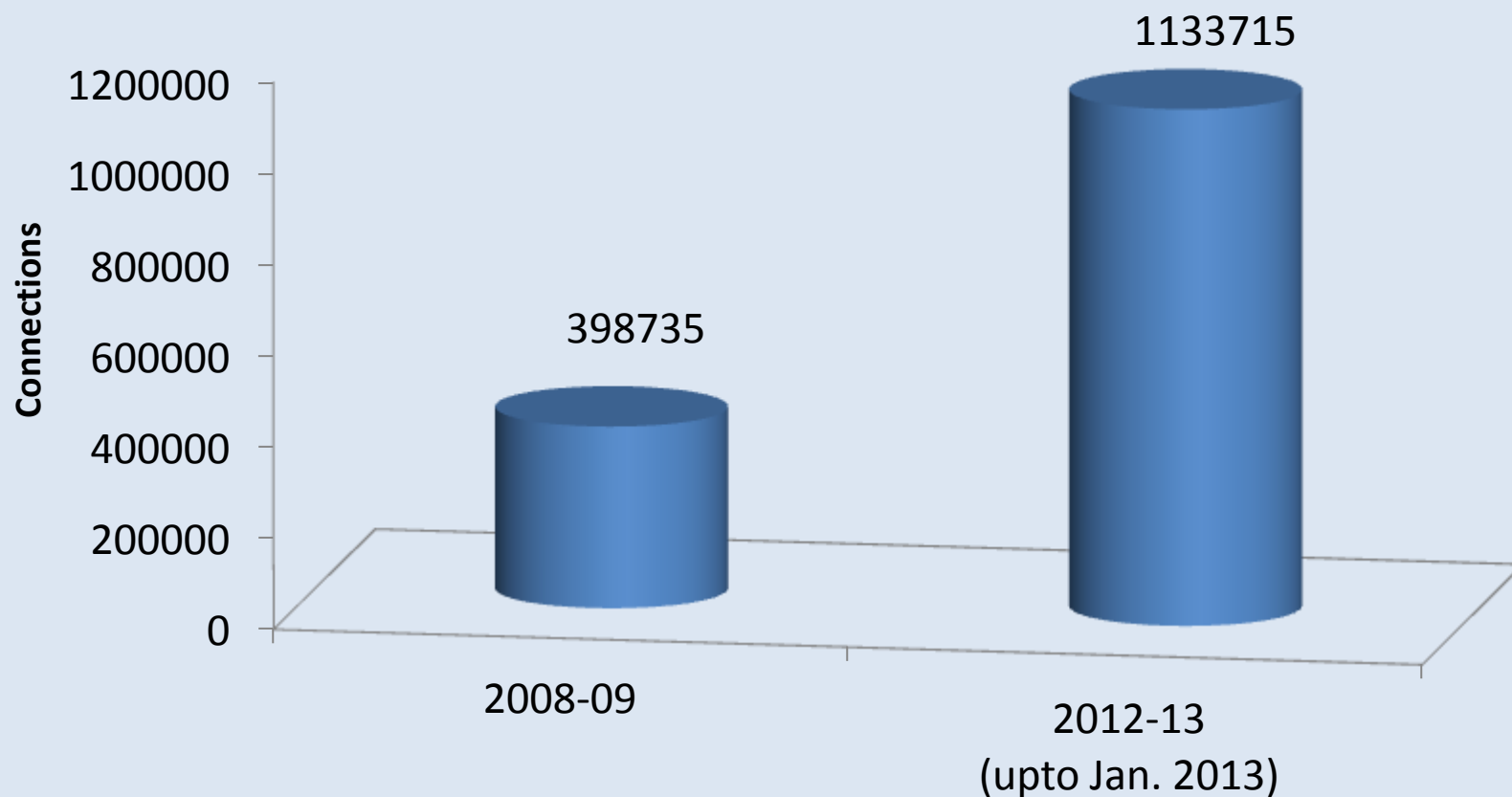
PHYSICAL ACHIEVEMENTS - Schemes Commissioned (SWAp)



PHYSICAL ACHIEVEMENTS – Private Connections



**284% jump
in Private Connections**



MARCH TOWARDS FINANCIAL SUSTAINABILITY

Playing its new role as a facilitator, the Department provides hand holding to the schemes post commissioning. Important initiatives are:

1. Assisting GPWSC's with various inputs & IEC material to **achieve minimum 70% HH connections**
2. Capacity Building of various stakeholders for disseminating need for **Water Conservation** and thus reducing energy cost & water wastage
3. **Fortnightly inspection** of schemes during defect liability period of six months after commissioning to address the technical challenge if any
4. Ensuring compliance of '**Transparency Wall**' to instill beneficiary confidence & compliance towards the scheme
5. **Special Awards** at the state & district level to honor & incentivize the best performing GPWSC's

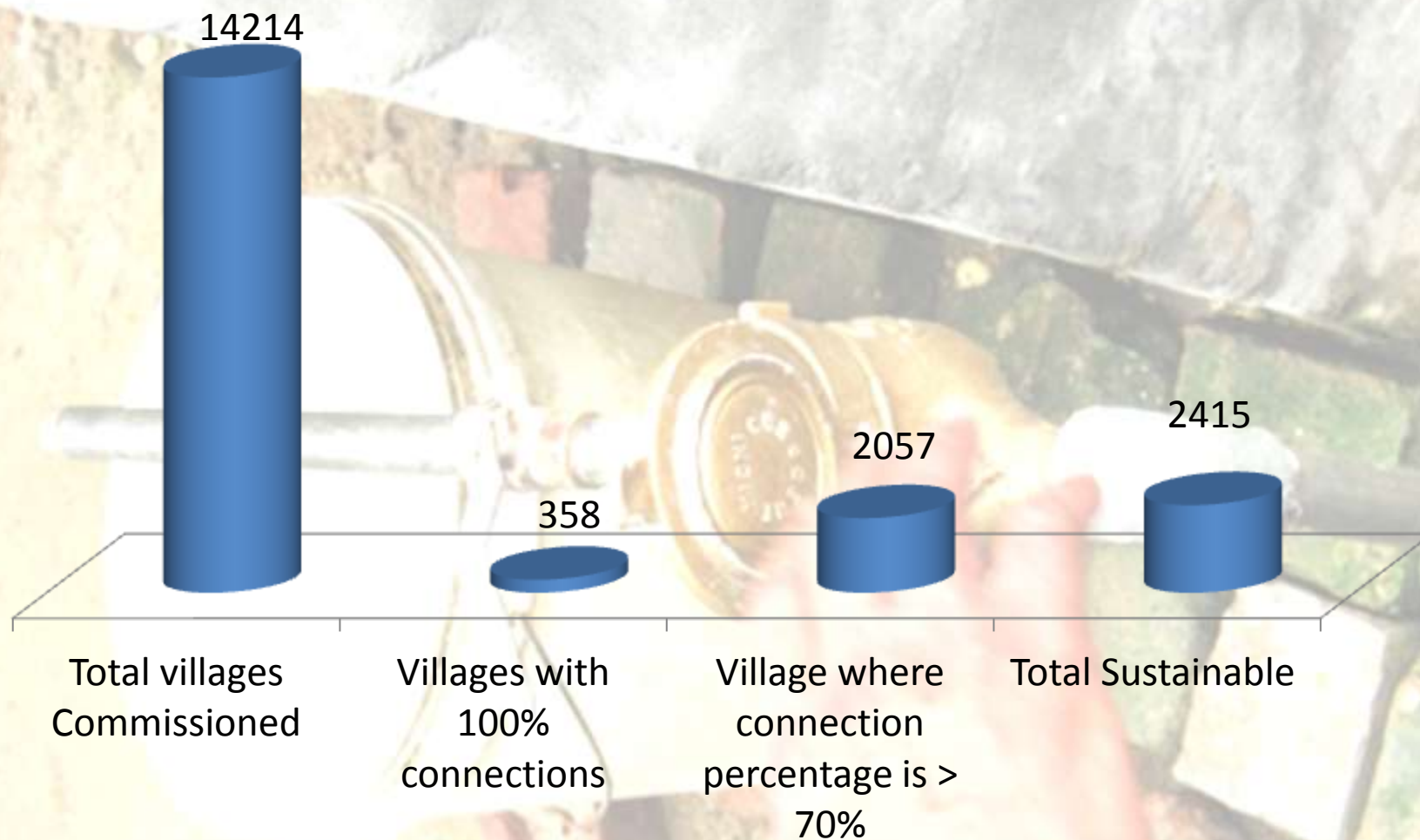
Financial Sustainability of completed Water Supply Schemes

Challenge: Financial sustainability of schemes is closely linked with percentage of water connections in the village.

Initiatives:

1. **SWAp mode involving of Community** - Involving community in designing, planning, construction and O&M stage of water supply scheme
2. **Target of 90% households** - Under MTP each scheme has to cover 90% HH through Pvt. water connections
3. **Culture of Transparency** - GPWSCs are expected to keep transparency in the accounts, provide details about revenue collections and operating expenses to Gram Sabha members. Culture propagated through “Transparency Wall”
4. **Provisioning for O&M** - Suitable tariff is being fixed to ensure revenue collected is greater than O&M expenditure
5. **Conducting Water Audit** - Production meters at Water Works are being installed at w/w site for monitoring the daily / monthly production of water and calculate unaccounted water

MARCHING TOWARDS 100% connections (Status as in 1/2013)

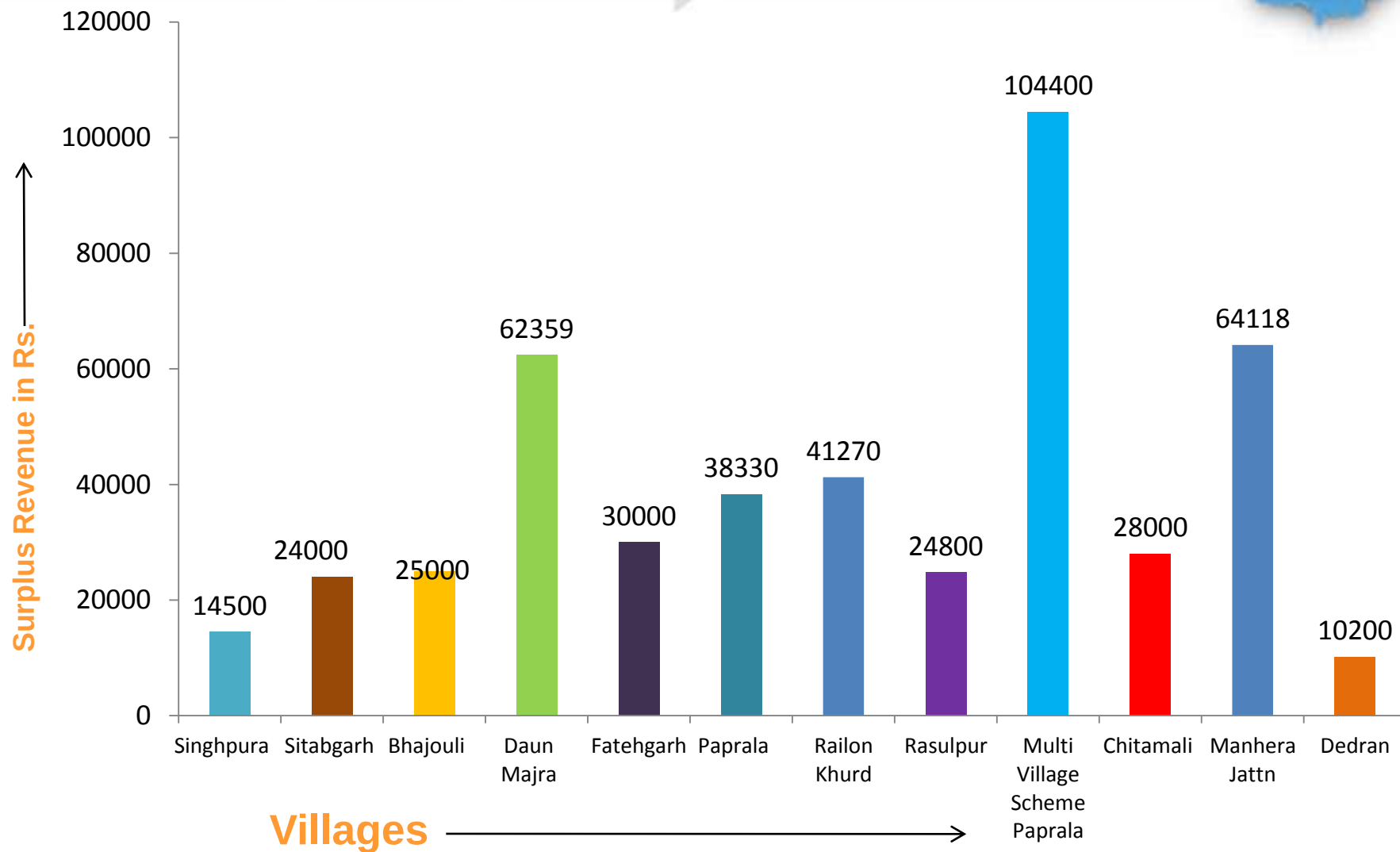


TOP PERFORMING SCHEMES - REVENUE SURPLUS



S.No.	Scheme	District	Month/ Year Commissioned	Houses	%age House Connections	Surplus Revenue (Rs. Lac) As in 1/2013
1	Naushehra	Amritsar	June – 09	1075	100	10.65
2	Langroya	SBS Ngr	Sept –09	725	105	6.21
3	New Raj Guru Ngr	Ludhiana	Oct – 10	950	103	2.50
4	Jodhan	..do..	..do..	739	82	2.33
5	Khuni Majra	Mohali	Jan - 10	230	96	2.07

OTHER SURPLUS REVENUE SCHEMES (Status as in 1/2013)



Grievance Redressal System: Shikayat Nivaran Kendra

**Customers don't expect you to be perfect.
They do expect you to fix things when they go wrong.**



Why Needed - Background

- **Long response time** - Senior level officers in hierarchy were not made aware regarding the complaints lodged/ problem persisting in their jurisdiction.
- **Low level of customer satisfaction** - Late attendance of complaints resulted into consumers losing confidence in the water supply system operated by Govt.
- **Low efficiency/ no check on performance** - Lower ranks official were attending to the complaints as per their convenience and will
- **To give convenient customer access to services required by 17.3 million Rural consumers residing in more than 15170 far-off located villages** - Non availability of any system for lodging complaints instantly upon noticing any defect as well as at odd hours of day

Inauguration of SNK



By Hon'ble
Deputy Chief Minister
Punjab on 16.12.2009

**Helpline**

1800-180-2468



SNK Objectives –

- **Improve quality of service delivery system**
- **Achieve satisfactory results with optimum inputs of man, machine & material while utilizing the latest e-governance methods and techniques**
- **Enhance efficiency and financial sustainability of the Water Supply System operations by reaching out to the beneficiaries**

Shikayat Nivaran Kendra (SNK)

A Good Governance Initiative:

Shikayat Nivaran Kendra, a state-of-the-art centralized call center is an endeavor to ensure the actual delivery of services in terms of good quantity, quality and reliability at consumer end and achieving sustainable operations by providing increased access to Rural Drinking Water Supply System

ਪੇਂਡੂ ਜਲ ਸਪਲਾਈ ਅਤੇ ਸੈਨੀਟੇਸ਼ਨ ਸ਼ਿਕਾਇਤ ਨਿਵਾਰਣ ਕੇਂਦਰ
RURAL WATER SUPPLY & SANITATION COMPLAINT CENTRE

ਜਲ ਸਪਲਾਈ ਅਤੇ ਸੈਨੀਟੇਸ਼ਨ ਵਿਭਾਗ, ਪੰਜਾਬ
DEPARTMENT OF WATER SUPPLY & SANITATION, PUNJAB

ਟੋਲ ਫ੍ਰੀ ਹੇਲਪਲਾਈਨ ਨੰ: 1800-180-2468 Toll Free Helpline No. 1800-180-2468

SNK Working Environment



SNK Highlights

- **SNK outreaches to approx. 17.3 million rural population in 15170 habitations**
- **Every official is directly connected to the centralized complaints redressal system through Telephone, Email & SMS**
- **SNK management & operation outsourced to third party to ensure transparency in the online complaints redressal system(DOEACC)**
- **Non Closure of the complaint till the satisfaction of complainant**
- **Daily progress report is reviewed by Secretary to Govt. Punjab, Department of Water Supply & Sanitation.**

Modus operandi

Stage 1: Registration and channelizing the Complaint

Stage 2: Redressal of Complaint

Stage 3: Closure of Complaint

Modus Operandi of (SNK)STAGE -1



Complaint dials Toll free Tel. No.
1800-180-2468 to register a complaint

Unique Registration Number generated automatically and same is conveyed to the complainant

The registered complaint is forwarded to all the concerned officials through Email, SMS & Telephone

Modus Operandi of (SNK) STAGE -2

Officials report the progress back to SNK through Phone & SMS (on Mobile No. **9501034596**) to SNK, which further informs the complainant.

In case of non-redressal, a reminder is sent to the concerned officer once the prescribed period is over & subsequent reminder is also sent after 24 hours of the first reminder, if complaint still persists.

In case of failure even after the reminders, escalated to the next level officer for their intervention after 24 hours each.

Modus Operandi of (SNK)STAGE - 3



**COMPLAINT IS CLOSED ONLY AFTER
COMPLAINANT IS SATISFIED**



NATURE OF COMPLAINTS & SERVICE STANDARDS



1.

Failure of water supply due to electrical or mechanical fault in the machinery

Service Standard
2 DAYS



2.

Failure of water supply due to absence of operator

Service Standard
1 DAY



3.

Failure of water supply due to large scale leakages in pipes

Service Standard
2 DAYS



4.

Failure of water supply due to bad quality of water

Service Standard
2 DAYS



5.

Failure of water supply in some specific areas

Service Standard
3 DAYS



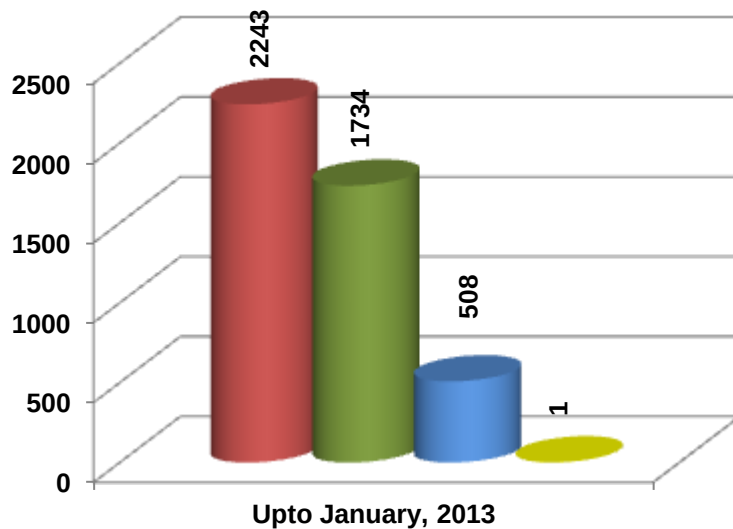
6.

Other Types of Complaints

Time may differ according to situation

COMPLAINT ANALYSIS & RESOLUTIONS

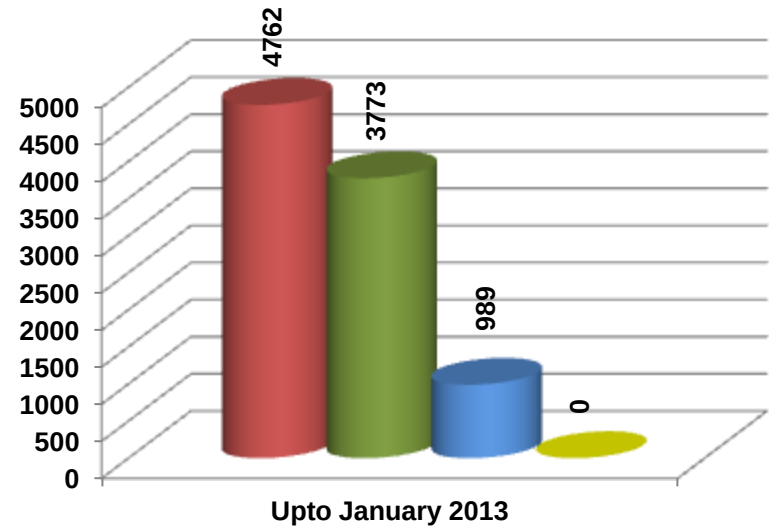
Electrical & Mechanical Failures (9% of total 25341 complaints)



Received
Attended Within Time
Attended But Slipped
Pending

Reasons are analysed and appropriate preventive measures are taken

Large Scale Leakages in Pipes (19% of total 25341 complaints)

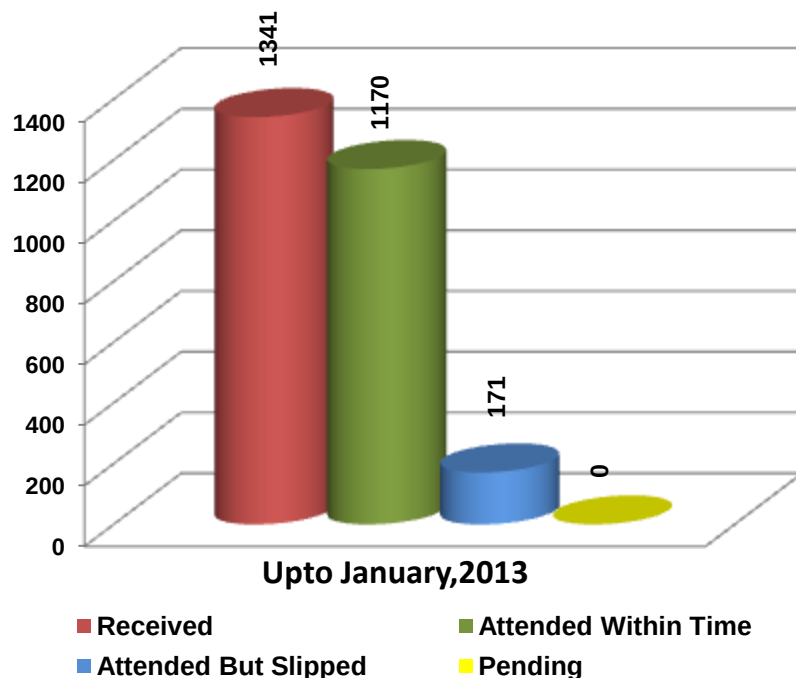


Received
Attended Within Time
Attended But Slipped
Pending

Field officers have become more quality conscious and ensure that distribution system stabilizes within defect liability period

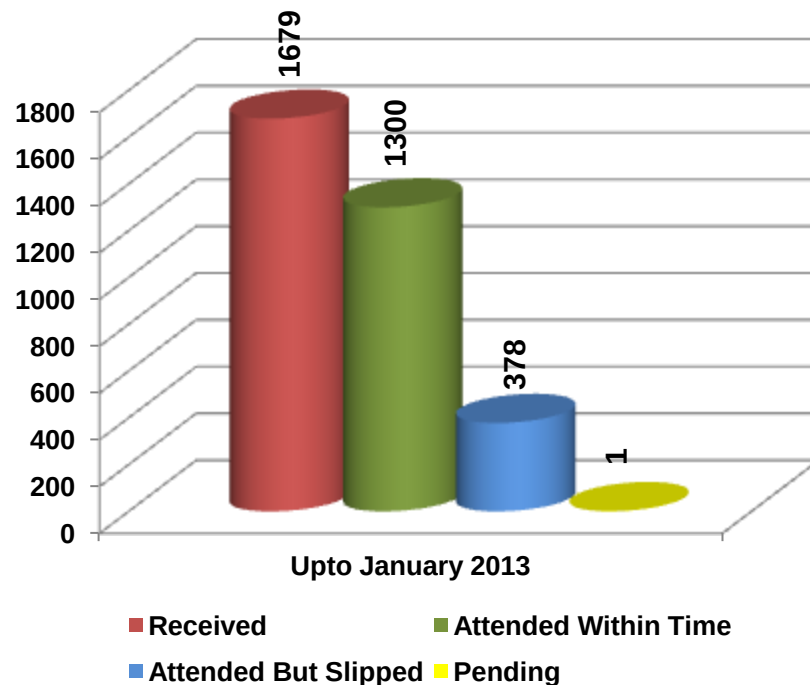
COMPLAINT ANALYSIS & RESOLUTIONS

Absence of Operators (5% of total 25341 complaints)



Department is still grappling with issue of shortage of staff and has initiated outsourcing O&M to third parties/ contractors

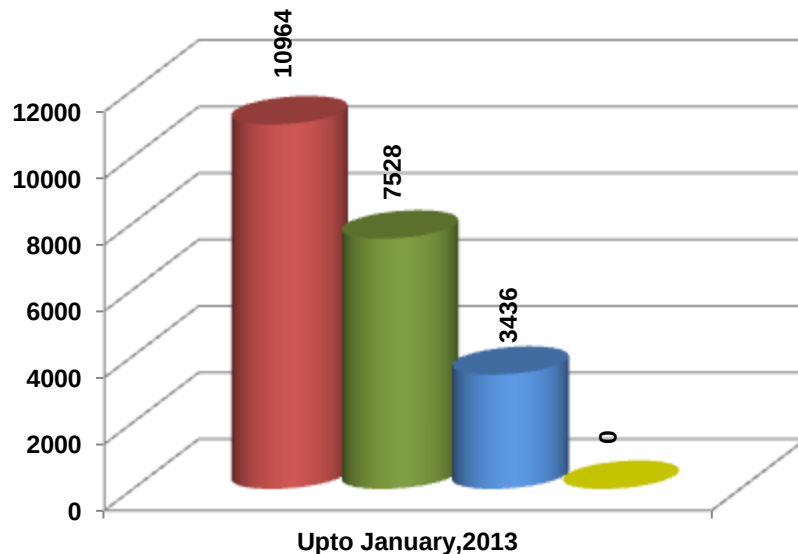
Bad Quality of Water Supply (7% of total 25341 complaints)



Reasons for bad quality such as sand pumping of tube well, inflow of dirty water from low lying open connection etc. are examined and appropriate remedial measures are initiated

COMPLAINT ANALYSIS & RESOLUTIONS

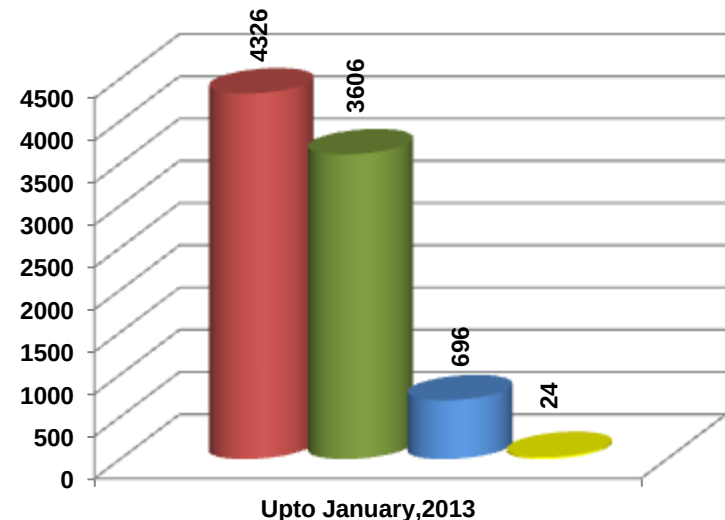
Water supply failure in a specific area (43% of total 25341 complaints)



■ Received
 ■ Attended Within Time
■ Attended But Slipped
 ■ Pending

Reasons of no water supply may be due to uneven topography, breakage of pipe etc. are looked into and appropriate measure are taken.

Other complaints (17% of total 25341 complaints)



■ Received
 ■ Attended Within Time
■ Attended But Slipped
 ■ Pending

Complaints of irregular water supply and pipes not laid in front of the house, etc., are tackled



99% CUSTOMER SATISFACTION Achieved

**(25315 complaints resolved out of
total 25341 up to January 2013)**

Challenges Faced and Action Taken

Demanding situation	Action Taken
Change of mindsets of department officials	Motivation of staff and field officers through constant internal dialogue
Financial constraints faced by staff	Low traveling allowance increased. Mobile telephone allowance provided.
Shortage of staff	Working overtime due to definitive timelines of redressal of complaints
Status of the complaints not available to SNK within the prescribed time period	Complaints escalated to next higher authority in hierarchy after a definite period
Genuineness of the complaint	Dealing reasonably well despite some difficulty



- **Credibility of Rural Water Supply operation enhanced due to efficiency in service delivery**
- **SNK has been well accepted by consumers as it helped in reducing closure/ downtime days of water supply operation**
- **Time bound action DWSS makes consumers satisfied**
- **DWSS has become more quality conscious to avoid re-occurrence of defects**

- **Absenteeism amongst operational staff in remote villages has been checked**
- **Higher O&M standards**
- **Performance of DWSS Operation is assessed on daily basis**
- **Availability of clean water providing huge social sector benefits**
- **Helps achievement of sustainable operation**

Conclusion

SNK Gives:

DWSS

- Measure of operational Difficulties

Customer

- Satisfaction that they are being heard by DWSS
- Sustainable Service

From Here Next



- **SNK to be upgraded into a management tool by linking it with MIS**
- **Identify problematic area**
- **Plan resource requirement**
- **Improve planning by addressing deficiency in institutional arrangement and delivery mechanism**

Metering In Villages - 24x7 Water Supply

Challenge :

Covering 100% households with water connections, 24x7 water supply

Initiative :

Work started initially in pilot villages Singhpura & Sitabgarh.

Scalability :

Success achieved in pilot villages encouraged department to adopt this model of metered water supply in the State and convert at least 100 villages to 24 x 7 metered water supply up to 2012-13.

Results achieved so far :

14 villages have availed 24x7 water supply so far and number is growing

Note: Water Meters in 100 Villages are being provided free of cost to public

Metering In Villages - 24x7 Water Supply

Benefits:

- **Helps poor families** - As water consumption is less compared to large houses. This encourages them into the system.
- **Helps tail end users** - The water pressure at tail end of distribution network increases due to judicious usage of water by all.
- **Helps Energy Savings** - Pumping hours get reduced by about 20% driving energy savings. Tulu pumps render obsolete in villages driving further energy savings and households save money.
- **Helps Water Conservation** – Consumers become cautious in the use of water and help in water conservation (demand based, no hoarding of water lead to improved consumption efficiencies)
- **Reduced chances of contamination** - As distribution system is always full and with 100% household water connections; no temptation of tampering by anyone.
- **Steep Reduction in Non Revenue (unaccounted) Water** - Water auditing has revealed steep reduction in unaccounted water i.e. leakages and theft etc. less than 10% against national average of 30% to 40%

Case study of two villages: Singhpura and Sitabgarh

Challenge:

At the time of commissioning, Drinking Water was supplied @ Rs. 100 per connection twice a day and 100% contribution was not realized.

Initiative:

100% metering of water supply & 24x7 water supply

Benefits:

- Fixed charge reduced to Rs.60 plus Rs3 per kilo litre
- Households have stopped wastage of water and as a result paying less
- The water pressure at tail end of distribution network has increased
- Saving of electricity charges as pumping hours has reduced by about 20%
- Total monthly O&M expenditure of both the GPWSCs is less than the monthly revenue collections from water charges
- Water supply has become reliable and confidence of the community in their ability to operate and maintain piped water supply system has increased

Case Study of two villages - contd.

Village Details	Village Singhpura	Village Sitabgarh
Gram Panchayat Water Supply Committee was formed under the Chairmanship in year 2008	S. Jagnahar Singh	Smt. Baljinder Kaur
Beneficiary contribution collected by GPWSC	Rs 3.33 lacs in a record period of one month.	Rs 0.57 lacs
Commissioning : Month /year	November 2009	March 2010
Population	849 persons	715 persons
No of households/connections	181/207	120/122
Surplus revenue generated (O&M)	Rs 18500	Rs 36200

Exemplar GPWSC's : **Singhpura and Sitabgarh** - Ideal for Replication



Exposure Visits
GPWSCs of village Pannua and Khizrabad (Majri) & Jandli on exposure in village Singhpura



EVALUATING PERFORMANCE with NRW

NON REVENUE WATER

This is the water that has been produced and is “lost” before it reaches the consumer. Losses can be real losses (through leaks, sometimes also referred to as physical losses) or apparent losses (for example through theft or metering inaccuracies).

SCALING IT UP

The success achieved in villages like Singhpura & Sitabgarh it is proposed to adopt this model of 24/7 metered water supply in the State and to convert at least 100 villages to 24 x 7 metered water supply.

**Rann naha ke chhappar vichon nikli
Sulphe di lat vargi**

- Balwant Gargi

“The woman emerged from the pond
Like a flame shooting out of an opium pipe . .



Ponds Rejuvenation Program

Background:

From the time immemorial village ponds have been an integral part of social fabric in the rural Punjab. These ponds are usually located at the lowest point in the village and consequently, excess rain water flows and collects into these ponds. However, with passage of time and unplanned development, they have degenerated now to become a source of nuisance.

Challenge:

To usher a healthy ecosystem in rural Punjab that replenishes bleak ground water situation and improves environmental & sanitation conditions in villages.

Initiative:

Restore pristine eco system of choked village ponds through a unique initiative using Waste Stabilization Techniques.

Ludhiana Pilot Project (Vill. Rurka)

Key Challenge:

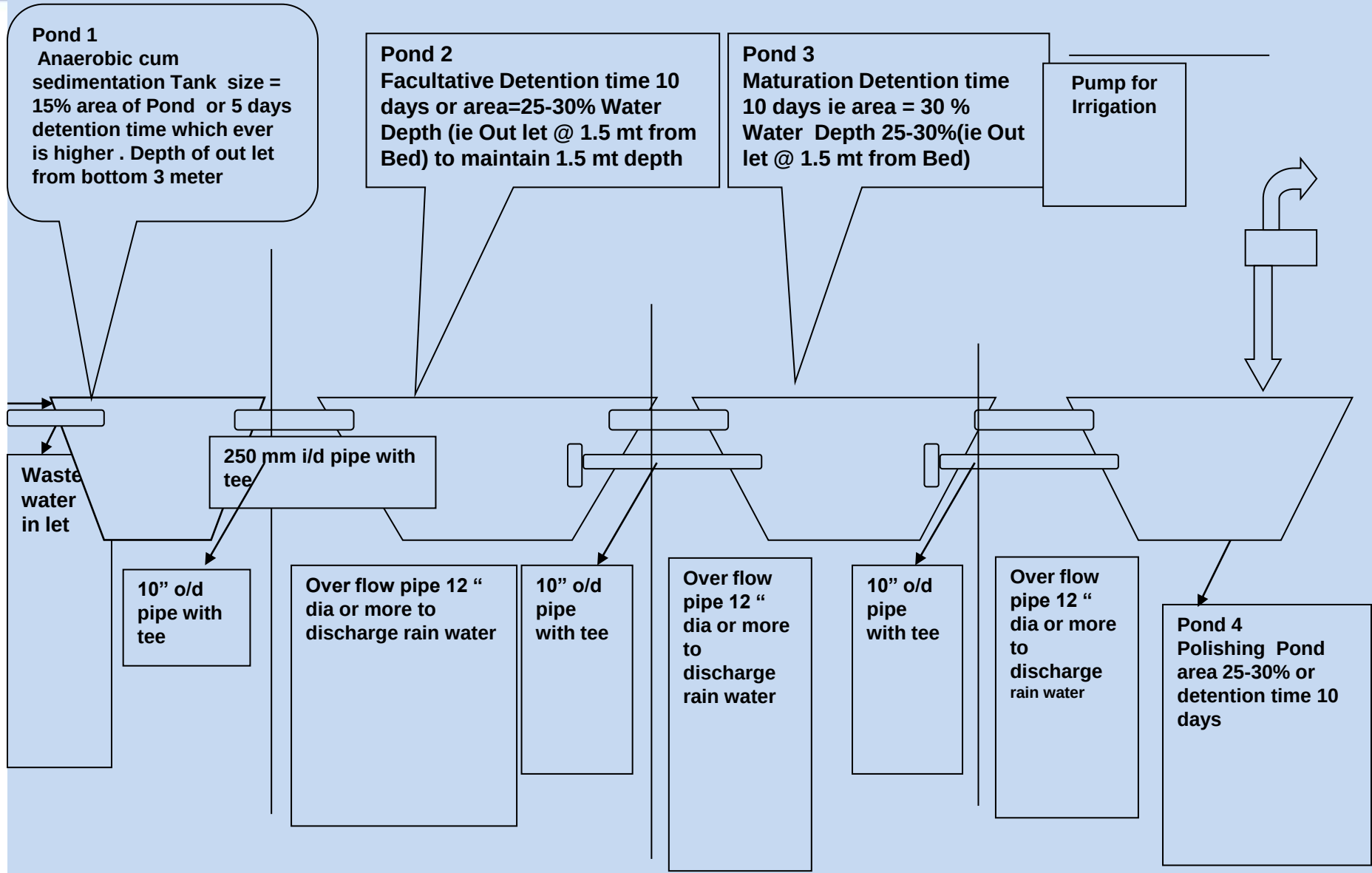
The intensive cropping pattern in the state of two major crops provided the department only two months time in a year to complete work

Initiative:

On the basis of “Technical Note on Solid and Liquid Waste Management In Rural Areas”, prepared by Government of India and UNICEF; DWSS honed up a unique process.



Schematic Flow Diagram



Pilot goal of renovating 500 village ponds

Status of Ponds Renovation Program

Stages of Pond renovation	Number of Ponds
Dewatering	20
Earthwork & Partition	25
Commissioned	139

To be scaled upto 12,000 villages in Punjab

Will boost up the ground water situation and brings tremendous improvement in environmental & sanitation conditions in villages

WATER SECURITY THROUGH ALTERNATIVE TECHNIQUE – RO Plants

There is not assured adequate availability of water in some **problematic villages** as shown below:

- Served through canal based water supply schemes and located at the tail of the canal network (mainly in Southern District of Punjab) experiencing shortage of canal raw water during peak summer season & no demand period of crops.
- Served through tube-well based water supply schemes where Total Dissolved Solids are beyond 800 ppm.
- Where uranium has been found to be above the permissible limits in the drinking water T/wells.
- Where Heavy Metal has been detected in the drinking water.

In order to ensure the water security, minimum for drinking & cooking requirements; alternate arrangement of qualitative water has also been made in such villages by providing Reverse Osmosis Plants on Build Own Operate & transfer basis with unique features of sustainability.

Contd....

SALIENT FEATURES:

- A nominal rate of Rs. 0.10 per Litre is being charged from the consumers. Thus by spending nominal amount, the villagers are able to get potable water of high standards which is reliable even in peak summer season when demand for drinking water grow manifold.
- The executing agencies have been engaged not only to built the plants but also to operate and maintain these plants for 7 years free of cost. The agencies will also payback Rs. 451.87 Lacs. to the state Govt. as a whole in this O&M period. Thus the state in return, will earn some money from the operation and maintenance of rural water supply schemes thus provided, which is a unique experiment.

Contd..





Ensuring Potable Water throughout the year with RO Plants

Potable water is assured throughout the year for drinking & cooking requirements, with installation of 1824 (1803 commissioned +21 in progress) Reverse Osmosis Systems in **problematic villages:**

- Served through canal based water supply schemes and located at the tail of the canal network (mainly in Southern District of Punjab) experiencing shortage of canal raw water during peak summer season & no demand period of crops.

(1003 commissioned)

- Served through tube-well based water supply schemes where Total Dissolved Solids are beyond 800 ppm.

(536 commissioned + 21 in progress = Total 557)

- Where uranium has been found to be above the permissible limits in the drinking water T/wells.

(188 commissioned)

- Where Heavy Metal has been detected in the drinking water.

(76 commissioned)

Reverse Osmosis Plants (Status as in 01/2013)

1803

1824

21

Already in
operation

Under
installation

Total

REACHING GRASSROOTS – MAY I HELP YOU

360 degree feedback process

Getting feedback is not about sampling criticism
but is enabling for continuous improvement.



ESTABLISHING CUSTOMER ENGAGEMENT

Challenge: After commissioning of scheme, many micro level issues cropped up and need quick resolution to sustain operations & maintain customer faith

Initiative: Calling up GPWSC's to ascertain actual working situation. Predefined script is administered to collect the feedback from the GPWSC and a software employed to capture the data, which generates MIS reports This experiment initiated on pilot basis in District Ludhiana and has been implemented in all 20 districts of Punjab.

Benefits:

- Timely intervention by the DWSS from the feedback/ concerns escalated
- Technical difficulties like leakages, SIP not working, Low pressure were rectified in a timely manner
- Institutional weaknesses like non opening of bank account for O&M expenditure, non deployment of adequate staff by GPWSC were identified and rectified
- Boosted confidence of GPWSCs and they feel department takes care and is willing to support them in successful O&M of schemes.

360 degree feedback process



Collecting phone numbers and creating GPWSC directory

Predefined Questionnaire

Nodal officer to make daily telephone calls to stake holders in 5 villages

Computer based software to capture the feed back

Generate reports from computer on the basis of feed back for remedial action

Call again to check if issues are resolved?



Sample of Feedback

District	Nature of problem / defects noticed	GPWSC wise action taken on problems
Bathinda	Leakage in village Kaile Bander & Pacca Kalan	Leakage Rectified in village Kaile Bander & Pacca Kalan
Mansa	Leakage Problem in village Khaira Kalan & Jalwera.	Leakages rectified in both the villages.
Sangrur	Leakages, Illegal connections	Rectified
Barnala	3 Nos. Leakage in village Khaili & 2 Nos. Kalalmajara	Reported to DWSS & Rectified
Roop Nagar	Less water pressure at higher reaches	Water pressure increased by controlling wastages in low reaches
SAS Nagar	Minor leakages & less water pressure at higher reaches	Leakages rectified within week and water pressure increased by controlling wastages in low reaches
Patiala	Leakages in pipe line & less water supply in farther village in MV village scheme	Rectified
Nawanshahr	7 Nos. Leakages is found	Leakages rectified
Hoshiarpur	Leakages	Leakage rectified

ADDRESSING WATER QUALITY CONCERNS

Up-gradation of Lab infrastructure

“What's measured improves”



Establishing state-of- the-art Water Testing labs

Challenge :

To ensure safe drinking water with rapidly changing ground water quality & for villages affected by High concentration of TDS, Uranium, Heavy Metals etc. beyond permissible limits

Initiative:

30 Water Testing Laboratories equipped with Spectrophotometer, pH meter, TDS / conductivity meter, autoclave, incubator, distillation still, turbidity meter, laminar airflow, hot air oven.

- State level laboratory - Patiala
- District headquarters -19 Laboratories
- Sub-Divisional level -10 Laboratories
- Mobile Water Testing Laboratory - Analyses 100 water samples per month at random from various source

Benefits :

Ensures supply of safe drinking water in the villages & quality compliance as per BIS standard IS-10500:1991 (Rev.-2)



THRUST ON WATER QUALITY ASSURANCE

- Emphasized water quality assurance by increasing testing labs from 4 to 30, with an annual target of analysis of 36,000 samples per year (100 samples/lab /month)
- Quality Assurance in collaboration with world class testing labs like Bhabha Atomic Research Centre, Mumbai, Indian Institute of Toxicology, Lucknow
- Third party quality testing through Sri Ram Laboratory to counter PGI Chandigarh toxicology report of Amritsar district



Construction of Individual Household Toilets

In order to provide clean environment in villages, a Project costing Rs.124.50 crores for installation of 1,00000 toilets (resulting into open defecation free status for 724 villages & the number is increasing), for BPL and APL families (without toilets) is under implementation with financial assistance from Nabard.



Other Best Practices



- **Computerization of Water Bills:**

Time bound preparation and delivery of bills leading to manifold increase in revenue collection

- **Initiation of State & District level Awards:**

Encourage and reward the best performing GPWSC's

- **Website & Management Information System**

Availability of the right information for all time enabling management interventions.
(www.pbdwss.gov.in)

If GOD is willing to grant,
why should we restrict ourselves from wishing

Thanks