

IMPLEMENTATION OF JAL JEEVAN MISSION SCHEME & NEED FOR RAINWATER HARVESTING

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JAL JEEVAN MISSION



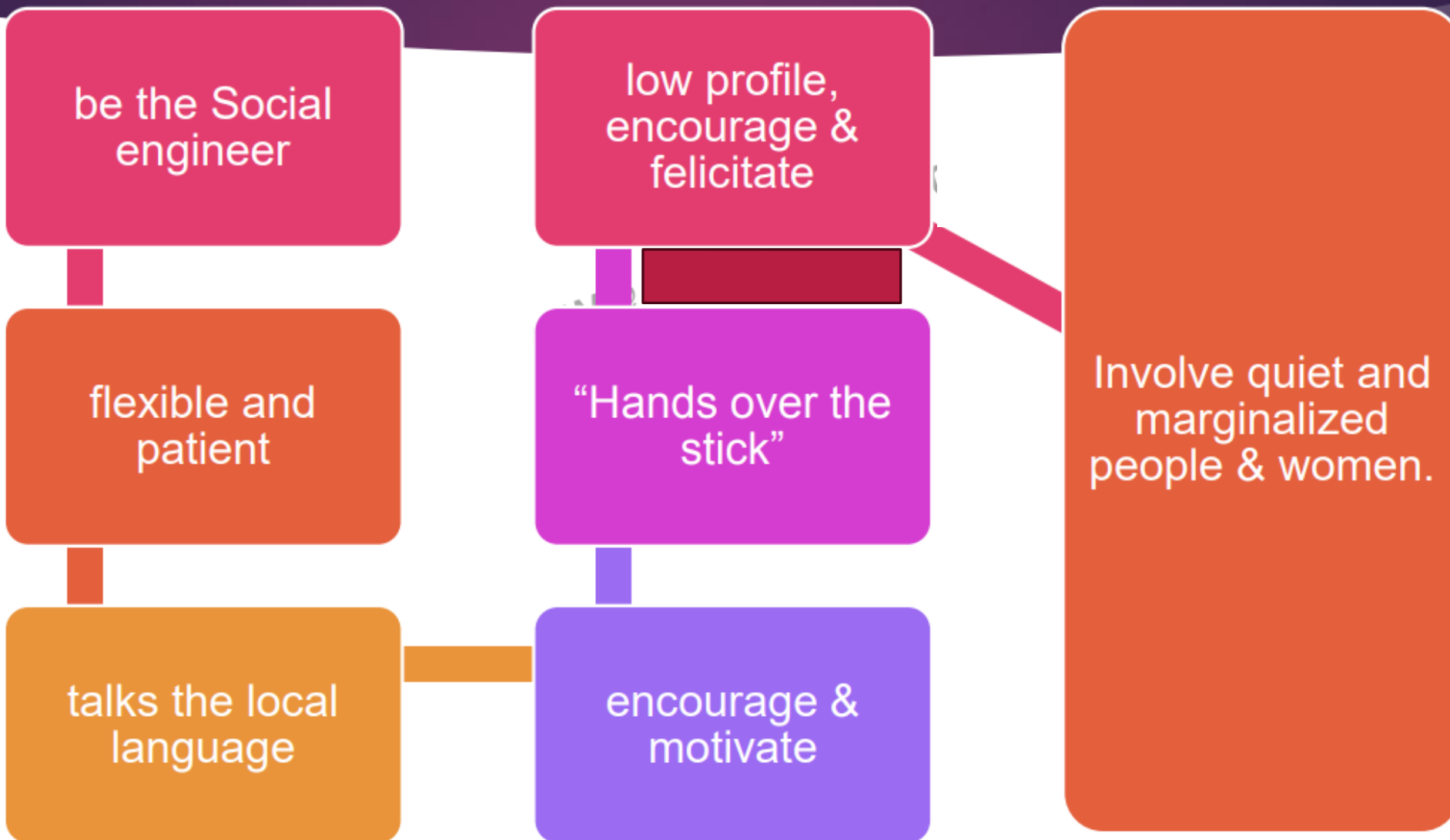
- **JJM is not only the project of water supply engineering, tendering, contractors etc –**
- **But also to involve the community in planning, implementation, operation and management; and**
- **Communities to lead in all aspects of implementation of JJM.**
- **JJM has been launched to provide Functional Household Tap Connections (FHTCs) to every household by 2024.**
- **Growing awareness of community participation in the works from pre planning to post implementation can help in successful implementation of the project.**

BENEFITS OF COMMUNITY INVOLVEMENT IN IMPLEMENTATION & MAINTENANCE OF WSS

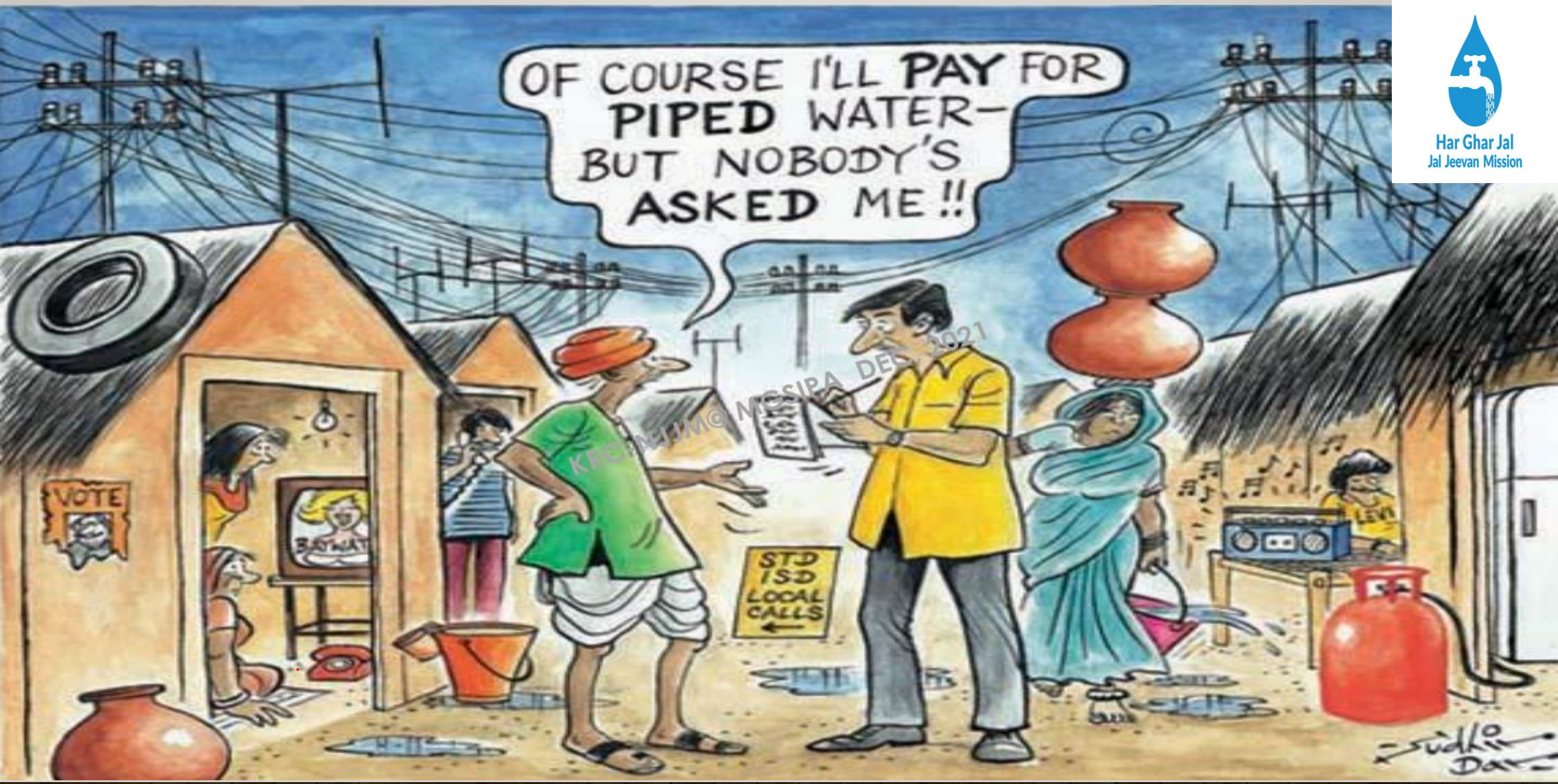
- Better service delivery;
- Better understanding of the day-to-day O&M responsibilities;
- Better awareness and understanding about drinking water related issues in their village;
- Higher levels of community ownership on in-village infrastructure;
- Community determines what will work in reality and what will not;
- Can work with extended hands for PHED engineers
 - in monitoring; • local support; • Contribution;
 - and • Immediate problem solving



How to involve community



OF COURSE I'LL PAY FOR
PIPED WATER-
BUT NOBODY'S
ASKED ME!!



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COMMUNITY NEEDS TO UNDERSTAND BENEFITS OF FHTC

- Reducing time spent in collecting the water;
- Reducing travel distance upto water point;
- Reducing incidence of water-related disease;
- Increasing adequate quantity of water;
- Improving water quality;
- and Increasing opportunities for income generation.

THE KEY ROLE TO BE PLAYED BY THE COMMUNITY IN SUCCESSFUL RUNNING OF THE WATER SUPPLY SCHEME

- Arranging operation of the system through a suitable person;
- Carrying out minor repairs;
- Chlorination;
- Water quality testing/ surveillance;
- Ensuring proper use of infrastructure, cleanliness near sources, etc.
- Create and maintain register for accounts.
- Fixing & collection of O&M costs/ water tariff.



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WSS RAMPURA (COMPLETED UNDER JJM)-COST-439.23 LACS FHTCS-NEW=465, UPGRADED=175



ARRANGING OPERATION OF THE SYSTEM THROUGH A SUITABLE PERSON OR CARRYING OUT MINOR REPAIRS



Arrangement of Skilled Manpower



Today on 04-12-22, Paani Samiti Meml Panchayat Gudwal - A Block Vijaypura Rampur District Sambalpur, suggested and approved the following skilled manpower for skill development as mason, electrician, plumber, pump operator, motor mechanics and also capable person for Grievance mechanism of concerned village under the banner for carrying the Support Activities for successful implementation of Jal Jeevan Mission.

Sl.No	Name	Address	Contact No.	Signature
Mason	Ashok Kumar	Rampur	9086348398	Ashok
Electrician	Rakesh Kumar s/o Bishan Dass	—	9796609393	Rakesh
Plumber	Ramesh Lal s/o Dharam chand	—	9622193917	Ramesh
Pump Operator	Shubam Sharma s/o Reepal	—	8493059530	shubam
Motor Mechanic	Jai Paul s/o Tharu Ram	—	9541605132	Jai Paul
Grievance Mechanism	Tilak Raj	—	9419312002	Tilak Raj
Grievance Mechanism	Mohan Lal	—	9419133875	Mohan Lal

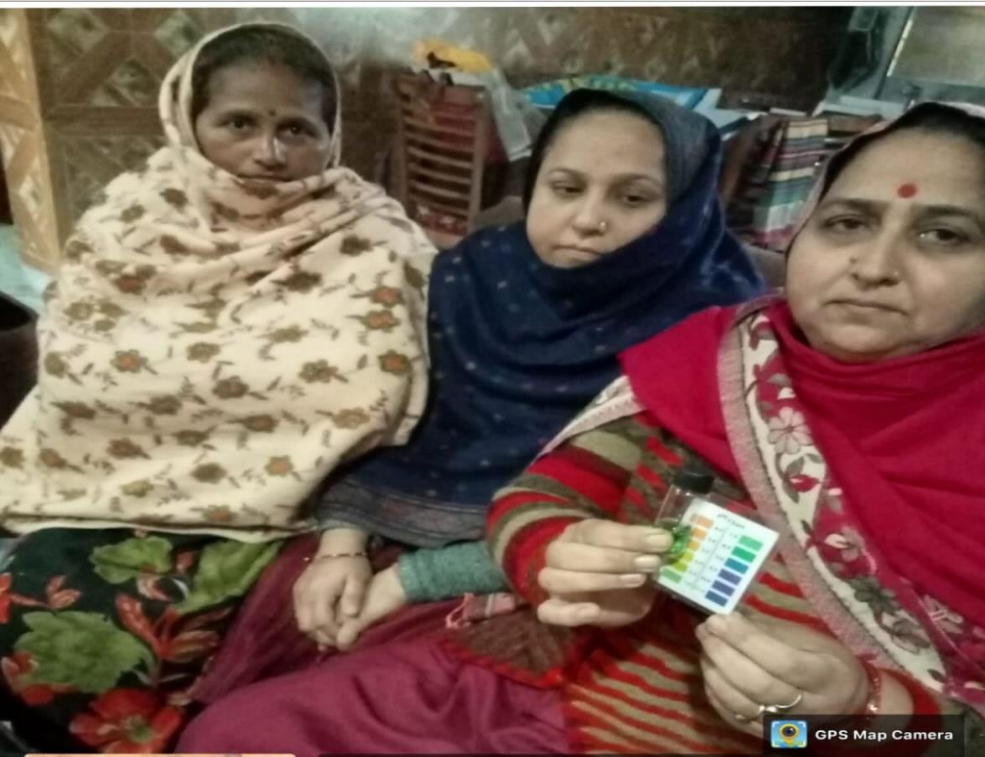
Paani Samiti (Signature & stamp)

Ashok
Sarpanch
ANITA SHARMA
Panchayat Hama Gudwal A

CHLORINATION: DEMONSTRATION OF INLINE CHLORINATORS TO SCHOOL STUDENTS



WATER QUALITY TESTING/ SURVEILLANCE



FTKit Training for Women

Today on 16-02-23, a FT Kit training for women was organised in Panchayat Gudwal-A Block Wajaypur Village Rampur District Samba, in which all Paani Samiti Members, PHE Trainers and Trainee womens of concerned village were present in it. In this Training process, ISA's gave Training to the women of the above mentioned village how to test the water under the banner for carrying the Support Activities for successful implementation of Jal Jeevan Mission.

Name	Address	Contact No.	Signature
Savita		9906225940	Savita
Sudesh		—	Sudesh
Geeta Devi		9622170307	Geeta Devi
Kamukan Sharma (A-WM)		—	Kamukan Sharma
Suresh		9419143794	Suresh
Mohan Lal		9622170307	Mohan
Rajinder		—	Rajinder
		7051964085	—

Paani Samiti

Sarpanch
ANITA SHARMA
Panchayat Gudwal A



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COMMUNITY INVOLVEMENT IN CONSTRUCTION OF RAINWATER HARVESTING STRUCTURE IN WSS RAMPURA(JJM)



SPECIAL MEETING OF PAANI SAMITI MEMBERS ALONG WITH ISA TEAM FOR ORIENTATION OF THE PUMPING STATION AFTER COMPLETION



FIXING & COLLECTION OF O&M COSTS/ WATER TARIFF



illustration to fix monthly Water charges for Panchayat Gudwal-A
(WSS Rampura): -

Number of households = 640

- **Pumping hours of machinery (at present)= 8**
- **Hp of pumping machinery = 15**
- **Unit of electricity consumed per hour = 11.4**
- **Total electricity consumed per month = 2736 Electricity cost = 2736x7 (or whatever electricity rate is) = 19152/-**
- **Salary of the staff (03 No. minimum)= 27990/-**
- **General repairs (including equipment) = 10000/-**
- **Unforeseen miscellaneous expenses = 5000/-**
- **Chlorination = 3500/-**
- **Total = 65642/-**
- **Add 10% extra monthly addons (for major repairs)= 6564/-**
- **Grand total = 72206/- Monthly water charges for 576 No. water connections(assuming 90% households)comes out to be 72206/576 = **Rs125/HH**/-**

NEED FOR RAINWATER HARVESTING

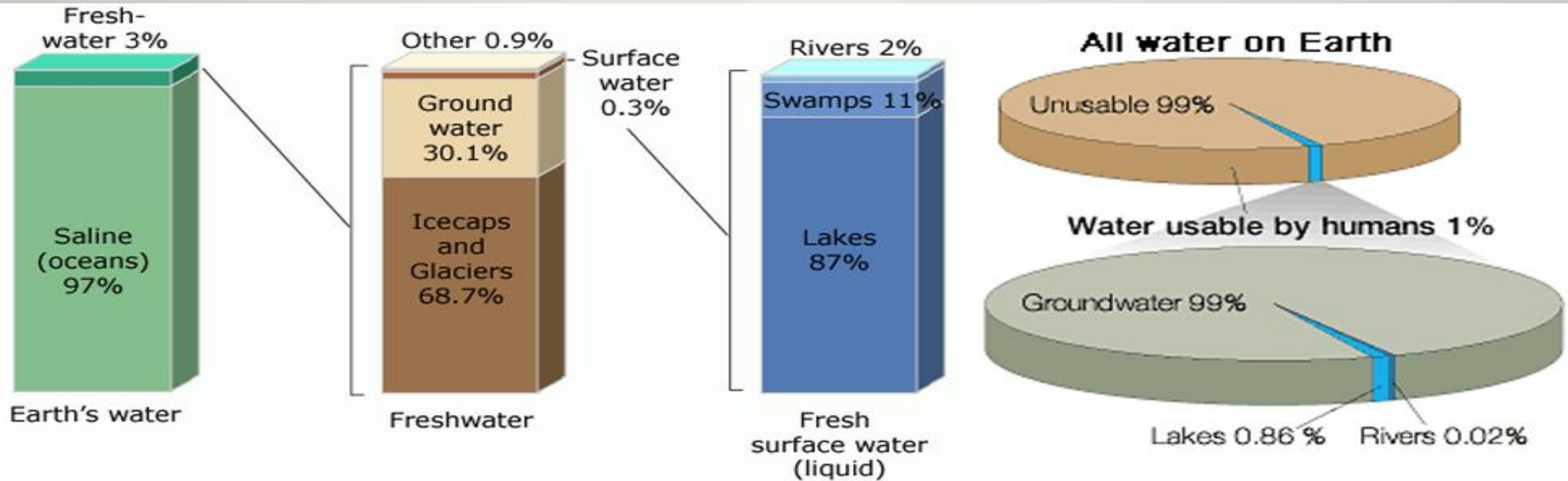


WHAT IS RAIN WATER HARVESTING

- **Rainwater Harvesting is the technique of collection and storage of rainwater at surface or in sub-surface water bearing zones before it is lost as surface run. It is collection and storage of rain water that runs off from rooftops, parks, roads, open grounds, etc..**



DISTRIBUTION OF EARTH'S WATER



by S. H. Schneider, Oxford University Press



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NEED FOR RAINWATER HARVESTING

- To meet increasing water demand
- To reduce the surface runoff
- To avoid the flooding and damage of roads
- To avoid accumulation of water in low lying areas.



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PURPOSE OF RECHARGING GROUNDWATER

- To arrest the declining water levels
- Storage of fresh water in the aquifer
- To improve the ground water quality
- Disposal of waste water
- To improve the sustainability of existing ground water structures
- To minimize the failure of tubewells/dug wells due to lowering of water levels
- To check the increasing cost on energy consumption.



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Freshwater Stress

1995

2025

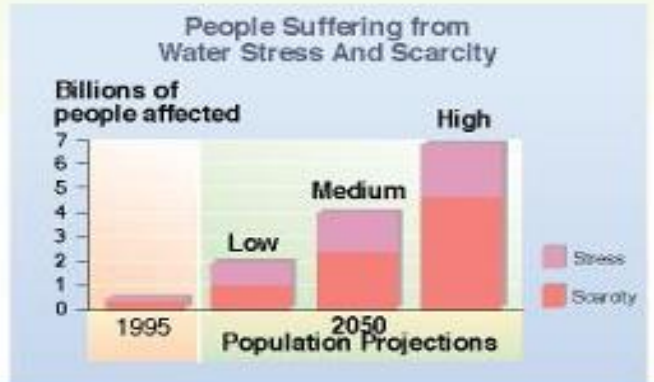


PHILIPPE PERACEVICZ
FEBRUARY 2002

Water withdrawal as percentage of total available

- more than 40%
- 40% to 20%
- 20% to 10%
- less than 10%

Source: World Meteorological Organization (WMO), Geneva, 1996 ; Global Environment Outlook 2000 (GEO), UNEP, Earthscan, London, 1999.



Global trend water stress

GROUNDWATER ASSESSMENT IN J&K

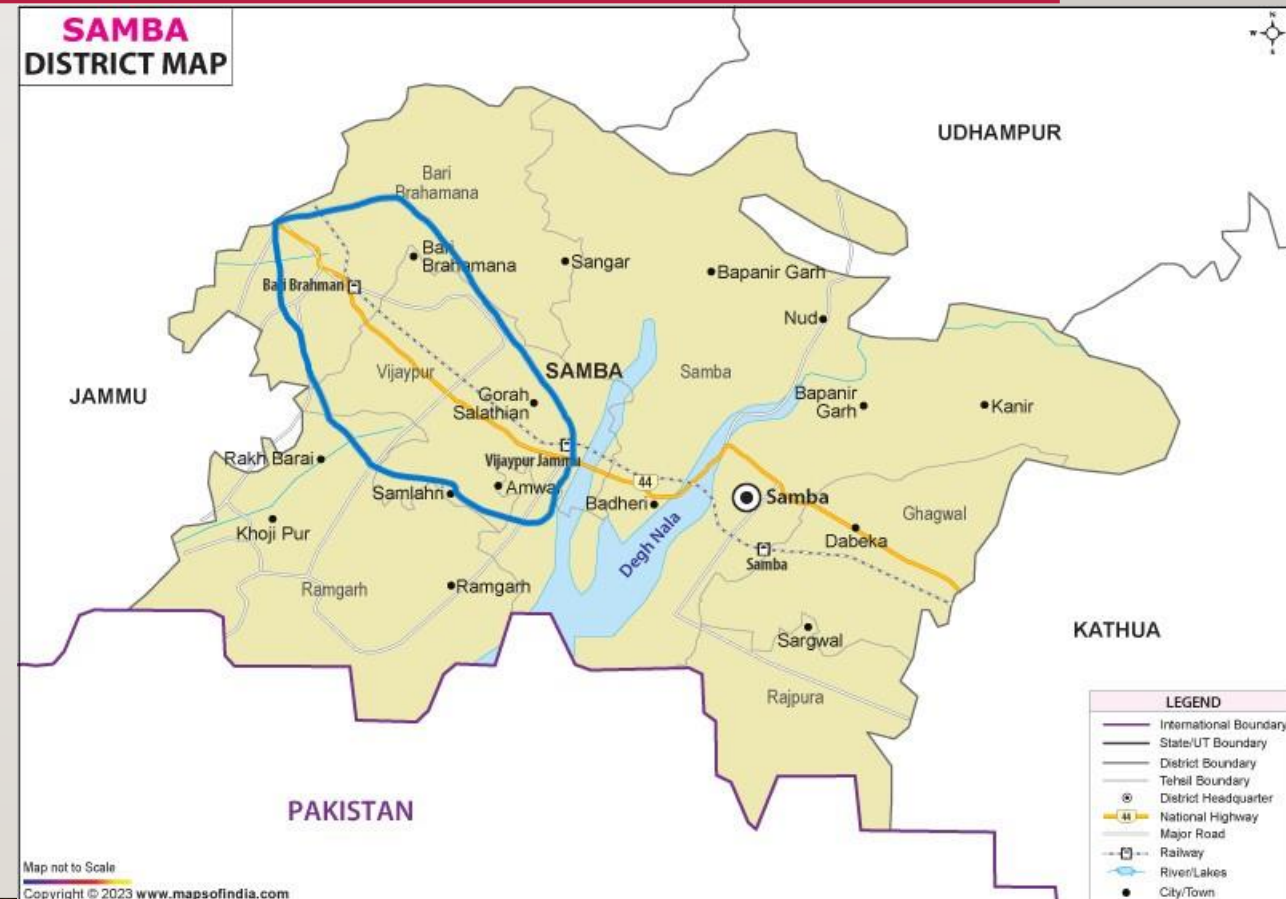
Categorization of Assessment Units based on the 'Stage of Ground Water Extraction'

Sl. No	Category	GWRA-2017		GWRA-2020		GWRA-2022		GWRA-2023	
		Number of AUs	% of AUs	Number of AUs	% of AUs	Number of AUs	% of AUs	Number of AUs	% of AUs
1	Safe	22	100	20	100	19	95	19	95
2	Semi-critical					1	5	1	5
3	Critical								
4	Over-exploited								
5	Saline								
Total number of AUs		22		20		20		20	

What is the challenge then ?

WATER CHALLENGES IN JAMMU

- Jammu, nestled in the foothills of the Himalayas, faces unique water challenges. Despite being blessed with abundant natural resources such as rivers and seasonal rainfall, the region grapples with water scarcity issues. The population is rapidly increasing in Jammu as well as Samba District. Therefore dependency on ground water sources to fulfil requirement has generally increased.



1 m rise in water level saves 0.4 kwh of power

GROUNDWATER EXTRACTION IN JAMMU PROVINCE

- EXISTING DATA

(approx.)

No. of Tubewells-789

No. of Borewells-1000

No. of Handpumps-21000

- UNDER JJM

No. of Tubewells-350

No. of Borewells-554

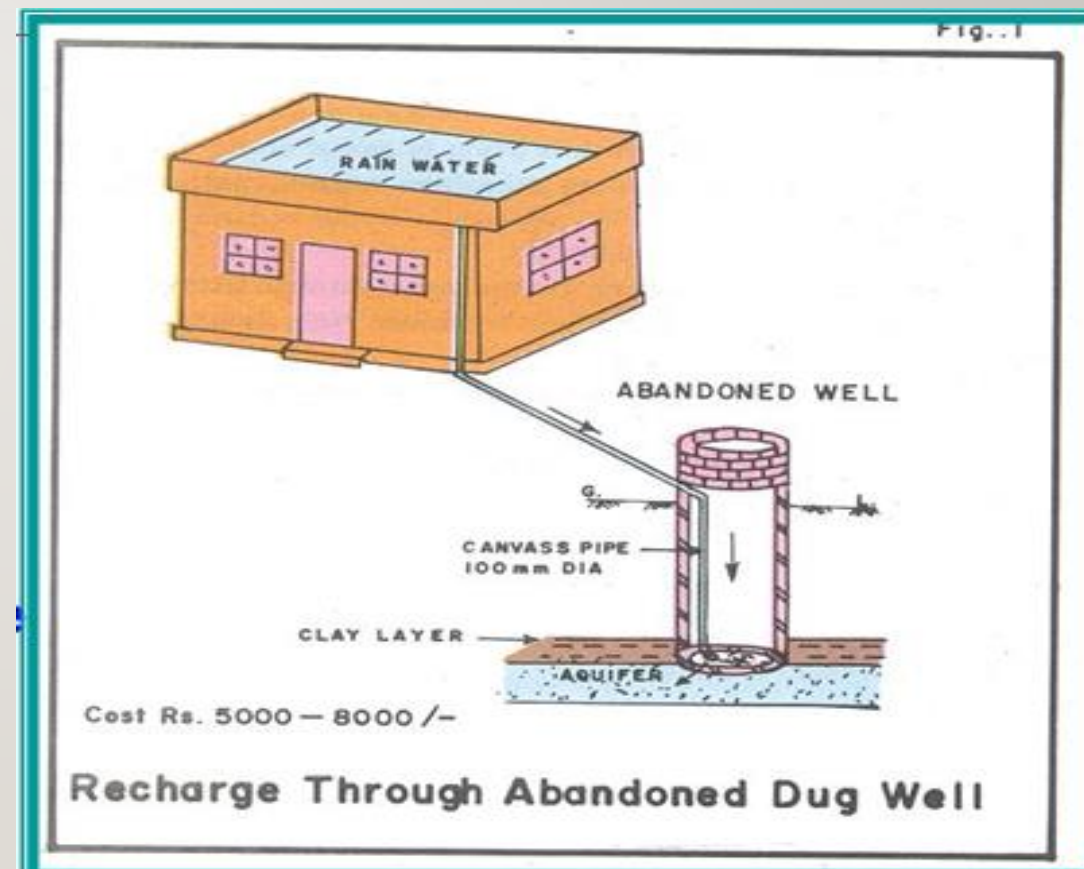


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ARTIFICIAL RECHARGE TECHNIQUES

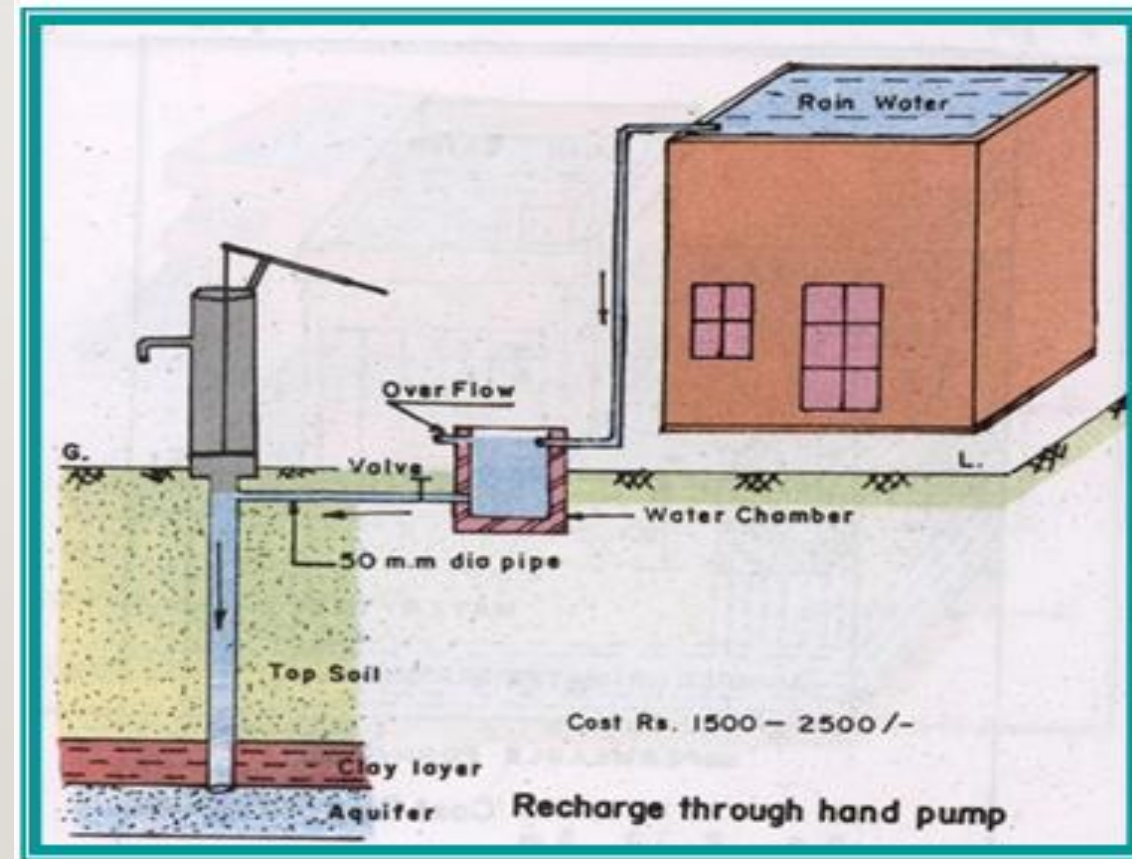
ABANDONED DUGWELL

- A dry /unused dug well can be used as a recharge structure.
- The recharge water is guided through a pipe to the bottom of well to avoid scouring of bottom.
- Before using the dug well as recharge structure , its bottom should be cleaned and all the fine deposits should be removed .
- Recharge water should be silt free.
- It should be cleaned regularly.
- It is suitable for large buildings
- Periodic chlorination should be done for controlling the bacteriological contamination.



ABANDONED HAND PUMP

- An abandoned hand pump can also be used for recharge.
- These structures are suitable for the small buildings having the roof area up to 150 Sq.m.
- Water is diverted from roof top to the hand pump through pipe of 100mm dia.



VIDEO PRESENTATION ON RAINWATER HARVESTING



CONCLUSION

- In conclusion, community engagement is pivotal for the successful implementation of Jal Jeevan Mission and the adoption of rainwater harvesting practices in Jammu. By harnessing the collective wisdom and resources of local communities, we can address water challenges effectively and ensure water security for future generations. Together, let us strive towards building a sustainable and resilient water future for Jammu through collaborative efforts and inclusive approaches.



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THANKS