



Jal Jeevan Mission

an Introduction

6th August, 2021

Recent initiatives to improve the lives of people

Housing

Toilet

Electricity

Cooking Gas

Social Security/ Pension

Healthcare

Financial Inclusion

Roads

Now, Potable Water

provision of safe tap water to every home by 2024
through Functional Household Tap Connection (FHTC)

Jal Jeevan Mission – Har Ghar Jal



- Every rural household to have **Functional Household Tap Connection (FHTC)**
- Assured tap water supply in **adequate quantity** of **prescribed quality** with **adequate pressure** on **regular** and **long-term basis**.

- Out of 18.93 Crore rural HHs, 3.23 Crore (17%) with tap water connections.
- Remaining 15.70 Crore (83%) HHs are to be provided with FHTC by 2024.
- Scheme launched on 15 Aug, 2019
- Implementation started with release of Operational Guidelines on 25th Dec, 2019.

What's new: Paradigm shift

- Stress on '**functionality**' of tap connections
- Focus on water service delivery rather than mere water supply infrastructure;
- Delegation, empowerment and capacity building of GPs i.e. VWSC;
- community ownership - contribution in cash, kind or labour of 5%/ 10% of CAPEX
- End-to-end approach: Source sustainability, grey-water reuse and O&M integrated;
- Focus on long-term assured supply;
- Assets created under JJM to be photo-geo-tagged; and
- FHTCs provided will be linked to Aadhar of the head of the household.

Bottom-up approach

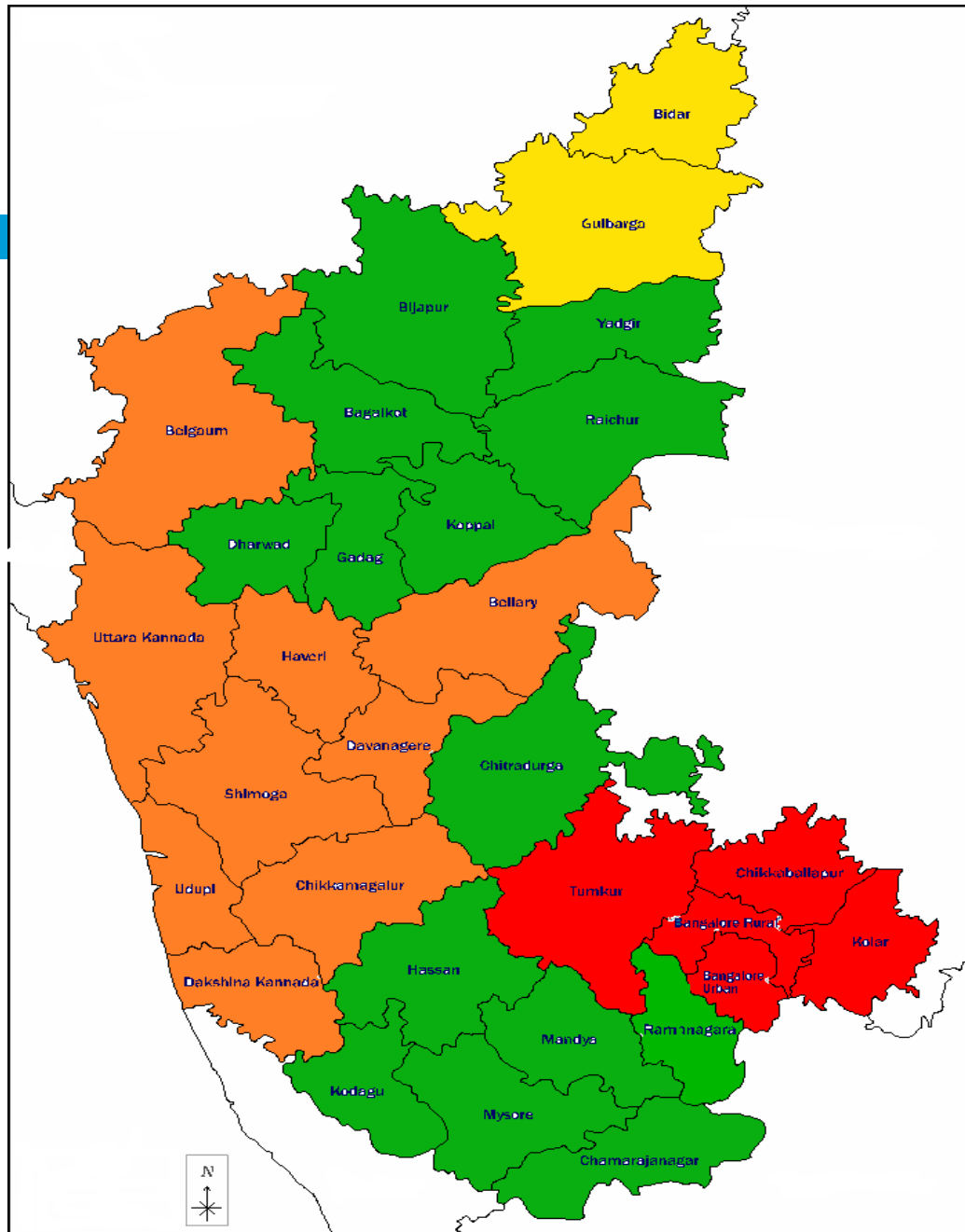
- Community ownership - approval of 5-year Village Action Plan (VAP) in Gram Sabha;
- VAP co-terminus with 15th Finance Commission period for long-term water security and improved WASH services – owned by village community;
- VAP to have 4 components, viz.:
 - drinking water source augmentation & strengthening;
 - drinking water supply system;
 - grey water treatment and its reuse; and
 - regular operation & maintenance (O&M).
- Long-term water security - VAP to be implemented by dovetailing funds at village level, viz. MGNREGS, JJM, SBM-G, 15th FC grants for PRIs, DMDF, CSR funds, MP/ MLA–LAD, community contribution, etc.

Bottom-up approach (contd.)

- Preparation of schemes to be based on **Village Action Plan (VAP)** approved by Gram Sabha;
- VAPs to be integrated into **District Action Plan (DAP)**;
- DAPs to be aggregated to finalise **State Action Plan (SAP)**;
- **Skilling** of local persons as masons, plumbers, electricians, fitters, pump operators, etc.;
- **Training** of 5 persons especially women in villages for testing of water samples;
- Capacity building of GP/ VWSC/ Pani Samiti members to manage, operate and maintain the system – development of '**responsible and responsive leadership**' at the village level;

Overall Planning Approach

- Assured water supply to every home in every village for the next 30 – 40 years, to be planned using ‘bottom-up and participatory approach’;
- In villages with existing piped water supply system, all remaining HHs to be provided with tap water connection by retrofitting/ augmenting, if needed, so that **‘no one is left out’**;
- In isolated tribal hamlets/ hilly/ forested areas, stand-alone solar-based water supply systems to be given priority, with low O&M expenditure and easy to operate & maintain;
- In villages where ground/ surface water of good quality in sufficient quantity available, single village systems (SVS) to be planned and executed ;
- Villages with adequate groundwater but having water quality issues, water to be treated before supply to every home, and
- In water-stressed, drought prone and desert areas, regional water supply schemes to be planned and executed.



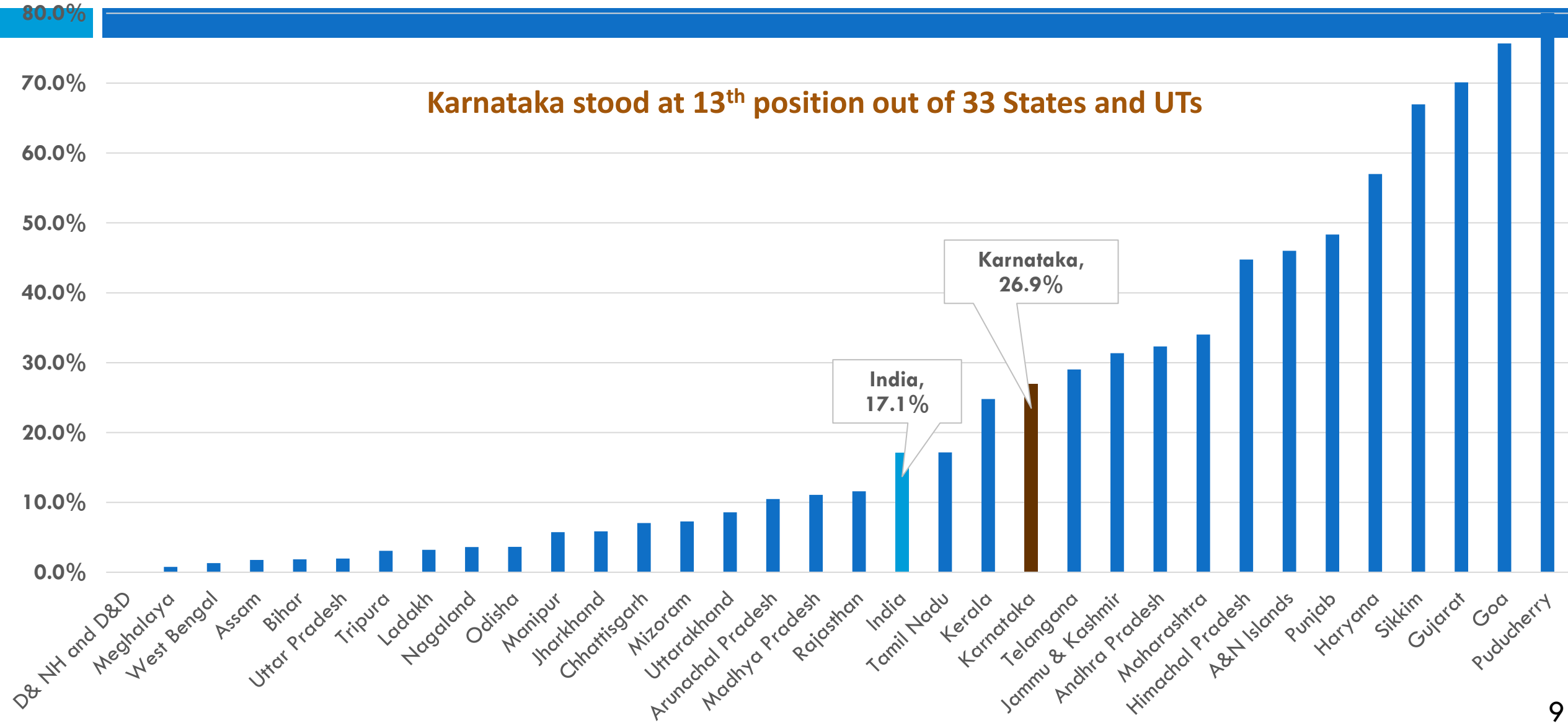
JJM: Area Coverage Map

Plans prepared based on the current availability of water will lead to coverage of FHTCs in the state as per this map.

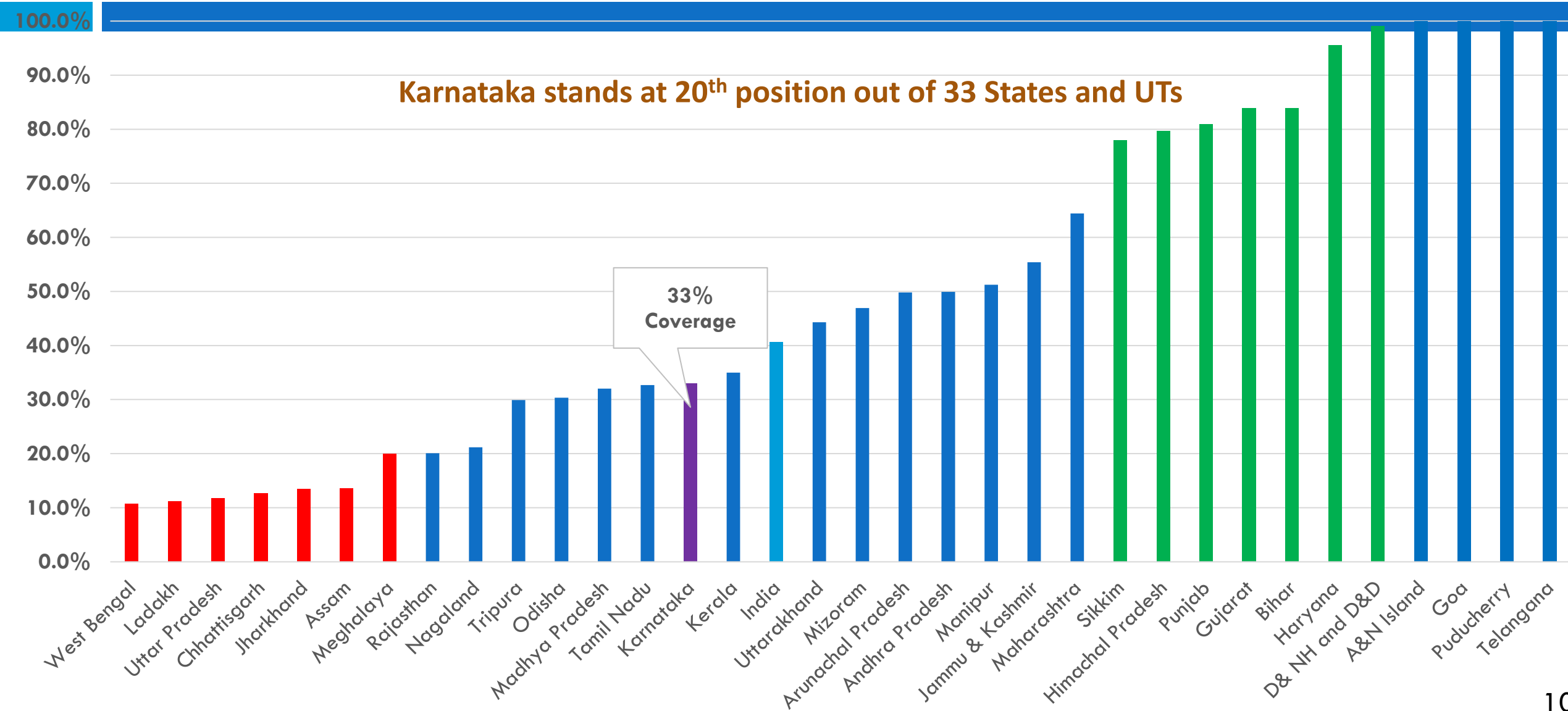
Legend:

- Upto 25% Coverage –
- 25-50% coverage –
- 50-75% coverage –
- 75-100% coverage –

JJM – Coverage : As on 15th August, 2019



JJM – Coverage : As on 17th July, 2021



Har Ghar Jal – No one is left out

(100% households with tap water connections)

India

100% FHTC
Districts

71

100% FHTC
Blocks

814

100% FHTC
Panchayats

49,918

100% FHTC
Villages

99,201

Karnataka

100% FHTC
Districts

0

100% FHTC
Blocks

0

100% FHTC
Panchayats

31

100% FHTC
Villages

863

JJM – Immediate tasks



- Work to be started in every village, augmentation and retrofitting works in all 28,517 PWS villages to be completed.
- Tap water connection to 5.66 lakh HHs in 2 Aspirational districts.
- Approval of Multi- Village Schemes by SLSSC within next couple of months.
- Piped water supply to remaining schools and AWCs by 15th August, 2021.
- VWSCs to be constituted in remaining 6,375 villages.
- VAPs to be prepared in participatory manner in remaining 9,263 villages; VAPs to ensure dovetailing of resources including 15th FC tied grants.
- Gram Sabha to be conducted on 15th August and 2nd October.
- Water quality to be improved along with accreditation of 32 district labs.
- Public grievance redressal on digital/ online platform.

Way Forward

- **Chief Secretary** may hold monthly review as Chairman of State Water & Sanitation Mission (SWSM);
- **Hon'ble Chief Minister** may like to hold joint review **with Hon'ble Union Minister, Jal Shakti**, on regular basis;
- A high powered '**Committee of Ministers**' chaired by **Hon'ble Home Minister**, regular review the implementation and progress; and
- **Jal Jeevan Mission to be reviewed in Pragati by Hon'ble Prime Minister**

Thanks

Thank you !



Water Quality Monitoring & Surveillance

Dr. Pratibha D'Souza
State Technical Coordinator, WQMSP
RDW&SD

Background

- The **United Nations General Assembly**: “Right to safe and clean drinking water, sanitation”, essential for life.
- **Niti Aayog** June 2018 report:
 - 75% of the households in India do not have drinking water in their premises.
 - ~70% water is contaminated, India @ 120th amongst 122 countries in the water quality index”.
 - About 2,00,000 people die every year mainly due to inadequate access to safe water, leading to water borne diseases such as typhoid, cholera, dysenteries etc.
- **Ministry of Jal Shakti constituted** for an integrated approach to water conservation and management.
- **Jal Jeevan Mission**, the Flagship programme of Prime Minister, launched on 15th August 2019

Introduction

VISION:

To ensure safe **potable water** is available for all the rural households of Karnataka

OBJECTIVE:

To ensure each and every functional source is tested for its water quality

Laboratories Status

Total labs: 80 Chemical, 80 Microbiology labs (yet to be set up) & 2 State referral labs covering 176 Taluks

Existing:

- **2** State referral Govt and Private labs: KSPCB & Shri. Krishna Aqua Engineering works,
- **31** District/ Division and **46** Sub-Division Chemical labs

To be set up:

- **Chemical labs:** **1** District lab at Hospet & **2** Sub-Division labs at Kudligi and Dandeli
- **Microbiology labs:** **32** District/ Division and **48** Sub-Division Microbiology labs (lab floor plans are getting finalized)

Water

- Water in its chemically pure form occurs rarely in nature
- Groundwater quality depends on multiple factors: rock type, irrigation practices, over exploitation and effluents if any.
- Owing to above factors ground water quality is a dynamic one
- Hence, there is a need to constantly monitor the water quality to determine suitability for consumption. Hence the testing is done in **Pre-monsoon (Jan-June) and Post-Monsoon (July-Dec)**
- **Water quality** refers to physical, chemical, biological and radiological characteristics of water
- **Revised BIS 10500: 2012, Ra 2018 standards** are followed for drinking water

INDIAN STANDARD DRINKING WATER SPECIFICATIONS IS 10500: 2012, Ra 2018

TEST PARAMETER	ACCEPTABLE LIMIT	PERMISSIBLE LIMIT
Color (hazen units)	5	15
Odour	Agreeable	Agreeable
pH	6.5 – 8.5	No relaxation
Turbidity, NTU	1	5
Specific Conductance, $\mu\text{S}/\text{cm}$	-	-
Alkalinity as CaCO_3 , mg/l	200	600
Total Dissolved Solids as TDS, mg/l	500	2000
Total Hardness as CaCO_3 , mg/l	200	600
Calcium as Ca, mg/l	75	200
Magnesium as Mg, mg/l	30	100
Chloride as Cl, mg/l	250	1000
Fluoride as F, mg/l	1	1.5
Sulphate as SO_4 , mg/l	200	400
Nitrate as NO_3 , mg/l	45	No relaxation
Iron as Fe, mg/l	1	No relaxation
Arsenic as As, mg/l	0.01	No relaxation
Total coliform/ 100ml	Shall not be detectable in any 100ml of sample	-
E.coli/ 100ml	Shall not be detectable in any 100ml of sample	-

Why Water Quality Monitoring?

It serves as a tool to identify safe drinking water, whether at the source, within a piped distribution system, or consumer end.

Objectives of water quality monitoring:

- Verifying safety of drinking water
- Investigating & correlation with disease outbreaks
- To assess the type of water purification technology required
- Validating process and preventive measures (WPPs functioning etc.)
- To evaluate water quality trend over a period of time

Concept of Monitoring & Surveillance

Monitoring:

- Laboratory and / or Spot Testing of water samples collected from water sources and FHTCs.
- It is the responsibility of **RWS Dept.**

Surveillance:

- Keeping a careful watch at all times, from the public health point of view over the safety and acceptability of drinking water supply.
- It is the responsibility of **GPs/rural community.**

Key components of Surveillance

- **5 women VWSC members to do the following:**
 - **Testing of 100% drinking water sources** including private sources and anganwadi and Govt. schools sources by **FTK & bacteriological vials**.
 - Refer positively tested samples to nearby RDW&SD WQ testing laboratories
 - **Sanitary survey** (yearly twice)
 - Data sharing with GP members, VWSC and concerned RWS officials
 - FTK & bacteriological vials test results & sanitary inspection report to be submitted to RWS Dept.
- **Purchase, distribution and training** on FTKs and H₂S vials is the responsibility of **Division Executive Engineers**
- FTKs and H₂S vials **testing, sanitary survey and reporting in WQMIS/IMIS** responsibility lies with **PDOs**, which has to be regularly monitored by AEEs

Water Quality Monitoring & Surveillance Mechanism

Presumptive Testing via Field Test Kits & Bacteriological Vials
(6022 GP)
(5 VWSC Women members, Waterman and G.P Secretary)



Detail laboratory Testing @ 46 Sub-Division Laboratories
(all sources in lab jurisdiction)
(Headed by AEEs of Concerned Sub divisions)



Detail laboratory Testing @ 31 Division Level Laboratories
(all sources in lab jurisdiction & positive samples from Taluka)
(Headed by EEs of Concerned Divisions)



Govt. & Pvt. State Referral Laboratory (KSPCB & Shri. Krishna Aqua Engineering Works, crosscheck of 5% samples including positive samples from Districts)

Water Quality Monitoring & Surveillance Mechanism

contd...



- ▶ Field test kit analysis of parameters (pH, Cl, TH, Alk, Fe, NO₃, F) and H₂S Vials Testing for Total Coliforms and E.Coli



- ▶ Water Sample collection using Time and Geo Stamp Application.



- ▶ Lab analysis of 16 parameters (Colour, odour, taste, pH, turb, TDS, EC, TH, Ca, Mg, Alk, Cl, F, SO₄, NO₃, Fe)



- ▶ Around 3000 samples analyzed/yr/lab



- ▶ WQMIS/IMIS data entry



- ▶ **Analysis carried out for ~1,20,000 drinking water sources**
 - Borewells, Delivery Points, WPPs (raw & treated water) and Random FHTCs as per JJM Guidelines

Water Quality Management Information System (WQMIS)

National Jal Jeevan Mission in partnership with **Indian Council of Medical Research (ICMR)** has developed an online portal on “**Water Quality Management Information System (WQMIS)**”.

WQMIS benefits:

1. Automated data flow: sampling, analysis, reporting and decision making;
2. In case of contaminations, immediate remedial actions can be initiated by DWSM member secretary;
3. Easy management of inventories, human resources and financial transaction of the laboratories;
4. Laboratories are **accessible to public** through online mode; a nominal fee of Rs. 1150/- is charged to test 16 basic parameters.

NABL Accreditation/Recognition

- **NABL** stands for National Accreditation Board for Testing and Calibration Laboratories.
- **Requirements:** Laboratory infrastructure, competent trained manpower, calibrated instruments, requisite documentation, proficiency proofs
- NABL provides an impartial assessment of the quality standards being followed by labs
- Laboratory compliance and testing have to be according to **ISO/ IEC 17025: 2017**
- Once the lab applies for NABL accreditation, **adequacy audit** is conducted, followed by **detailed audit** to test whether the technical competency and management system requirements are being fulfilled or not

Steps being taken for NABL Accreditation

- Recruitment of competent personnel and their capacity building
- Video documentation of Water Quality Analysis
- Standard reference rates consolidated for Chemical and Microbiology laboratories requirements
- Specifications for Chemical and Microbiology labs to be set up circulated and layout plan for each lab is examined and finalized for infrastructure upgradation
- Four level documentation: QM, MSP, SoP and documentation formats
- AMC and external calibration of Instruments ensured
- IQC, ILC and PT to demonstrate competency in testing
- Internal audit through NABL assessors
- Management review meeting and corrective actions
- Performance review of the labs through regular VCs.
- Field visits and remote monitoring to ensure preparedness for NABL accreditation

Status of NABL Accreditation

- **NABL accredited Labs:**

- Dakshin Kannada District Lab
- Bengaluru Urban District Lab
- Bengaluru Rural District Lab
- Chikballapura District Lab

- **NABL accreditation application filed for 8 labs:**

- Belagavi District Lab
- Dharwad District Lab
- Mandya District Lab
- Vijayapura District Lab
- Ramnagara District Lab
- Mysuru District Lab
- Kalaburagi District Lab
- Haveri District Lab

Impact of NABL Accreditation

- NABL approval has boosted confidence of the lab personnel and instilled a sense of responsibility
- Quality Assurance standards as per NABL requirements are being complied, hence supply of safe potable water being ensured and hence consumers are also satisfied.
- A satisfaction for the District authority with regard to competency of WQ testing and hence keeping up with the public trust.
- Improvement in the long term performance of the laboratory.
- Increased credibility of laboratory among Public Users which boosts their confidence to opt for testing in Govt. laboratory at a nominal rate

A CASE STUDY OF DAKSHINA KANNADA DISTRICT LABORATORY, RDW&SD, GoK



1st NABL accredited laboratory



National Accreditation Board for
Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

WATER QUALITY TESTING LABORATORY, DAKSHINA
KANNADA DIVISION, RURAL DRINKING WATER AND
SANITATION DEPARTMENT

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing &
Calibration Laboratories"

for its facilities at

2ND FLOOR, ZILLA PANCHAYATH BUILDING, RURAL DRINKING WATER AND SANITATION
DIVISION, KOTTARA, MANGALORE, DAKSHIN KANNAD, KARNATAKA, INDIA

in the field of
TESTING

Certificate Number: TC-9649

Issue Date: 30/06/2021

Valid Until:

29/06/2023

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : RURAL DRINKING WATER AND SANITATION DEPARTMENT, KARNATAKA

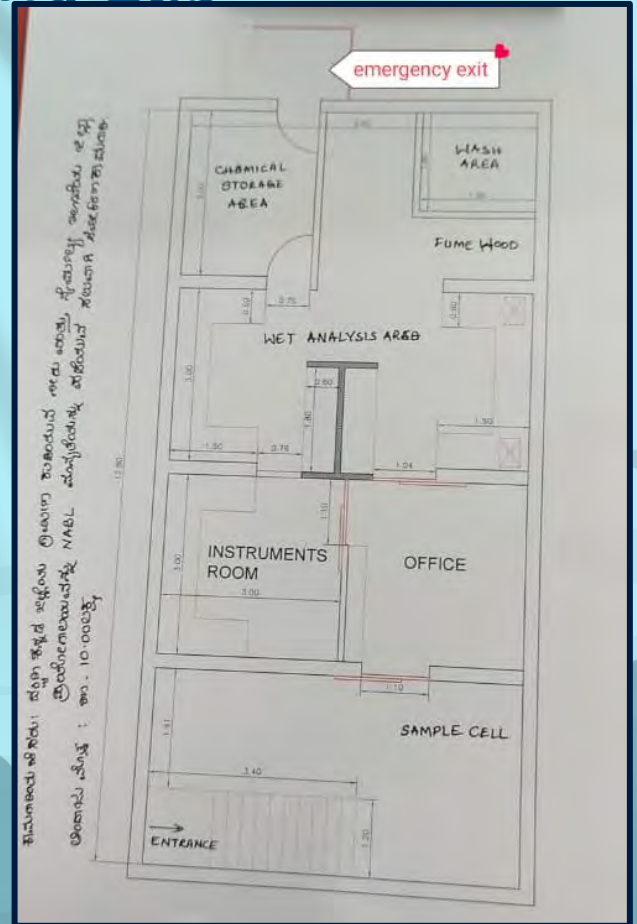
Signed for and on behalf of NABL



N. Venkateswaran

N. Venkateswaran
Chief Executive Officer

Upgradation of Existing Lab



4 Level Documentation

Level – I Quality Manual



QUALITY MANUAL


ISO 17025:2017


Audit


Vendor Evaluation & Rating


Testing Facility


Documentation


Employee Training


Correction Action & Preventive Action


Traceability

Document No. : RDWSD/WQMSP/QM/01
Issue No. : 01
Issue Date :
Copy Holder :

Water Quality Monitoring & Surveillance Cell (WQMS)
Rural Drinking Water and Sanitation Department (RDW&SD),
Government of Karnataka




*We do our best
in
Monitoring the Water Quality
to assure
the health of Rural Karnataka*


**QUALITY
MANAGEMENT
CERTIFIED**

Implemented By:
Water Quality Monitoring & Surveillance Cell (WQMS)
Rural Drinking Water and Sanitation Department (RDW&SD),
Government of Karnataka.

This Quality Manual belongs to the Rural Drinking Water and Sanitation Department, Govt. Of Karnataka.
NO. 17025/2017

Level – II Management System Procedures


MANAGEMENT SYSTEM PROCEDURES
as per ISO / IEC 17025:2017



Document No. : RDWSD/WQMSP/MS/01
Issue No. : 01
Issue Date :
Copy No :

WATER QUALITY MONITORING & SURVEILLANCE PROGRAMME
RURAL DRINKING WATER & SANITATION DEPARTMENT
(RDW&SD),
Government of Karnataka





QUALITY
Proficiency Testing
Training
Audit
Improvement

ISO : 17025
Objectives
Impartiality
Documentation
Confidentiality
Low Cost
Service
System Procedures
Inter Laboratory Comparison

Implemented By:
Water Quality Monitoring & Surveillance Cell (WQMS)
Rural Drinking Water and Sanitation Department (RDW&SD),
Government of Karnataka.
This QMS belongs to Rural Drinking Water and Sanitation Department, Govt. Of Karnataka.
NO. 17025/2017

Level – III Standard Operating Procedures


WATER QUALITY MONITORING & SURVEILLANCE PROGRAMME
**MANUAL FOR WATER QUALITY
ANALYSIS**



Water Quality Monitoring & Surveillance Cell (WQMS)
Rural Drinking Water and Sanitation Department (RDW&SD),
Government of Karnataka





Implemented By:
Water Quality Monitoring & Surveillance Cell (WQMS)
Rural Drinking Water and Sanitation Department (RDW&SD),
Government of Karnataka.

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NO. 17025/2017

Level – IV Formats & Registers

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I. MASTER LIST OF DOCUMENTATION FORMATS		
Sl. No.	Format No.	Name
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2.	RDWSD/WQMSP/001/02	Standard Operating Procedures
3.	RDWSD/WQMSP/001/03	Instruments
4.	RDWSD/WQMSP/001/04	Calibration/Standardization Documents
5.	RDWSD/WQMSP/001/05	Reference Materials
6.	RDWSD/WQMSP/001/06	Internal Quality Checks
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II. MASTER LIST OF STANDARD OPERATING PROCEDURES (SOPs)

Sl. No.	Format No.	Name
1.	RDWSD/WQMSP/001/01	Standard Operating Procedure
2.	RDWSD/WQMSP/001/01	SOP for pH
3.	RDWSD/WQMSP/001/02	SOP for Specific conductivity
4.	RDWSD/WQMSP/001/02	SOP for TDS
5.	RDWSD/WQMSP/001/04	SOP for Turbidity
6.	RDWSD/WQMSP/001/05	SOP for Alkalinity
7.	RDWSD/WQMSP/001/06	SOP for Total Hardness
8.	RDWSD/WQMSP/001/07	SOP for Calcium
9.	RDWSD/WQMSP/001/08	SOP for Magnesium
10.	RDWSD/WQMSP/001/09	SOP for Chloride
11.	RDWSD/WQMSP/001/10	SOP for Iron
12.	RDWSD/WQMSP/001/11	SOP for Fluoride
13.	RDWSD/WQMSP/001/12	SOP for Nitrate
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18.	RDWSD/WQMSP/001/17	SOP for Lab Safety Procedures
19.	RDWSD/WQMSP/001/18	SOP for Biotin & Penicillins
20.	RDWSD/WQMSP/001/19	SOP for Laboratory waste management

Sample Receipt & Documentation Area



**Sample Receipt and Documentation area
BEFORE**



**Designated Sample Receipt Area
AFTER**



**Designated Documentation Area
AFTER**

- Sample receipt area provided separately for receiving samples and checking its condition.
- Organized Documentation room being maintained for safe custody of documents and referral books

Wet Analysis Room



From wooden table to dedicated Titration platform for conducting titrations along with the provision of cabinets to store chemicals and other requirements handy, thereby improving the efficiency of analysis.

Instrumentation Room



BEFORE



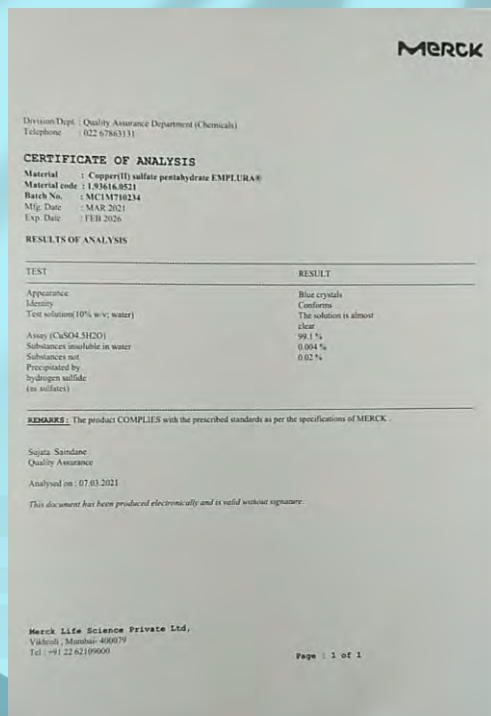
AFTER

Partitions between wet analysis room and instrumentation area alongwith AC for maintaining environmental conditions.

AR Grade Chemicals & CRMs



AR Grade Chemical



Certificate of AR Grade Chemical

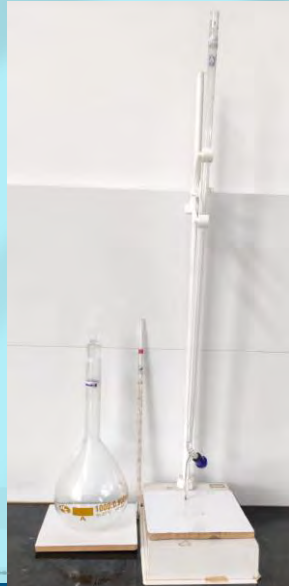


Certified Reference Material

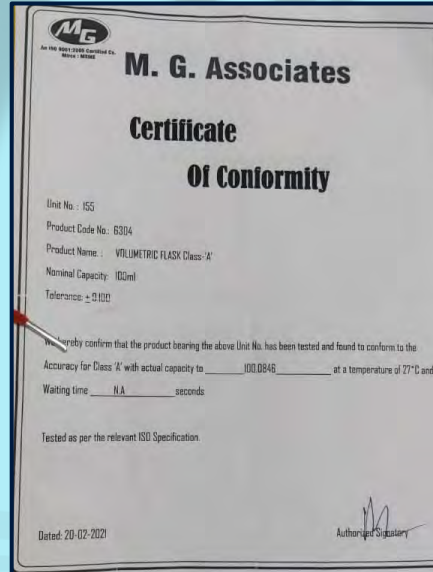


Certificate of CRM

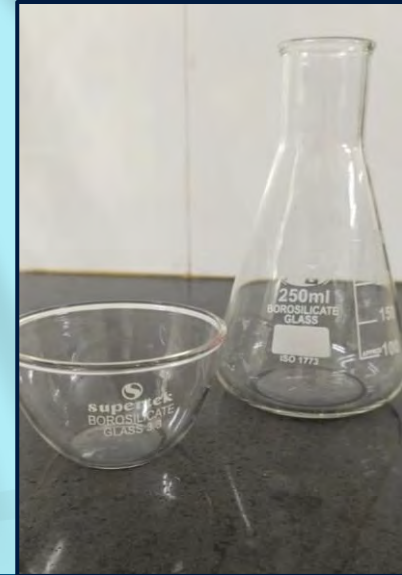
Glassware A & B Class



A Class Glassware



A Class Glassware Certificate



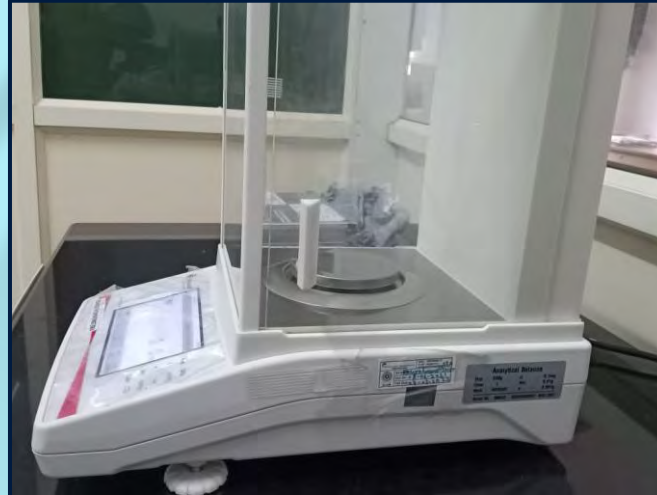
B Class Glassware

Earlier B class glasswares were used. Now for volumetric measurements only A class glasswares with calibration certificates are used and for other requirements B class glasswares are used

Instrument: Internal & External Calibration



Analytical Balance on Anti Vibration Table with IOP & History Card



External Calibration Label:
Calibration date
Calibration due date
Calibrated by
Signature

WORLD ONE INSTRUMENTS
Calibration Centre
No. 102, 1st & 2nd Cross Street, Lakshminagar, LAB 101, HSR
Bangalore - 56.0088, Karnataka, India. Phone: 98456 98456
No. 100, 2nd Cross Street, 1st & 2nd Cross Street, Lakshminagar, Bangalore - 56.0088

CALIBRATION CERTIFICATE

Client Name: MPT/2022/21540/02
Date of Issue: 4 March 2022
Page 1 of 3

SR No: 21438
Calibrated on: 4 March 2022
Mechanical Weighing Balance

Name & Address of the Customer: MPT, Lakshminagar, Bangalore
Name of the Dept: MPT
Date of Birth: 4 March 2022

Serial No: 21438
Calibration Due on: 4 March 2023

Model: MPT
Serial No: MPT/2022/21540/02/01A
Capacity: 2000g

Manufacturer's name: Analytical Weighing Balance
Model: MPT
Serial No: MPT/2022/21540/02/01A
Capacity: 2000g

Calibration Method: Weighing
Environmental Condition: Temperature: 28 ± 0.5°C

Checked by: [Signature]
Checked by: [Signature]

External Calibration Certificate

RURAL DRINKING WATER & SANITATION DEPARTMENT, CoK
District Name: Dakshina Kannada
Laboratory Name: Davanagala Lab

MONTHLY CALIBRATION OF ANALYTICAL WEIGHING BALANCE

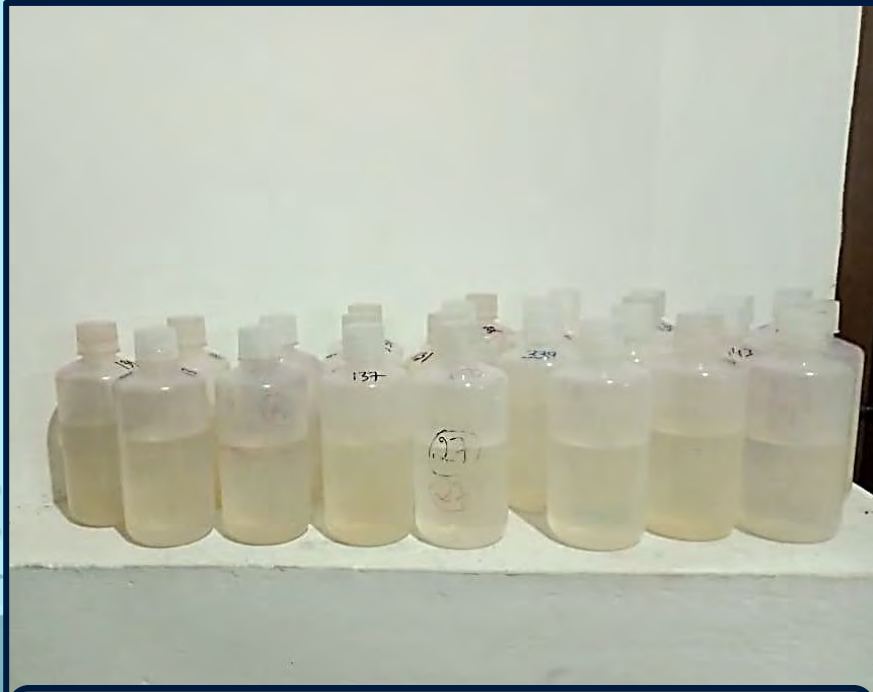
DATE: 26.06.2022 MONTH: June DISTRICT ID: RWD/2019/1897/08

WEIGHTS	ACTUAL WEIGHTS	TOLERANCE LIMITS	CENTRE (g)	TOP (g)	BOTTOM (g)	LEFT (g)	RIGHT (g)
200g	200.0000g	± 0.0010g	199.9999g	200.0001g	199.9999g	200.0001g	199.9999g
100g	100.0000g	± 0.0005g	99.9999g	100.0001g	99.9999g	100.0001g	99.9999g
50g	50.0001g	± 0.0002g	49.9999g	50.0001g	49.9999g	50.0001g	49.9999g
20g	20.0000g	± 0.0001g	19.9999g	20.0001g	19.9999g	20.0001g	19.9999g
10g	10.0000g	± 0.00005g	9.9999g	10.0001g	9.9999g	10.0001g	9.9999g
5g	5.0000g	± 0.00002g	4.9999g	5.0001g	4.9999g	5.0001g	4.9999g
2g	2.0000g	± 0.00001g	1.9999g	2.0001g	1.9999g	2.0001g	1.9999g
1g	1.0000g	± 0.000005g	0.9999g	1.0001g	0.9999g	1.0001g	0.9999g
500mg	500.0000g	± 0.0005g	499.99g	500.01g	499.99g	500.01g	499.99g
200mg	200.0000g	± 0.0002g	199.99g	200.01g	199.99g	200.01g	199.99g
100mg	100.0000g	± 0.0001g	99.99g	100.01g	99.99g	100.01g	99.99g
50mg	50.0000g	± 0.00005g	49.99g	50.01g	49.99g	50.01g	49.99g
20mg	20.0000g	± 0.00002g	19.99g	20.01g	19.99g	20.01g	19.99g
10mg	10.0000g	± 0.00001g	9.99g	10.01g	9.99g	10.01g	9.99g
5mg	5.0000g	± 0.000005g	4.99g	5.01g	4.99g	5.01g	4.99g
2mg	2.0000g	± 0.000002g	1.99g	2.01g	1.99g	2.01g	1.99g
1mg	1.0000g	± 0.000001g	0.99g	1.01g	0.99g	1.01g	0.99g

Calibrated by: [Signature]
Checked by: [Signature]

Internal Calibration Record

Sample retention



BEFORE



AFTER

Earlier samples were retained at normal room temperature conditions and in open. Now Samples are retained in cold storage for a period of 15 days, with the maintenance of environmental conditions.

Safety Measures Followed In The Lab



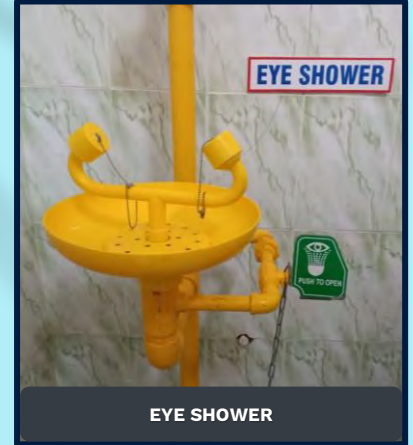
LAB PERSONNEL WORKING WITH PPE



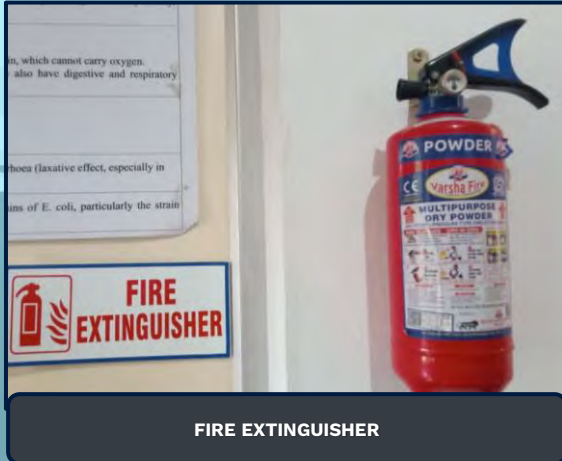
FIRST AID BOX



BODY SHOWER



EYE SHOWER



FIRE EXTINGUISHER



FUMEHOOD TO VENT OUT ACID FUMES



DEDICATED EMERGENCY EXIT

DOs & DON'Ts IN THE LABORATORY		
DOs (ಅರಿವುಬಾಳಿ)		DON'Ts (ಅರಿವುಬಾಳಿ)
Keep the location of all safety and emergency equipment used in the lab. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು ಗುರುತಿಸಿ ಇಡಲಾಗಿದೆ.)		NEVER add water to an acid. (ನೀರಿನು, ಆಮ್ಲಕ್ಕೆ, ಸೇರಿಸಬೇಡಿ.)
Wear appropriate items such as masks, PPE (Personal Protective Equipment). (ದೇಹದ ಅನುಕೂಲತೆಯನ್ನು ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		NEVER smell, taste or touch chemicals. (ನಿರೀಕ್ಷಿಸದಂತಹ ರಸವನ್ನು, ಉಪಯೋಗಿಸದಂತಹ ದ್ರವಗಳನ್ನು ಸುಟ್ಟುಕೊಳ್ಳುವುದು ಮತ್ತು ಒಡಿಸುವುದು.)
Do not work in laboratory without supervision. (ದೇಹದ ಅನುಕೂಲತೆಯನ್ನು ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Do not work in laboratory without supervision. (ದೇಹದ ಅನುಕೂಲತೆಯನ್ನು ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Procedures manual with all lab procedures before doing the lab routine. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Do not wear contacts in the lab without proper eye protection. (ಅನುಕೂಲತೆಯನ್ನು ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Report all Accidents, Injuries or Chemical spills to the instructor immediately. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		NEVER use alcohol-containing equipment around you. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Never pour toxic chemicals into the sink. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Do not use reusable chemicals use of procedure. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Always be sure that chemical equipment is kept in the "safe" position before plugging it back to work. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Explosion can not allowed behind the laboratory room during experiments. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Do not use any fume hood equipment without supervision. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Never remove acid chemicals in the regular container. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Waste handling: Segregate in a safe place, always point the test tube away from others. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Minimise the handling of acid in the lab area. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Never use acid handling in the regular container. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Do not touch lab without wearing mask. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)
Never use acid handling in the regular container. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)		Do not use mobile phones inside laboratory during experiment. (ಘಟನೆಯಾಗುವಂತಹ ಎಲ್ಲಾ ಸುರಕ್ಷತೆ ಮತ್ತು ದುರಸ್ತಿ ಸಾಧನಗಳನ್ನು, ಉತ್ತಮವಾಗಿ ಮತ್ತು ಸುರಕ್ಷತೆಯನ್ನು ಖಚಿತಗೊಳಿಸುವಂತಹ ಸರಕುಗಳನ್ನು ಧರಿಸಿ.)

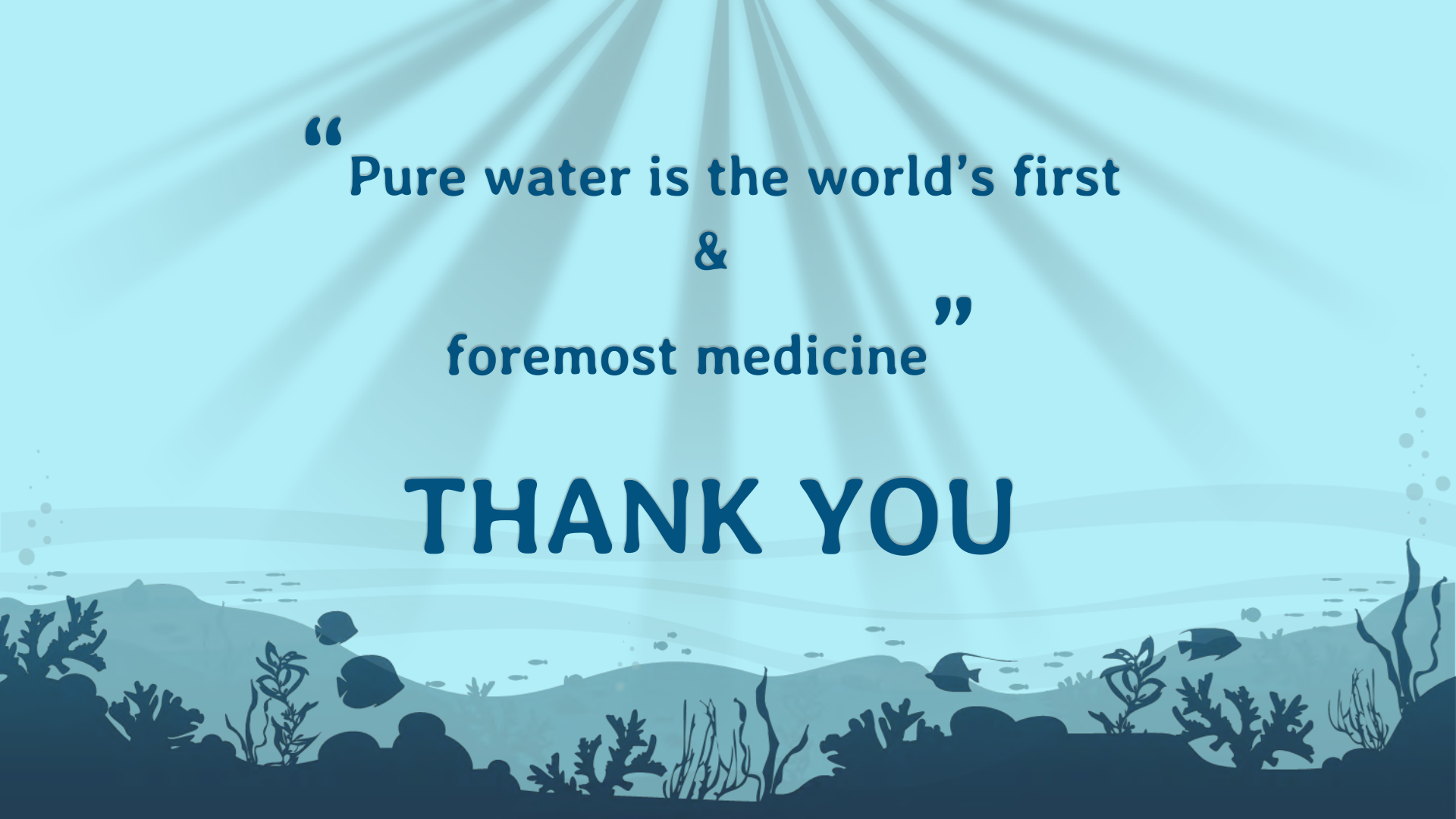
Liquid waste disposal



The liquid waste generated from the titrations and instrumental analysis is collected in polypropylene drums, neutralized with acid/base and then discharged to the drain

Further actions to be Initiated

- **Heavy Metal analysis Instrument:** ICPMS to be procured 1 for each circle.
- Till Microbiology labs are setup analysis of the existing sources for Microbiological parameters (Total Coliform and E.Coli) will be done through 3rd party NABL Accreditation laboratory.

The background is a light blue gradient with several rays of light shining down from the top. At the bottom, there is a dark blue silhouette of an underwater scene with various coral reefs, seaweed, and several fish swimming. The text is centered in a dark blue, bold, sans-serif font.

**“
Pure water is the world’s first
&
foremost medicine”**

THANK YOU



KARNATAKA STATE POLICY AND STRATEGY FOR SANITATION AND WASTE MANAGEMENT IN RURAL AREAS

Rural Drinking Water and Sanitation Department (RDW&SD)

- **VACUUM IN POLICY AND LAW** WITH RESPECT TO RURAL WASTE MANAGEMENT
 - TO PUT IN PLACE AN **ENFORCEABLE UNIFORM FRAMEWORK** WHICH COULD BE LOCALIZED
 - PROVIDE A **SHARED VISION** FOR ALL FUNCTIONARIES
 - **CLARITY IN ROLES AND RESPONSIBILITIES**, PROCESS OF WASTE MANAGEMENT, FINANCIAL VIABILITY & MONITORING OF SYSTEMS
-



WHY?

BACKGROUND FOR THE POLICY & STRATEGY
FRAMEWORK



POLICY

**VISIONARY &
ASPIRATIONAL DOCUMENT**

CONTAINS
**OBJECTIVES,
GUIDING PRINCIPLES
APPROACH**

FOR SOLID AND LIQUID
WASTE MANAGEMENT



STRATEGY

IMPLEMENTATION DOCUMENT

CONTAINS
DETAILS OF **PROCESS,
PLANNING,
FINANCING,
TECHNOLOGIES INCLUDING
NORMATIVE STANDARDS,
CAPACITY BUILDING,
MONITORING & EVALUATION,
IEC & BCC ACTIVITIES**



BYE-LAWS

ENFORCEMENT DOCUMENT

CONTAINS
**ROLES, RESPONSIBILITIES
AND DUTIES OF DIFFERENT
STAKEHOLDERS,
DETAILS OF PENALTIES &
USER FEES
GRIEVANCE REDRESSAL**

WHAT?

COMPONENTS OF THE FRAMEWORK

STEPS TAKEN FOR IMPLEMENTATION



APPOINTMENT OF QUALIFIED MANPOWER AT STATE & DISTRICT LEVELS

30 STATE
CONSULTANTS
150 DISTRICT
CONSULTANTS



CONTINUOUS TRAINING & CAPACITY BUILDING

WORKSHOPS
TRAINING
SESSIONS BY
EXPERTS
SITE VISITS
STUDY MATERIAL



PILOT PROJECTS IN DIFFERENT AREAS

DECENTRALISED
WET WASTE
MANAGEMENT
DRY WASTE
CENTRES &
MATERIALS
RECOVERY
FACILITIES
SANITARY WASTE
MANAGEMENT



IEC AND BBC ACTIVITIES

AWARENESS
PROGRAMS
SENSITISATION
WORKSHOPS
CONTINUOUS &
CONSISTENT
BEHAVIOURAL
CHANGE
ACTIVITIES

How?

INTRODUCTION AND BACKGROUND

- THE POLICY IS BASED ON THE SBM (G) GUIDELINES, KARNATAKA GRAM SWARAJ AND PANCHAYAT RAJ ACT 1993, ENVIRONMENT PROTECTION ACT 1986, SWM RULES 2016 & PWM RULES 2016
- MANAGEMENT OF HAZARDOUS WASTE, BIO-MEDICAL WASTE, E-WASTE, CONSTRUCTION AND DEMOLITION WASTE & INDUSTRIAL WASTE IS EXCLUDED FROM THE SCOPE OF THIS POLICY
- THIS POLICY IS APPLICABLE TO ALL THE GRAM PANCHAYATS IN THE STATE OF KARNATAKA.
- **GRAM PANCHAYATS HAVE THE PRIMARY RESPONSIBILITY AT DECENTRALISED LEVEL TO PROVIDE PROPER SANITATION AND WASTE MANAGEMENT FACILITIES WITH HANDHOLDING SUPPORT FROM THE STATE GOVERNMENT**

VISION OF THE POLICY

- TO PROVIDE SAFE, AFFORDABLE, SUSTAINABLE, INCLUSIVE SANITATION AND **WASTE MANAGEMENT** TO EVERY INDIVIDUAL IN RURAL KARNATAKA LEADING TO **IMPROVED PUBLIC HEALTH AND ENHANCED RECOVERY OF RESOURCES**

INTRODUCTION & BACKGROUND OF THE POLICY

AIMS & OBJECTIVES OF THE POLICY



SEGREGATION AT SOURCE AND PROCESSING OF 100% OF BIODEGRADABLE WASTE

20% OF GPs BY MARCH 2020
50% OF ALL GPs BY MARCH 2021
100% BY MARCH 2022



100% REUSE, RECYCLE OR PROCESSING OF THE NON-BIODEGRADABLE WASTE WITH FOCUS ON MINIMIZING TRANSPORTATION TO LANDFILL.

20% OF GPs BY MARCH 2020
50% OF ALL GPs BY MARCH 2021
100% BY MARCH 2022



EFFECTIVE IMPLEMENTATION OF KARNATAKA PLASTIC BAN

IN ALL RURAL AREAS WITHIN THE STATE



ZERO DUMPING OR BURNING OF WASTE IN OPEN SPACES.



CONVERGENCE OF DRY WASTE & DOMESTIC HAZARDOUS WASTE MANAGEMENT BETWEEN RURAL AND URBAN AREAS AT TALUK OR DISTRICT LEVEL

BY MARCH 2022.



TO INCULCATE THE 4R APPROACH (I.E. REDUCE, REUSE, RECYCLE AND RECOVER) TOWARDS WASTE THROUGH INTENSIVE IEC AND BCC ACTIVITIES.



REDUCTION IN ADVERSE AFFECTS OF IMPROPER SOLID AND LIQUID WASTE MANAGEMENT ON ENVIRONMENT AND HEALTH OF LOCAL POPULATION IN RURAL AREAS.

AIMS & OBJECTIVES OF THE POLICY



ELIMINATE OPEN DEFECATION THROUGH ACCESS TO TOILET AND ENSURE SUSTAINED USAGE OF THE FACILITIES THROUGH AWARENESS AND COMMUNITY PARTICIPATION



IMPROVE PUBLIC HEALTH AND HEALTH OF SANITATION WORKERS THROUGH PROMOTION OF SAFE PERSONAL AND PUBLIC HYGIENE PRACTICES



ENSURE NO EXPOSURE OF HUMAN FAECES BY PROVIDING SAFE CONTAINMENT, COLLECTION & TREATMENT. COMPLIANCE WITH PROHIBITION OF EMPLOYMENT AS MANUAL SCAVENGERS AND THEIR REHABILITATION ACT 2013



ENSURE NON-CONTAMINATION OF LAND AND WATER RESOURCES BY WASTEWATER BY PROVIDING APPROPRIATE AND LOW-COST, MINIMAL MAINTENANCE TREATMENT FACILITIES



ENSURE MAXIMUM RESOURCE RECOVERY AND REUSE THROUGH PROPER LIQUID WASTE MANAGEMENT PRACTICES

100% ODF STATUS IS MAINTAINED BY CONSTRUCTING NEW TOILETS FOR EVERY NEW HOUSE WITH APPROPRIATE CONTAINMENT

CONVERT SINGLE-PIT TOILETS TO TWIN-PIT OR ANY OTHER ACCEPTABLE SAFE MODE OF CONTAINMENT

PROVIDE 100% CONTAINMENT AND TREATMENT OF FAECAL SLUDGE AND GREYWATER

• **100% CONVERSION FROM SINGLE PIT BY 2025**

- **5% OF THE TOTAL BY 2021**
- **20% OF THE TOTAL BY 2022**
- **35% OF THE TOTAL BY 2023**
- **70% OF THE TOTAL BY 2024**
- **100% OF THE TOTAL BY 2025**



WASTE GENERATORS SHALL HAVE THE PRIMARY RESPONSIBILITY ON MINIMIZING THEIR WASTE (SOLID AND LIQUID) AND TREATING IT ON-SITE TO THE EXTENT POSSIBLE



DECENTRALIZED SOLUTIONS SHOULD BE PREFERRED OVER CENTRALIZED ONES



WASTE MINIMIZATION AND TREATMENT OPTIONS WITH BETTER REUSE/RECYCLING POTENTIAL SHOULD BE SELECTED.



EASY TO OPERATE, LOW O&M COST TECHNOLOGIES SHALL BE CHOSEN.



PLANNING SHALL BE ON THE BASIS OF LOCAL CONDITIONS AND CAPACITIES TO IMPLEMENT AND OPERATE THE SOLUTION.



SELF SUSTAINABLE SYSTEMS – 25% OF BUDGET TO BE EARMARKED FOR SANITATION

ALL WASTE GENERATORS SHOULD BE PREPARED TO PAY USER FEES FOR WASTE MANAGEMENT SERVICES ON AN EQUITABLE BASIS



MANAGEMENT OF BLACKWATER SHOULD BE GIVEN PRECEDENCE OVER GREYWATER BECAUSE OF GREATER RISKS.

DRY WASTE MANAGEMENT SHOULD BE GIVEN PRECEDENCE OVER WET WASTE MANAGEMENT

OVERALL WASTE MANAGEMENT APPROACH

The image features a white background with a central text element. The top-left corner is a dark grey triangle. The top-right and bottom-left corners are light grey triangles. The bottom-right corner is a yellow triangle. The text 'STATE STRATEGY' is centered in a bold, black, sans-serif font.

STATE STRATEGY

SECTIONS COVERED IN STRATEGY

- **RETROFITTING OF FAULTY TOILETS**
- **SWM & LWM– APPROACH, PROCESS AND TECHNOLOGY SELECTION**
- **PLANNING**
- **EXTERNAL SOURCES FOR FUNDING – CAPEX + SHORT-TERM OPEX**
- **INTERNAL SOURCES FOR REVENUE - LONG-TERM OPEX**
- **FINANCIAL SUSTAINABILITY**
- **CAPACITY BUILDING FOR VARIOUS LEVELS: SANITATION STAFF, VILLAGE LEVEL WORKERS, GP LEVEL FUNCTIONARIES, TALUK & DIST LEVEL FUNCTIONARIES**
- **WAGES, BENEFITS & OCCUPATIONAL SAFETY FOR SANITATION STAFF**
- **IEC/BCC – FOR WHOM, WHAT AND HOW?**
- **MONITORING OF SLWM SYSTEMS - PARAMETERS/KEY INDICATORS, MANNER AND FREQUENCY OF MONITORING**
- **ADMINISTRATIVE STRUCTURE – STATE, DISTRICT, TALUK AND GP LEVEL**
- **ROLES & RESPONSIBILITIES OF FUNCTIONARIES AT DIFFERENT LEVELS**

ANNEXURES

- ANNEXURE I | METHODS FOR RETROFITTING OF TOILETS
- ANNEXURE II | ILLUSTRATIVE LIST FOR THE PURPOSE OF SEGREGATION
- ANNEXURE III | NORMATIVE STANDARDS FOR MANPOWER AND VEHICLES
- ANNEXURE IV | WASTE FLOW IN GRAM PANCHAYATS
- ANNEXURE V | WET WASTE PROCESSING TECHNOLOGIES
- ANNEXURE VI | MODEL DRY WASTE CENTRE/UNIT
- ANNEXURE VII | SUGGESTED TECHNOLOGY OPTIONS FOR TREATMENT OF LIQUID WASTE
- ANNEXURE VIII | GUIDELINES FOR SELECTION OF SUITABLE TECHNOLOGIES FOR LIQUID WASTE MANAGEMENT
- ANNEXURE IX | CLASSIFICATION OF DISTRICTS IN KARNATAKA
- ANNEXURE X | WORKABLE MODEL FOR LIQUID WASTE MANAGEMENT
- ANNEXURE XI | FORMAT OF MODEL DETAILED PROJECT REPORT
- ANNEXURE XII | ROLES AND RESPONSIBILITIES FOR SLWM IN RURAL AREAS
- ANNEXURE XIII | RECOMMENDED USER FEES
- ANNEXURE XIV | RECOMMENDED PENALTIES

RETROFITTING FOR SUSTAINED USAGE

STEP TO ENSURE FUNCTIONING AND USAGE OF TOILETS

- FACT FINDING EXERCISE: CONDUCT A HOUSE TO HOUSE SURVEY TO MARK OUT THE FAULTY DESIGNS
- CATEGORIZE THE FAULTY TOILETS BASED ON DESIGN AND THE FAULTS
- PREPARE A PLAN OF ACTION AND ASSIGN RESPONSIBILITIES, EARMARK BUDGETS AND SOURCE OF FUNDS FOR RETROFITTING
- CARRY OUT FOCUSED IEC/BCC ACTIVITIES AND ENSURE COMMUNITY PARTICIPATION
- PROVIDE TECHNICAL TRAINING IN RETROFITTING TO THE STAFF WHO WILL BE INVOLVED IN RETROFITTING
- PERFORM CONCURRENT QUALITY MONITORING

MAJOR ISSUES	REPERCUSSIONS	RETROFITTING OPTIONS
ONLY ONE PIT INSTEAD OF TWO	PIT CONTENT DOES NOT DECOMPOSE FULLY, NO RESTING PERIOD, PROBLEMS IN EMPTYING	<ul style="list-style-type: none"> • ADD ANOTHER PIT WITH JUNCTION CHAMBER • TRY VERMI-FILTRATION • REMOVE MANURE WITH ADEQUATE PRECAUTION
IMPROPER SEPTIC TANK DESIGN	NO TREATMENT HAPPENS DUE TO FAULTY DESIGN	<ul style="list-style-type: none"> • MAKE CORRECTIONS IN INLET/OUTLET DESIGN & VENT PIPE • CONSTRUCT LEACH PIT FOR EFFLUENT DISCHARGE • SEND SLUDGE TO FSTP/STP
SUPERSTRUCTURE ISSUES: LOW HEIGHT, NO VENTILATORS, NO ROOF/DOOR, IMPROPER PLATFORM FINISH	NO PRIVACY DISCOMFORT	<ul style="list-style-type: none"> • EXTEND HEIGHT • PROVIDE SMALL WINDOW • PROVIDE DOOR AND ROOF • CORRECT PLATFORM FINISH

PROPOSED FLOW OF SOLID WASTE



IN RURAL VILLAGES



IN PERI-URBAN VILLAGES

GUIDING PRINCIPLES FOR WASTE WATER MANAGEMENT

Domestic waste generators shall have the primary responsibility on minimizing their waste water and treating it on-site to the extent possible

Decentralized solutions should be preferred over centralized ones

Waste minimization and treatment options with better reuse/recycling potential should be selected.

All waste generators should either manage their waste scientifically on their own or pay for the services of the waste management service provider

Easy to operate, low O&M cost technologies shall be chosen.

Planning shall be on the basis of local (climatic and social) conditions and capacities to implement and operate the solution.



THE KARNATAKA PANCHAYAT RAJ (MANAGEMENT OF SOLID WASTE) MODEL BYE-LAWS, 2019

PUBLISHED IN THE GAZETTE ON 28TH MAY 2020

**Rural Drinking Water and Sanitation Department
(RDW&SD)**



CONTENTS OF SWM BYE-LAWS

PRIMARY STAKEHOLDERS IN THE SWM BYELAWS

DEFINITION OF TERMS AND APPLICABILITY

ROLES AND RESPONSIBILITIES

PLANNING AND IMPLEMENTATION

**WASTE COLLECTION, TRANSPORTATION AND
PROCESSING**

MONITORING OF SWM SYSTEMS

**USER FEES, PENALTIES & FINES, GRIEVANCE
REDRESSAL**



KARNATAKA PANCHAYAT RAJ (GRAM PANCHAYAT SANITATION & LIQUID WASTE MANAGEMENT) MODEL BYE-LAWS, 2019

PUBLISHED IN THE GAZETTE ON 28TH MAY 2020



CONTENTS OF LWM BYE- LAWS

COVERAGE OF THE SANITATION & LWM BYELAWS

APPLICABILITY & DEFINITIONS

FAECAL SLUDGE AND SEPTAGE MANAGEMENT- CONTAINMENT, COLLECTION, TREATMENT AND DISPOSAL

GREYWATER & COMBINED WASTEWATER MANAGEMENT.

POWERS AND FUNCTIONS OF DIFFERENT STAKEHOLDERS IN THE GRAM PANCHAYAT

PLANNING AND MONITORING OF WASTEWATER MANAGEMENT SYSTEMS

USER CHARGES FOR WASTEWATER MANAGEMENT; OFFENSES, PENALTIES AND GRIEVANCE REDRESSAL

ROLES AND RESPONSIBILITIES AT VILLAGE LEVEL

TASKS

MEETINGS AND ORGANISATION

PLANNING

IMPLEMENTATION

OPERATION AND MAINTENANCE

MONITORING, AUDIT AND REPORTING

VILLAGE GOVERNING AUTHORITY (GRAM PANCHAYAT)

VILLAGE ADMINISTRATIVE OFFICER (PANCHAYAT DEVELOPMENT OFFICER)

COMMUNITY BASED ORGANISATIONS

INDIVIDUALS SUCH AS SANITATION MOTIVATORS



THANK YOU

Contact: wsrcdpr@gmail.com

RURAL DRINKING WATER & SANITATION
DEPARTMENT

**Water Purification Plants
(WPP)**

WATER PURIFICATION PLANTS ACROSS KARNATAKA

• Drinking Water is an important and economical element which shall be made available to every person as constitutional rights. Of the 60272 habitations, as per IMIS data as on 01.04.2021, 8998 habitations are fully covered while 51274 are partially covered. At present there are about 18,000 plants

•2011-12	300
•2012-13	387
•2013-14	1000
•2014-15	2000
•2015-16	5454
•2016-17	2015
•2017-18	6138

- Karnataka is the second most drought prone state, after Rajasthan.

The availability of safe potable water is scarce due to depletion of ground water levels and therefore it is challenging task especially in districts of Kolar, Chickballapur, Bengaluru rural and Tumkur districts. (ಬಯಲು ಸೀಮೆ)

- The installation of water purification plants in quality affected habitations will ensure that the rural population is provided with clean and safe drinking water as a measure of Social justice which NGT has given directions..

- As per IMIS data all 218 quality affected habitations as on 01.04.2021 are covered either with WPP or provided treated surface water.

- Through 3rd party assessment GoK has digitised and standardized the existing inventory of plants spread across the state in coordination with the district officials. Plants were audited based on their cleanliness, water availability, maintenance and sales.

- In addition to inventory and physical audit of the plants, users (households which avail the services of the plant) and non-users (Households which do not avail the services) were interviewed to understand affordability, accessibility and availability of water at the RO-plants.



- Of the audited 18,741 plants across the state in all 31 districts it was found,
 - 69% of the plants were ‘operational’
 - 31% of plants were reported to be ‘not operational’.
- As part of the audit, more than 90,000 community-level interviews were conducted with both users and non-users in the vicinity of the RO plants.- Role of ISA is more important here to educate users for proper utilisation of the services provided by the government and even to complain to appropriate authorities if there is any issues on functioning of the WPP. Parihara Cell is monitoring the status of complaints
- From the audit, it was observed that the RO-plants on an average sold about 827 litres of water per day and that there were more than 11 districts that outperformed the state average in terms of sales

- The plants that were flagged as ‘not operational’, - two key reasons that were found were;

- 1) Maintenance issues (58%),
- 2) Dried-up water source/sources (38%),

Remaining 4% account for major repairs or damaged units.

- On the service-delivery front, it was found that about 14% of the plants delivered RO-water throughout the day, and 21% of plants delivered water for at least 8 hours per day. It was found that about 88% of the plants sold at a 20-litre benchmark whereas 11% of plants sold at a 10 liter benchmark.
- overall feedback as received from the users where 95% of the respondents reported that they were satisfied with RO water.



THANK YOU

Rural Drinking Water
and Sanitation
Department,

Rural Development
and Panchayat Raj
Department,

GoK

6th August 2021

Operations & Maintenance Policy for Rural Water Supply sector in Karnataka

Table of Contents - Operation and Maintenance (O&M) Policy

- ❖ Chapter I – Introduction

- 1.1 to 1.9 Goal, Objectives, Scope, Need, Components, Category of Rural Water Supply Schemes, Governance and Institutional aspects, Water Policies and Organization of O&M Policy

Part A: O&M of Multi Village Schemes (MVS)

- ❖ Chapter II – Policy Statements for O&M of MVS

- ❖ Chapter III – Implementation Strategies for O&M of MVS

Part B: O&M of Single Village Schemes (SVS) and In-Village Distribution network (IVDN)

- ❖ Chapter IV – Policy Statements for O&M of SVS and IVDN

- ❖ Chapter V – Implementation Strategies for O&M of SVS and IVDN

Part C: Annexures

- ❖ Chapter VI – Annexures for O&M of MVS

- ❖ 22 Nos. of Annexures

- ❖ Chapter VII – Annexures for O&M of SVS and IVDN

- ❖ Model Bylaws at GP level for operation and maintenance of SVS and IVDN

Objectives of O&M Policy

1

To provide guidance on sustainable water supply services in terms of availability, accessibility and affordability adopting decentralized approach involving Panchayat Raj Institutions (PRIs) and VWSCs.

2

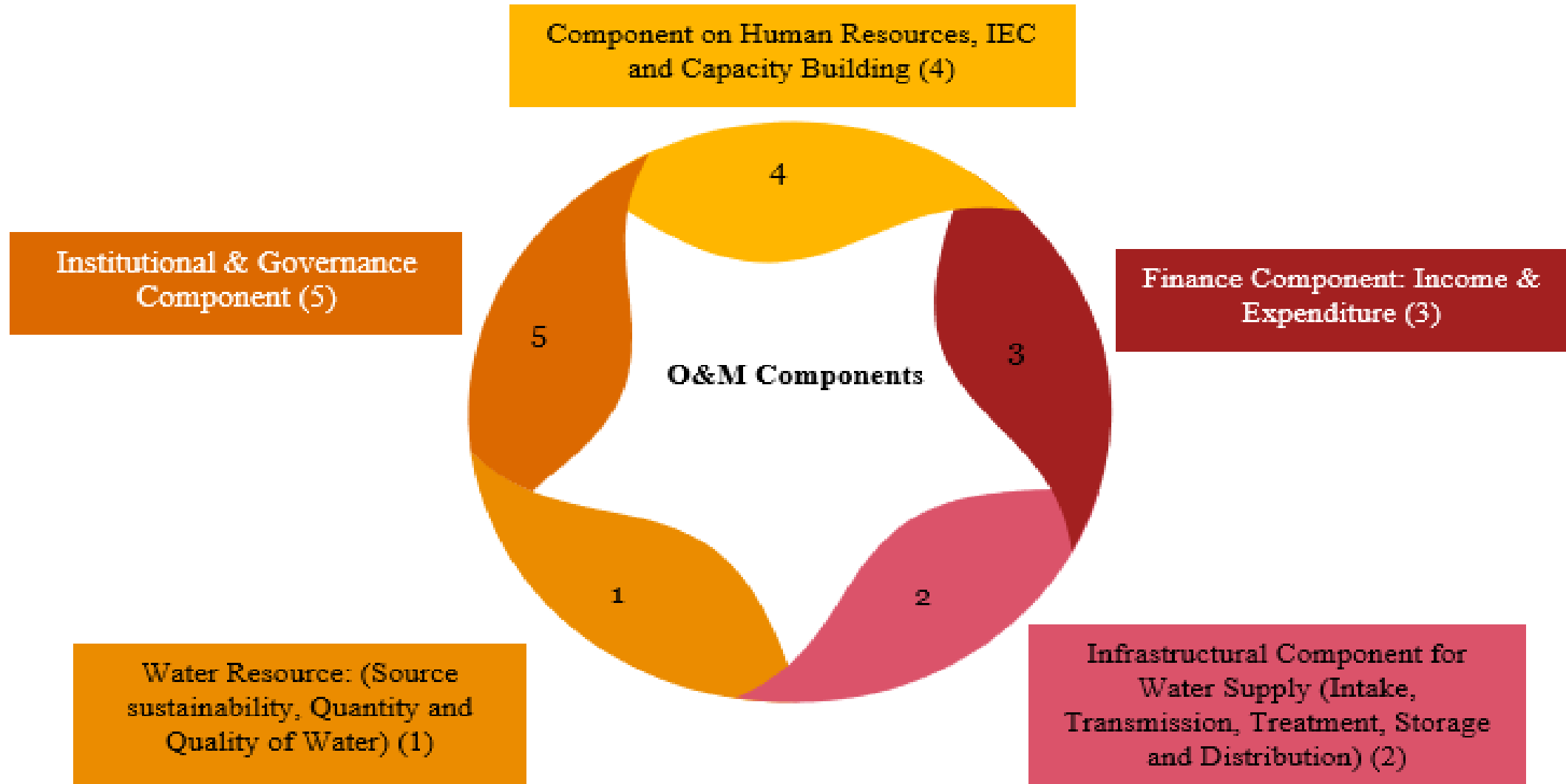
To improve institutional capacity and human resources of RDWSD, GPs and VWSCs to provide efficient, effective and sustainable drinking water supply services and to clarify institutional roles and responsibilities of RDWSD, GP, VWSC and Operators for operation, maintenance and management of rural water supply schemes and assets in the State.

3

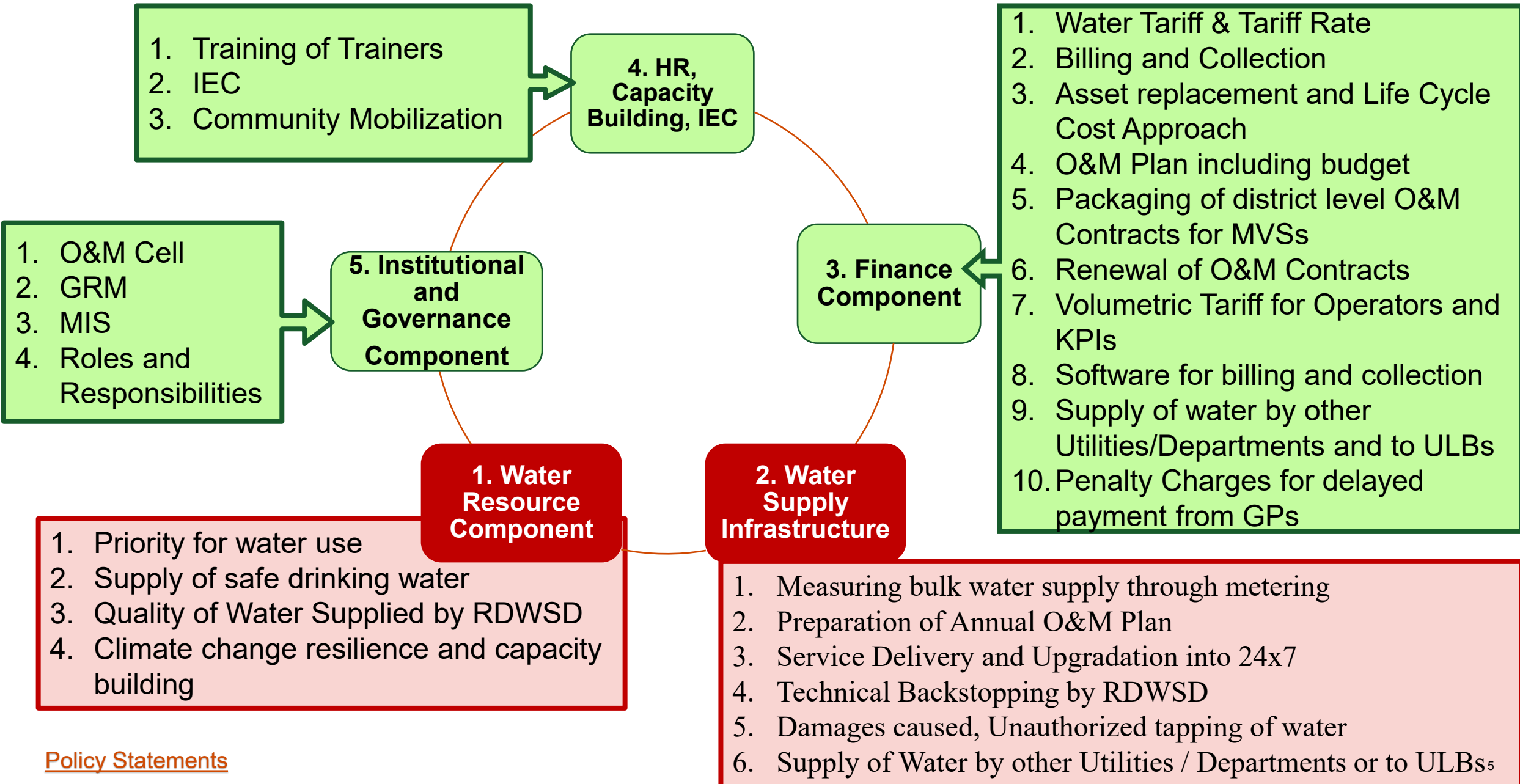
To provide guidance on technical, institutional and financial sustainability of rural water supply schemes and to facilitate cost recovery at the GP and community level from operations of MVS and SVS in the State

O&M Components – Basis of O&M Policy

O&M of Rural Water Supply Schemes is based on five components, collectively referred to as the O&M Pentagon



Strategies of O&M Policy



Incremental Block Tariff proposed at Bulk Water for MVS

Water supply from RDWSD to GPs	Tariff Rs / kL	Tariff Paise / L
Assuming a GP with 1500 Households		
Upto 7 kL/Month/HH for entire GP	05	0.5
7.1 to 10 kL/Month/HH for entire GP	08	0.8
10.1 to 15 kL/Month/HH for entire GP	10	1.0
15.1 to 20 kL/Month/HH for entire GP	12	1.2
Tariff for Bulk water supply (non-PRI)		
Upto 60 kL/Month/Bulk Consumer	15	1.5
60.1 kL+ Upto 120 kL/Month	17	1.7
120.1 kL+ Upto 180 kL/Month	19	1.9
180.1 kL+ Upto 240 kL/Month	21	2.1

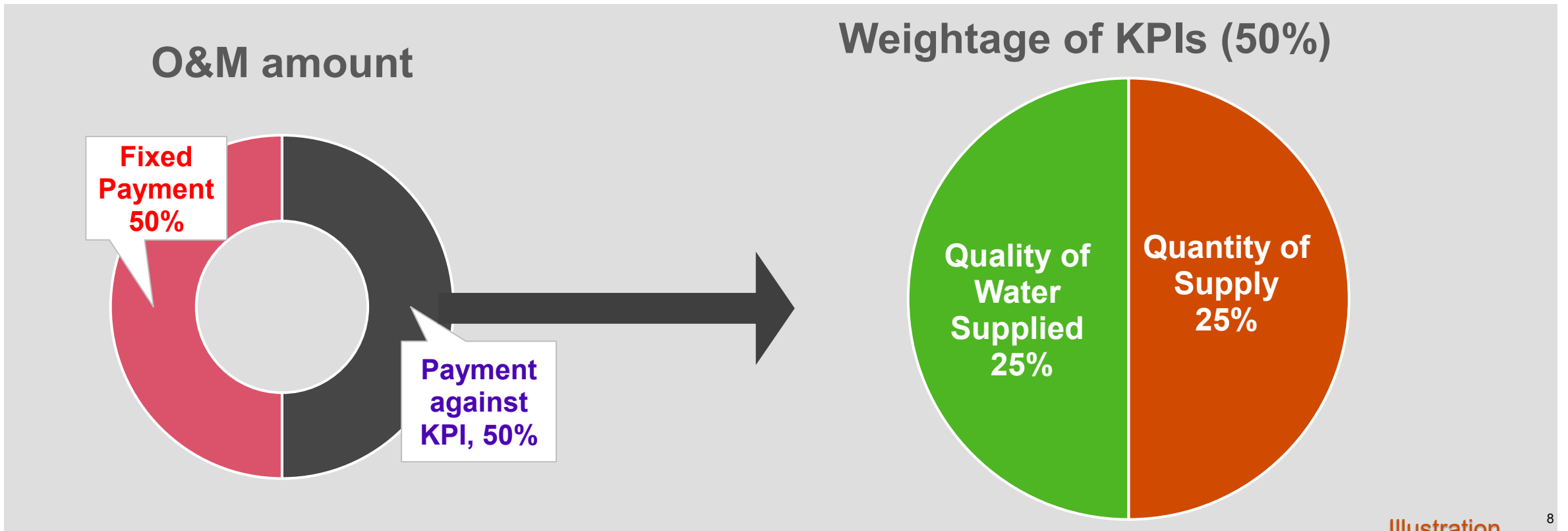
Indicative Water Tariff at Domestic and Non-domestic level

Tariff for water supply from GPs to Consumer Households	Total Water in Litres /month	Block Tariff Amount in INR /Unit of kL	Block Tariff Amount in Paise / Unit of L	Cumulative Amount
Upto 7kL/Month/Hh	7000	INR 70 for 7 kL @INR 10/kL	0.7	70
7.1 kL to 08 kL/Month	8000	12	1.2	82
8.1 kL to 09 kL/ Month	9000			94
9 kL to 10 kL/ Month	10000			106
10.1 kL to 11 kL/Month	11000	14	1.4	120
11.1 kL to 12 kL/Month	12000			134
12.1 kL to 13 kL/Month	13000			148
13.1 kL to 14 kL/Month	14000			162
14.1 kL to 15 kL/Month	15000			176
15.1 kL to 16 kL/Month	16000	16	1.6	190
16.1 kL to 17 kL/Month	17000			206
17.1 kL to 18 kL/Month	18000			222
18.1 kL to 19 kL/Month	19000			238
19.1 kL to 20 kL/Month	20000			252
Non-Domestic Water Tariff				
Consumer Category			Tariff / kL / Month	Tariff / L in Paise
Non-Domestic public institutions (such as (1) Orphanages, (2) Old age homes, (3) Physically Challenged Residence, (4) Raitha Samparka Kendra, (5) Government educational institutions, (6) Government offices, (7) Government Hospitals (PHCs and sub-centres) and including Private sector Institutions from (1) to (3) as above			INR – 10 per kL	1.0
Non-Domestic Commercial Enterprises*			INR – 30 per kL	3.0
Industrial Enterprises			INR – 40 per kL	4.0

****RDWSD may examine the category of unit on a case-by-case basis***

Calculation of O&M contract amount based on KPIs

O&M Contract amount	Weightage		
Fixed Payment	50%	}	Fixed Payment
Payment against KPI	50%		Payment Against KPI
			Weightage (50%)
			Weightage (50%)
		A. Quantity of treated water	50% of 50%= 25%
		B. Quality of treated water	50% of 50%= 25%
		Total	Weightage 100%



Operations, Maintenance and Management of Rural Water Supply Schemes-SVS and IVDN- Model Bylaws, 2021 for the State of Karnataka (1/2)

Powers, Functions, Roles and Responsibilities of Key stakeholders related to O&M of Rural Water Supply Schemes

Captures the roles and responsibilities of

- Gram Panchayat
- Gram Sabha
- Gram Panchayat council
- Panchayat Development officer
- VWSC
- Waterman

Domestic and Non-Domestic Consumers

New Consumer Connections

Disconnection of consumer connections

Reconnection of Connections

Technical O&M of SVS and IVDN

This section of Bylaws explains:

- Maintenance of Village OHTs
- Indent & Purchase of Spares and Consumables
- Water Quality Monitoring
- Recharging of traditional water sources and borewells
- Guidelines on O&M of WPPs

Operations, Maintenance and Management of Rural Water Supply Schemes-SVS and IVDN- Model Bylaws, 2021 for the State of Karnataka (2/2)

Water Tariff and Finance Management for O&M of SVS and IVDN

This section of Bylaws captures appropriate tariff, mechanisms for collection and policy guidelines regarding cost recovery in the short, medium and long term

- Finance Management in O&M
- Payment of Water Tariff to GP
- Billing and Collection
- Measurement of Water Consumption
- O&M Budget
- Water Tariff and Increasing Block Tariff
- Consumer Bill Model at GP Level
- Tariff for Bulk water supply
- Consumer Ledger
- Capacity Building, IEC and Community Mobilization Component for O&M of SVS and IVDN

Governance and Institutional Arrangements for O&M of SVS and IVDN

Governance in the context of Bylaws is the way rules, norms and actions are structured, sustained and regulated for operating and maintaining a rural water supply scheme.

Governance of O&M of WSS at GP level

- Decentralized service delivery and O&M
- Bylaw for O&M
- Tripartite Memorandum of Understanding (TMoU)
- VWSC
- Staffing Pattern
- Monitoring the functioning of Staff at GP level
- Community Consultations
- MIS
- Grievance Redressal Mechanism GP Level
- Technical backstopping by RDWSD

ANNEXURES (1/3)

Water Quality	Annexure 1	Protocol for Water Quality Monitoring
	Annexure 2	Format for Water Quality Monitoring at district level water quality labs (MVS)
Government Orders	Annexure 3	G.O. on implementation of Policy for O&M of Rural Water Supply schemes
	Annexure 4	G.O. on Tariff for bulk water supply from Multi Village Schemes in the State
O&M Manual	Annexure 5	Operation, Maintenance and Management Manual for Rural Water Supply Schemes
MoUs	Annexure 6	Tripartite Agreement between RDWSD, Water Utility and GP for operation and maintenance of rural water supply services
	Annexure 7	Bipartite Agreement between RDWSD and ULB for operation and maintenance of rural water supply services
Demand & Collection of Water charges	Annexure 8	Logbook Format for recording Bulk Water Consumption in kL (OHT/BWM Level) – MVS
	Annexure 9	Monthly Consolidated Data on Bulk Water Consumption (GP/ULB Level) for MVS
	Annexure 10	Format for generating Monthly Bills on Bulk Water Consumption, Water Tariff and Demand (MVS)
	Annexure 11	Billing and Collection of Water Tariff / Process Flow - MVS
Role of Stakeholders	Annexure 12	Roles & Responsibilities of RDWSD Officials, Other Departments and O&M Contractor

ANNEXURES (2/3)

Tariff	Annexure 13	Water Tariff Calculation at MVS level
Annual Budget	Annexure 14	Annual O&M Plan for MVS
Contract Packaging	Annexure 15	Note on packaging of O&M Contracts of MVS at district level
Renewal	Annexure 16	Note on renewal of O&M Contracts and Handing over from Old Contractor to New Contractor
KPIs	Annexure 17	Note on calculation of O&M contract amount based on Key Performance Indicators (MVS)
Trainings	Annexure 18	Note on Trainings at State and Division Level
	Annexure 18.1	Reporting Format for Training Achievement
O&M Cell	Annexure 19	O&M Cell under RDWSD
Water meters	Annexure 20	Note on Metering
MIS - MVS	Annexure 21	Management Information System
	Annexure 21.1	Format for capturing baseline information on MVS
	Annexure 21.2	Format for capturing O&M related data on MVS
GRM	Annexure 22	Grievance Redressal Mechanism (GRM) for MVS

ANNEXURES (3/3)

Annexure 23	Operations, Maintenance and Management of Rural Water Supply Schemes-SVS and IVDN- Model Bylaws, 2021 for the State of Karnataka
CHAPTER I	General
CHAPTER II	Powers, Functions, Roles and Responsibilities of Key stakeholders related to Operation and Maintenance of Rural Water Supply Schemes
CHAPTER III	Technical Operations and Maintenance of Single Village Schemes (SVS) and In-Village Distribution Network (IVDN)
CHAPTER IV	Water Tariff and Finance Management for O&M of SVS and IVDN
CHAPTER V	Governance and Institutional Arrangements for O&M of SVS and IVDN
CHAPTER VI	Capacity Building, IEC and Community Mobilization Component for O&M of SVS and IVDN

Thank You

KPI – Quantity of treated water

- The volume of water supplied by the operator will be measured and captured daily and this will be compared with the required quantity of water to be supplied by the operator.
- Penalty will be levied for the shortfall of water supply i.e. if the quantity of water supplied to the sum total of village OHTs individually and collectively is less than the required quantity, then penalty will be levied.
- 50% weightage will be considered under this head. The penalty to be levied for non-compliance is illustrated below:

Assumed Quantity of water supplied per month from a MVS	Penalty	Remarks
3000 kL	0	Total amount to be paid to operator against supply of 3000 kL per month (Inclusive of losses) of water is assumed as = Rs. X. The penalty will be calculated by adding for each day separately for every OHT in the project.
2700 kL	X into 8.30%	
2400 kL	X into 16.65%	
2100 kL	X into 25.00%	
1800 kL	X into 37.50%	
1500 kL	X into 50.00%	
1200 kL	X into 62.50%	
900 kL	X into 75.00%	
600 kL	X into 87.50%	
300 kL	X into 100.00%	

KPI – Quality of treated water

- Water supplied to the scheme should be tested at Water Treatment plant with all the 17 water quality parameters.
 - Water quality testing will be undertaken for the water sample taken daily at WTP location.
 - Water sample testing at WTP should be within acceptable/ permissible limits for all the 17 parameters.
- Four water quality parameters will be tested at Village OHT level (Colour Hazen units, Max; pH, value, Turbidity, NTU, Max and Free Residual chlorine*, mg/l, *Min*).
 - Residual chlorine limit must be tested daily basis, while the other three may be tested on a weekly basis.

No	Parameters for testing at WTP level	Weightage % (Amount)	Periodicity of Testing	Parameters for testing at WTP level	Weightage % (Amount)	Periodicity of Testing
	Total	17 (170000)			8 (8000)	
1	Free Residual chlorine*, mg/l, Min.	1(10000)	Daily	Free Residual chlorine*, mg/l, Min	2 (20000)	Daily
2	Colour Hazen units, Max	1(10000)	Daily	Colour Hazen units, Max	2 (20000)	Weekly
3	pH, value	1(10000)	Daily	pH, value	2 (20000)	Weekly
4	Turbidity, NTU, Max	1(10000)	Daily	Turbidity, NTU, Max	2 (20000)	Weekly
5	For rest of the 13 parameters – Same weightage and periodicity is proposed	1(10000)	Daily			
6	13 parameters includes (1) Taste (Test only after safety is established); (2) Odour, (Test cold and when heated and at several dilutions); (3) Total dissolved solids, mg/l; (4) Chloride (as Cl), mg/l, Max ; (5) Total alkalinity (as Ca CO ₃), mg/l, Max; (6) Total hardness (as Ca CO ₃), mg/l, Max; (7) Sulphate (as SO ₄), mg/l, Max; (8) Iron (as Fe), mg/l, Max; (9) Total arsenic (as As), mg/l, Max (in hot spots); (10) Fluoride (as F), mg/l, Max; (11) Nitrate (as NO ₃) mg/l, Max; (12) Total coliform bacteria; (13) E. coli or thermo-tolerant coliform bacteria					

Policy Statements (1/11)

2.1. Water Resource (Water Source, Sustainability, Quantity and Quality of Water)

2.1.1 Supply of safe drinking water: RDWSD shall draw water from sustainable sources (preferably surface sources) and after appropriate treatment, supply safe drinking water equivalent to 55 LPCD to Gram Panchayats and eligible enroute ULBs on priority need basis, with an objective of covering the entire rural areas of Karnataka progressively in a 7-year period from 2021.

2.1.2 Priority for water use: Drinking water needs of the people will have highest priority among competing uses of water. (Ref Karnataka State Water Policy-2002 and 2019).

2.1.3 Quality of Water Supplied by RDWSD: RDWSD directly or through Operator shall supply water complying with BIS 10500 specifications or as specified. Gram Panchayat shall also ensure that safe potable quality water is distributed to the consumer community through schemes managed within the GP. The Contractor/ Operator will be bound by provisions of O&M policy to maintain water quality standards distributed out of MVS. RDWSD shall check water samples for all quality parameters parallel to the Operator, either randomly or periodically and the result thereof will be considered for releasing payment to the Operator/ Contractor.

Policy Statements (2/11)

2.1. Water Resource (Water Source, Sustainability, Quantity and Quality of Water)

2.1.4 Climate change resilience and capacity building: RDWSD shall support Gram Panchayats and other sector stakeholders in building their capacity for management of water infrastructure, quantity of supply, water quality management and in recharging Borewells and other water bodies. The following sub-set of policies shall also be applied to build resilience to climate change: (a) Gram Panchayats shall recharge all bore wells, within the GP area, whether of private or public ownership, provisioning funds from MGNREGS or other watershed development programmes as part of the climate change resilience and preparedness; (b) GP shall undertake monitoring of groundwater table, using appropriate techno-social methods, devices and tools in the GP limits to understand and analyze the results of groundwater recharging; (c) All sector stakeholders including government departments, three tier PRIs, other sectoral institutions, organizations, industrial and commercial consumer units and individual households shall encourage, disseminate, demonstrate and scale up conjunctive use of water, including surface water, groundwater and rainwater sources as an immediate response to climate change impact in the State.

Policy Statements (3/11)

2.2 Infrastructure Component for Water Supply (Intake, Treatment, Transmission, Storage, Distribution)

2.2.1 Multi Village Schemes (MVS): RDWSD shall manage MVS either directly or through Operators/Contractors selected through a transparent tender process and provide bulk water to Gram Panchayats.

2.2.2 Priority for water use: Drinking water needs of the people will have highest priority among competing uses of water.

2.2.3 Measuring bulk water supply through metering: Bulk Water Meters (Electro-magnetic flow meters) shall be installed at Village level OHTs or such other appropriate locations to measure water supplied to GPs so as to calculate volumetric tariff and charge GPs and other bulk water consumers. Bulk Water Meters will be installed at the inlet and outlet of WTP, MBR and ZBR, besides at the inlet of Village OHTs and other supply points to GPs and ULBs for the same purpose. Three tier PRIs, especially Gram Panchayats shall take initiative for installing consumer level water meters of appropriate quality and specifications. Cost of Consumer Meters shall be borne under a project if projects/programmes such as JJM are available. If such projects/ programmes are not available, the consumer shall bear the cost of water meter.

Policy Statements (4/11)

2.2 Infrastructure Component for Water Supply (Intake, Treatment, Transmission, Storage, Distribution)

2.2.4 Operations and Maintenance of MVS: Multi Village Schemes shall be operated and maintained for achieving prescribed results and efficiency, following best practices of the water supply sector. RDWSD shall plan and install SCADA, IoT and web based service level monitoring system to all MVSs, piloting with large Multi-Taluk MVSs for controlling, maintaining and managing Operations and Maintenance. Information generated by SCADA and IoT shall also be used for conducting water and energy audit.

2.2.5 Preparation of Annual O&M Plan: RDWSD with the cooperation of DBOT contractors/ Operators shall prepare Operations and Maintenance Plan for each MVS, along with scheme specific O&M Manual. This manual shall be used as a guidance document / basis for the subsequent O&M contract. Routine O&M including preventive maintenance shall be included in the O&M plan and manual.

2.2.6 Service Delivery: RDWSD shall ensure through the Operators, Gram Panchayats and VWSCs that potable quality water is supplied to the GP population with the following service conditions: (a) Duration of supply: GPs connected to MVS shall receive water for a minimum duration of not less than four hours per day, with two hours each in the morning and evening; (b) Timing of water supply: Drinking water at Village level may be supplied between 6.00 am & 9.00 am and 5.00 pm & 8.00 pm in the evening; (c) Quantity of supply. Per capita supply of 55 LPCD shall be assured by MVS. If the demand for potable water in rural areas is lesser than 55 LPCD on a monthly average, the GP may officially inform the Operator and RDWSD regarding quantity of water demand for the GP and RDWSD shall inform the Operator to suitably adjust quantity of supply as per the request of GP; (d) Reduced Pumping Hours: If the aggregate demand for water is lesser than 55 LPCD, RDWSD may direct the Operator to operate the water supply scheme (MVS) with reduced hours of pumping and treatment operations.

Policy Statements (5/11)

2.2. Infrastructure Component for Water Supply (Intake, Treatment, Transmission, Storage, Distribution)

2.2.7 Upgradation into 24x7 service delivery: RDWSD shall take initiative for upgradation of selected MVS into 24x7, subject to satisfactory fulfillment of conditions such as: (1) All Village level OHTs or entry points to village water distribution system are fixed with Bulk Water Meter; (2) All households in GPs covered by the selected MVS are given metered HTCs; (3) Capacity building of RDWSD, Operator staff, GP level stakeholders for operating, maintaining and managing 24x7 water supply scheme is undertaken and duly accredited; (4) Scaling up of 24x7 shall be carefully done, selecting one pilot MVS in each of the physiographic region of the State, subject to availability of water, readiness of stakeholders to enter into a multi-stakeholder MoU regarding demand, supply, tariff levels and other service conditions.

2.2.8 Technical Backstopping by RDWSD: RDWSD shall provide technical backstopping, advice and technical support to resolve issues related to rural water supply schemes owned and operated by the three tier PRIs. PDO of the GP or the concerned officer may request for technical backstopping support to the concerned officer of RSWSD.

2.2.9 Damage to water distribution and pumping network: Damages caused to components of existing water supply system such as raw water rising main, clear water transmission mains, major distribution network etc. during construction works carried out by other departments, contractors/ agencies shall be compensated for restoration of infrastructure and water supply service, for which the cost shall be borne by the damage causing institution/ party/ department/ contractor. The EE of RDWSD shall use his good offices to resolve the issue, failing which, he/she shall take up the matter with the district coordination committee.

Policy Statements (6/11)

2.2. Infrastructure Component for Water Supply (Intake, Treatment, Transmission, Storage, Distribution)

2.2.10 Unauthorized tapping of water: The Operator/Contractor shall lodge a complaint with the legal authorities against unauthorized tapping of water, illegal connections and vandalism, which affect uninterrupted supply. The EE of RDWSD shall use his good offices to resolve the issue, failing which, he/she shall take up the matter with the district coordination committee.

2.2.11 Resolving issues in the express feeder line of ESCOM. RDWSD shall clearly define roles and responsibilities of KPTCL or such other power distribution company or agency with regard to the power supply arrangements for operation and maintenance in the contract documents. Mutually accountable provisions from the part of the Operator and KPTCL shall be included and defined in the O&M contract, including clauses regarding remedial measures. District Coordination Committee shall be an institutional mechanism at the district level to resolve issues relating to the uninterrupted power supply.

Policy Statements (7/11)

2.3. Finance Component: (Income & Expenditure)

2.3.1 Water Tariff: GPs, ULBs and other consumers as the case may be, will be charged by RDWSD for water supplied at specified rates. RDWSD will fix, recover and annually revise the water tariff for bulk water supply at a rate not less than 5% so as to recover partly or fully the cost of operations and maintenance.

2.3.2 Billing and Collection: RDWSD and GP will follow a monthly cycle for billing and collection under MVS. GP shall pay the water tariff into the specified account within 30 days of receiving the monthly water bill and demand.

2.3.3 Tariff Rate: RDWSD shall implement 'Incremental Block Tariff' for GPs/ULBs and other bulk consumers (if any). Gram Panchayats also shall implement 'Incremental Block Tariff' for its consumers. The bulk water consumer shall pay to the RDWSD, such tariff that is fixed by RDWSD, based on volumetric consumption and cost recovery principles. Bulk water tariff proposed is provided in the table below.

Tariff for water supply from RDWSD to GPs	Rs / kL	Paise / L
Up to 7 kL/Month/HH for entire GP	05	0.5
7.1 kL to 10 kL/Month/ HH /for entire GP	08	0.8
10.1 kL to 15 kL/Month/HH for entire GP	10	1.0
15.1 kL to 20 kL/Month/HH for entire GP	12	1.2

Policy Statements (8/11)

2.3. Finance Component: (Income & Expenditure)

2.3.4 Asset replacement and Life Cycle Cost Approach: Until RDWSD/Government of Karnataka fully graduates into life cycle cost approach and O&M cost recovery, the following arrangement shall be followed for asset replacement, operations and maintenance. For MVS, the replacement cost of assets is met by RDWSD for all assets upto the Bulk Water Meter at the Village level OHT. If any asset renewal or replacement or repair is required, such requirement shall be included in the annual O&M plan.

2.3.5 O&M Plan including budget: EE at Division level shall facilitate the preparation of an annual O&M Plan for each MVS. The annual O&M Plan shall be submitted to CE-RDWSD through CEO-ZP. CE-RDWSD shall review as per departmental norms, approve the O&M plan and inform EE of the respective division of RDWSD.

2.3.6 Packaging of district level O&M Contracts for MVSs: To the extent possible and unless there is justification otherwise, all O&M contracts for the smaller multi-village schemes may be merged and managed under a single contractor/ operator at district level in order to ensure service levels and monitor the quality of delivery. O&M contracts shall be for a period of five (5) years, renewable on a year on year basis, based on satisfactory performance by the O&M Operator/ contractor and, based on mutual agreement.

Policy Statements (9/11)

2.3. Finance Component: (Income & Expenditure)

2.3.7 Renewal of O&M Contracts: All costs associated with the repair, refurbishment, replacement of bulk water supply infrastructure shall be evaluated in the last year of the O&M contract and may be taken up as part of the upcoming O&M contract. O&M Contracts may be renewed with a 5% annual increment of O&M contract value from the second year of the five year contract for O&M.

2.3.8 Volumetric Tariff for Operators and Key Performance Indicators: Contractors/ Operators shall be paid on a volumetric basis, subject to achieving Key Performance Indicators (KPIs). Amount payable to Operator shall exclude cost towards electricity which shall be borne by the Government of Karnataka/RDWSD. The Operators will get 50% of the O&M contract amount as fixed cost and 50% payment as variable cost against achievement of key performance indicators. Key Performance Indicators for the O&M Contract of MVS shall be as under: (a) Total Quantity of Treated Water to be supplied to each habitation/village covered under the scheme at minimum of 55 LPCD for the design population (Weightage-25 (50% of the total score of 50); (b) All water samples tested daily in the previous month at WTP/Village OHT to meet quality standards as defined in the contract. (Weightage-25 (50% of the total score of 50); (c) Exemption from penal provisions: Penal provisions on the O&M Contractor may not be applied on account of supplying quantity of water lesser than 55 LPCD or as per the contract provisions, provided there is a clear indication of lesser demand for water from the rural community, supported with evidence, justification by data and written instruction by the GP; (d) Similarly, if water is not pumped, treated and supplied due to interrupted power supply, which is not under the control of the Operator, the penal provision may not be applied. This provision applies to such MVS which does not have a standby DG set. To administer these exemption provisions, evidence in the form of clear and justifiable data shall be presented; (e) O&M Cell of RDWSD shall undertake periodic review of O&M contracts.

Policy Statements (10/11)

2.3. Finance Component: (Income & Expenditure)

2.3.9 Data on bulk water supply: O&M contractor shall assist in capturing the volume of water supplied to each village consolidated at GP level and generate bills for the bulk water supply to GPs as per the tariff set out in the policy. Such data on bulk water supply shall be taken from the MIS/ SCADA or records maintained regularly and updated by the Operator/RDWSD.

2.3.10 Software for billing and collection: RDWSD shall prepare and introduce software to support billing, collection, accounting and build capacities of Operators/Contractors and GPs in using the software.

2.3.11 Supply of water by other Utilities/Departments: GPs/villages getting water from any other agency/utility such as BWSSB, KUWS&DB and KUIDFC shall pay for the water on a volumetric basis to RDWSD at a tariff rate as fixed under this policy. RDWSD shall pay to agency/utility the cost of water supplied on a per kL basis, which is equivalent to rate applicable/charged for urban local bodies. O&M activities of such schemes supplying water to enroute GPs, shall be carried out by the parent agency and shall charge O&M tariff to RDWSD for the volume of water supplied and recorded by bulk water meters at the same rate that is applicable for urban local bodies or otherwise agreed at the time of project implementation. RDWSD in turn will raise demand on GPs supplied with water from the scheme at a tariff as defined in the current policy and as amended ment from time to time.

2.3.12 Supply of water to Urban Local Body (ULB)/GP by RDWSD: RDWSD shall supply water to selected Urban Local Bodies located enroute or adjacent to the GPs/Villages included under the scope of Multi Village Schemes (MVS), subject to demand from the ULB, concurrence from the part of Urban Development Department, based on signed MoU and payment of water tariff for bulk water supply made to ULB.

2.3.13 Penalty Charges for delayed payment from GPs: RDWSD shall impose a penal charge on GP if the latter does not remit the O&M charges by the stipulated date.

Policy Statements (11/11)

2.4. Human Resources, Capacity Building

2.4.1 Training: RDWSD shall facilitate capacity building of RDWSD Engineers, contractors, consultants, NGOs/ISAs and other sector stakeholders together with people's representatives at the three tier PRIs, officials of PRIs and GP based Waterman/Pump Operators, by preparing appropriate training modules, scheduling training events, supporting training programmes with resource persons and knowledge.

2.5 Governance and Institution

2.5.1 O&M Cell: RDWSD will set up an O&M Cell at the HQ to monitor O&M activities, guide operations and maintenance, and develop data and knowledge base on O&M

2.5.2 Grievance Redressal Mechanism: 'PARIHARA', a comprehensive GRM (Grievance Redressal Mechanism) already functional at RDWSD will address complaints from the consumer households and other institutional stakeholders with possibilities of escalating complaints in the event of non-resolution.

2.5.3 Management Information System: RDWSD in consultation with RDPRD shall develop a Management Information System (MIS) for rural water supply sector.

2.5.4 Roles and Responsibilities regarding Monitoring and Regulation of Operations and Maintenance: Roles and responsibilities with regard to monitoring and regulatory functions under O&M for MVS is elaborated under implementation strategy.

[Return to main content](#)



Government of Karnataka

JAL JEEVAN MISSION

Planning & Progress

06th August 2021

Darshini N.

Assistant Executive Engineer



JJM - Concept

Objective - Jal Jeevan Mission (JJM) aims at **providing FHTC to every rural household by 2024.**

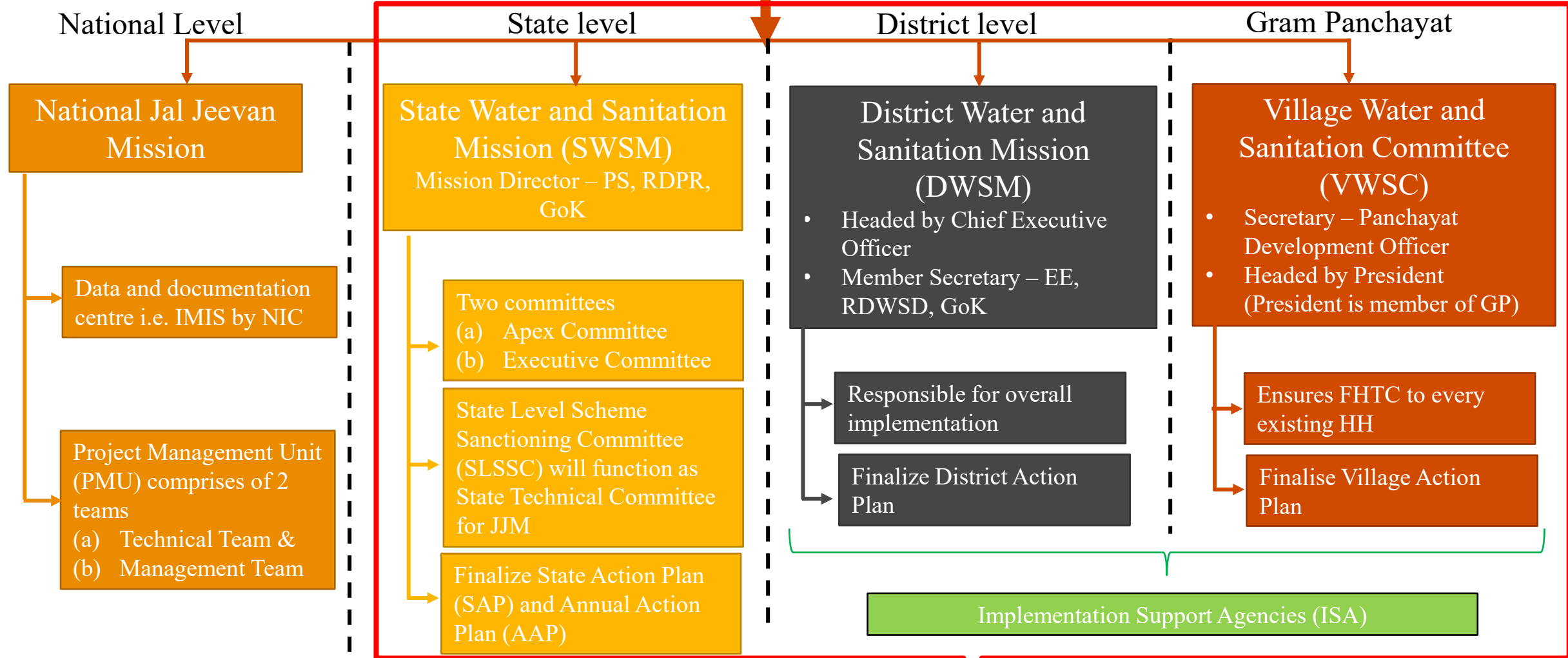
Functionality of a tap connection

- (a) in adequate quantity, i.e. at least 55 lpcd (litres per capita per day),
- (b) of prescribed quality as per BIS:10500 standards,
- (c) on regular basis, i.e. continuous supply in long-term.

Critical factors for considering schemes under JJM

- (a) Need
- (b) Source Sustainability
- (c) Techno Economic Feasibility
- (d) Fund availability
- (e) Implementation Capacity

Institutional Mechanism



Details	Chairperson	Member Secretary
Apex Committee	ACS & Development Commissioner, GoK	Commissioner, RDWSD, GoK
Executive Committee	Commissioner, RDWSD, GoK	Chief Engineer, RDWSD, GoK

Rural Drinking Water & Sanitation Department (RDWSD)
 Rural Development & Panchayat Raj, Government of Karnataka

VILLAGE ACTION PLAN

Village Action Plan (VAP) – Prepared by GPs (or VWSC)

- Baseline survey
- Need assessment to decide whether SVS or MVS
- *Community participation*
- Capacity building
- Grey water management

**VAP will be approved by Gram Sabha;
Technical Approval of VAP by DWSM**

DISTRICT ACTION PLAN

District Action Plan (DAP) – Prepared by DWSM

- Strategic Plan for FHTC
- Timelines for all activities, Financial requirement (Cost estimation) & institutional requirement for the district and plan for convergence of funds
- Decide on taking up retrofitting/augmentation and/or requiring water supply from surface water and formulation of schemes based on TEFR
- ISA activities & NABL accreditation of labs
- O&M

DAP will be approved by DWSM

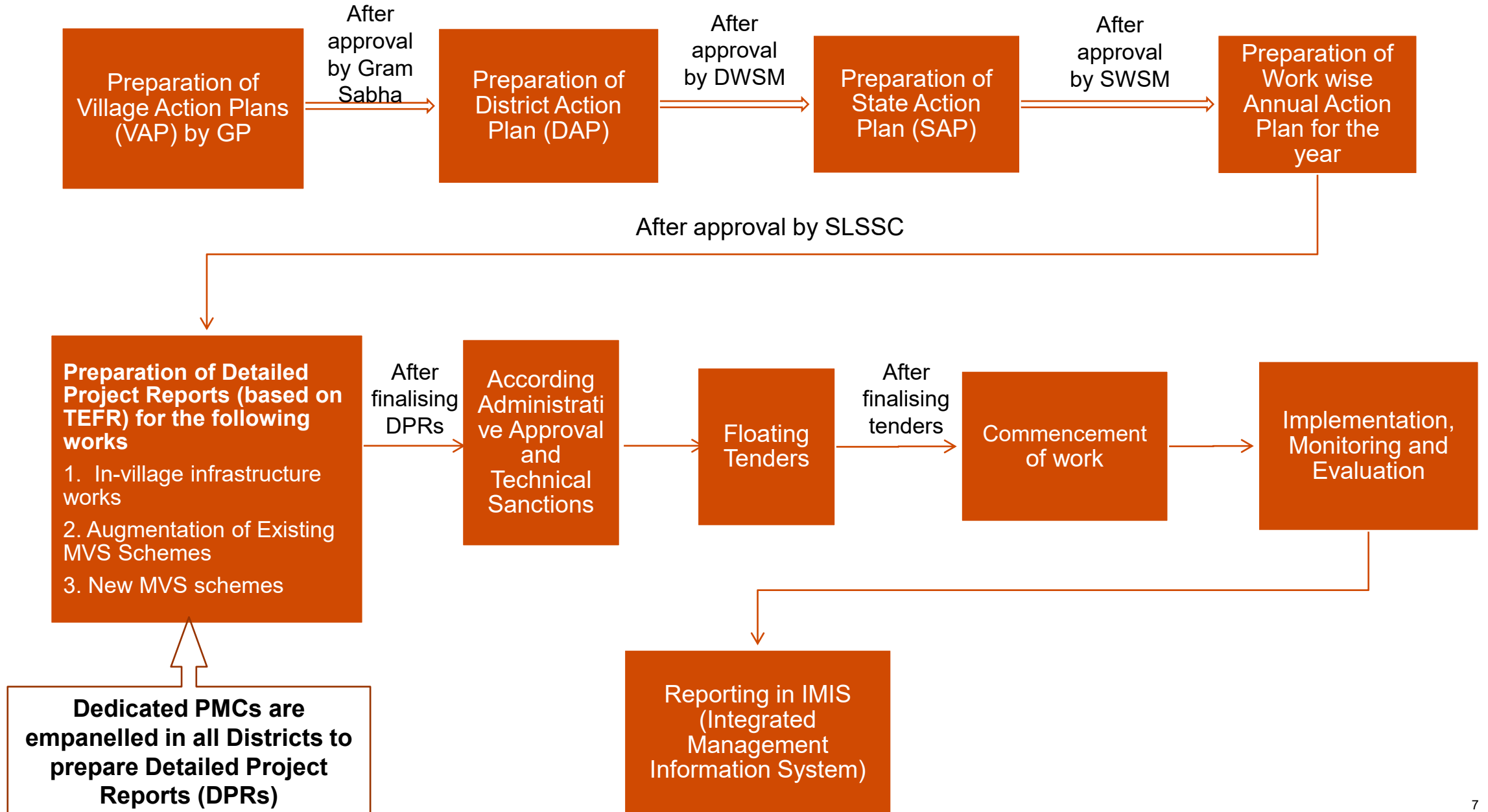
STATE ACTION PLAN

State Action Plan (SAP) – Prepared by SWSM

- District wise database
- Priority area planning
- Analysis of the schemes proposed in DAP
- Innovative technological interventions
- Timelines for all activities for district wise FHTC coverage and financial requirement
- HR required at different levels, training and capacity building

SAP will be approved by SWSM & GoI

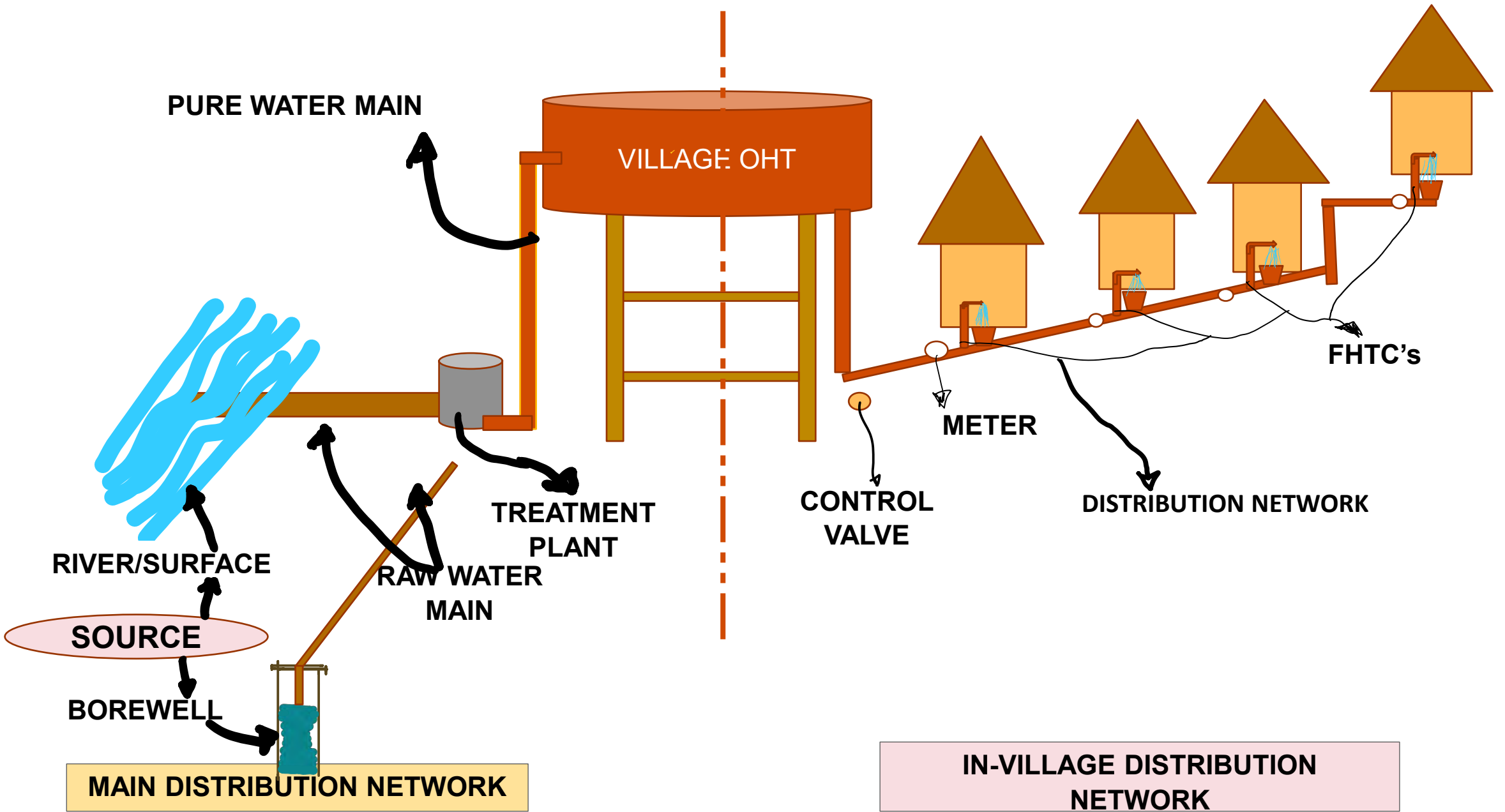
PROCESS FLOW



JJM – Financial Planning and Funding

- For Karnataka the sharing pattern between Centre and State is -
 - for bulk water supply - 50:50
 - for in-village infrastructure - 42.5:42.5:5:10 (GoI:GoK:15th FC:CC, CC-10% for general dominated villages)
- 42.5:42.5:5:10 (GoI:GoK:15th FC:CC, CC-5% for SC,ST dominated & hilly areas)
 - for Implementation Support Activities - 60:40 (5% out of overall fund)
 - for Water Quality Monitoring & Surveillance and other support activities - 60:40 (2% out of overall fund)

Type of scheme	Indicative Cost Per HH (In Rs.)
Retrofitting of ongoing schemes for last mile connectivity to provide FHTC	7,500
SVS in blocks having both adequate quantity and good quality of groundwater	15,000
SVS based on treated groundwater/ in hard rock area	25,000
Multi Village Scheme	47,000
Mini solar based piped water supply scheme in isolated/ tribal hamlets	7,00,000



PICTOGRAPHIC PRESENTATION OF JAL JEEVAN

MISSION-FHTC's

FHTC SATURATION PLAN

Sl. No.	Details	Numbers in lakhs
1	Total Rural Households as on 01.04.2020	91.19
2	Rural Households with tap connections up to the end of March 2020	24.72
3	Households provided with FHTCs in the year 2020-21	3.43
4	Balance Households to be provided with FHTCs [1-(2+3)]	63.04
5	Households planned to be provided with FHTCs in the year 2021-22	25.17
6	Households planned to be provided with FHTCs in the year 2022-23	27.15
7	Households planned to be provided with FHTCs in the year 2023-24 (till the end of December 2023)	10.72

JJM – SATURATION PLAN

To provide 55 LPCD safe drinking water from sustainable sources through FHTCs to all the 91.19 lakh rural households entire state, a plan of Rs.40,000 crores has been prepared (under 2215 H/A)

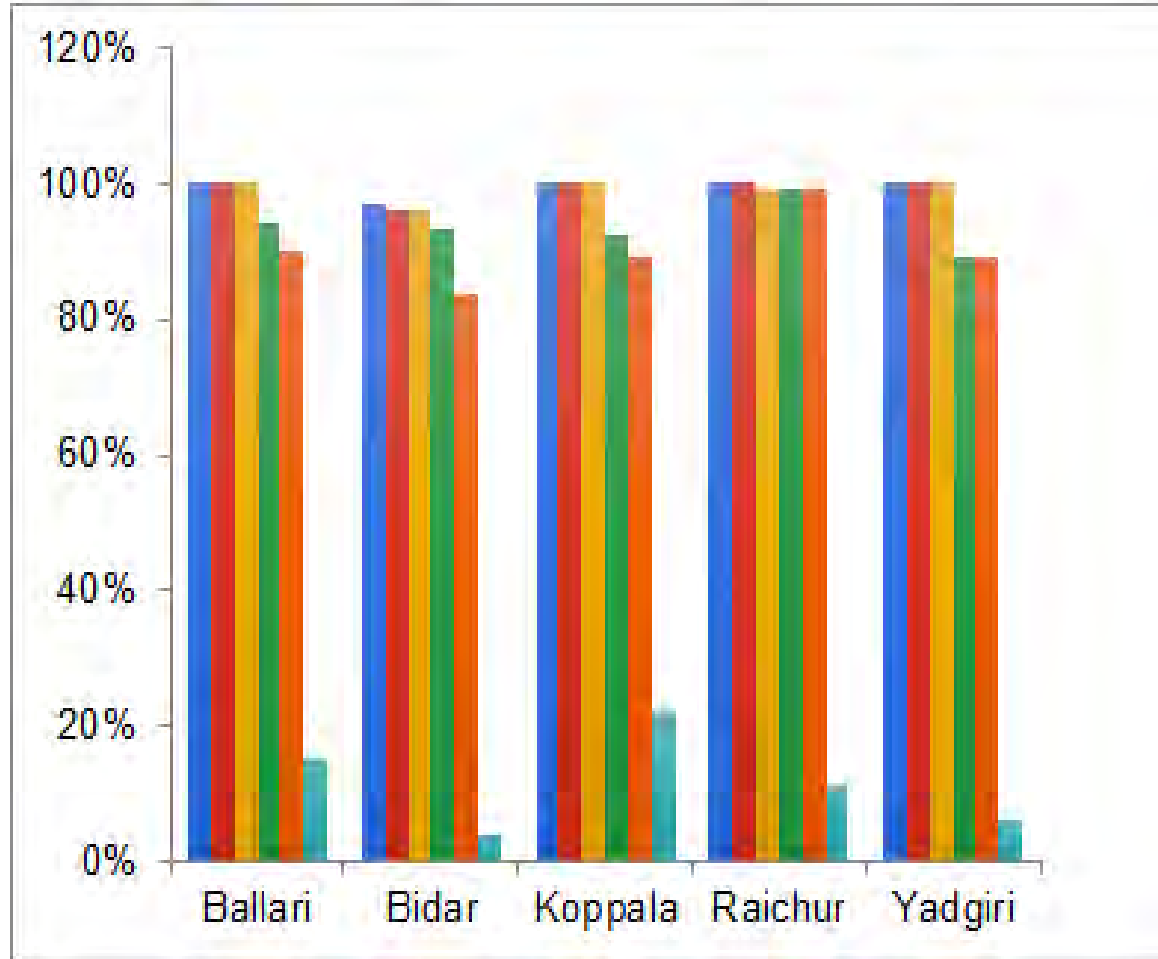
Sl. No.	Planned year	Type of scheme	No of schemes	No. of FHTCs (in lakhs)	Amount (Rs. in crores)
1	2021-22	MVS	99	21	13000.00
2		SVS	4000	4.17	1550.00
Total			4099	25.17	14550.00
Provision for 2021-22					8196.95
3	2022-23	MVS	161	19	15700.00
4		SVS	2500	8.14	1550.00
Total			2661	27.14	17250.00
5	2023-24 (Till December 2023)	MVS/SVS	-	10.72	8200.00
Grand Total			6760	63.03	40000.00

SNAPSHOT OF PROGRESS IN 2020-21

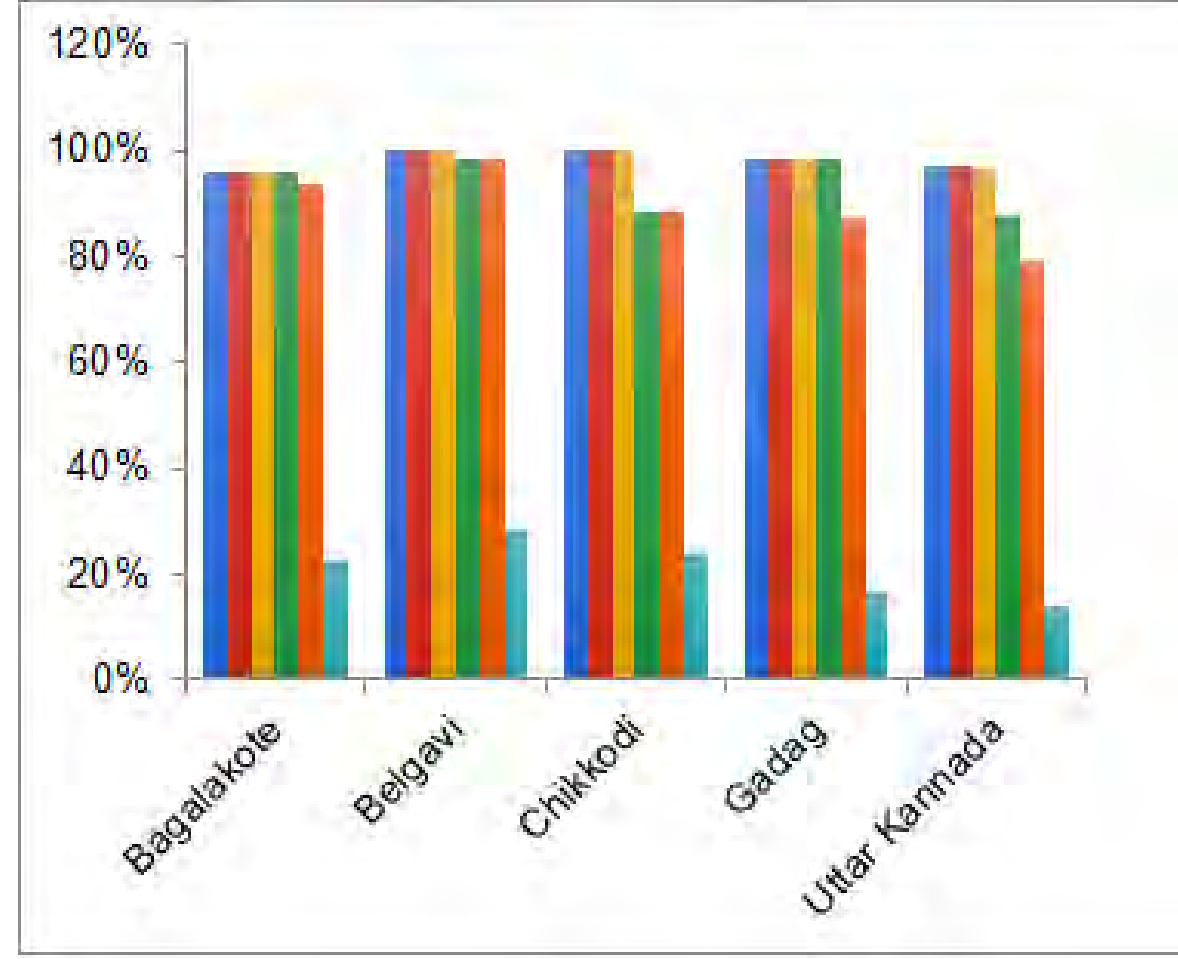
	Number of DPRs	Number of households	Amount (Rs. in crores)
Total works	10118	23,56,247	5341.50
DPRs finalised	10082	23,43,459	5204.62
ADM Approval	10070	23,33,923	5102.31
Technical sanctions given	10066	23,22,345	4852.61
Tender Floated	10033	23,06,527	4542.43
Awarded works	8748	1982966	361.94
Works under progress	7540	1667687	3177.43
Works completed	896	318604	414.59
FHTCs provided in 2020-21	3.43 lakh		

TOP 5 DISTRICTS (wrto Works commenced)

Kalburgi circle



Belgavi circle



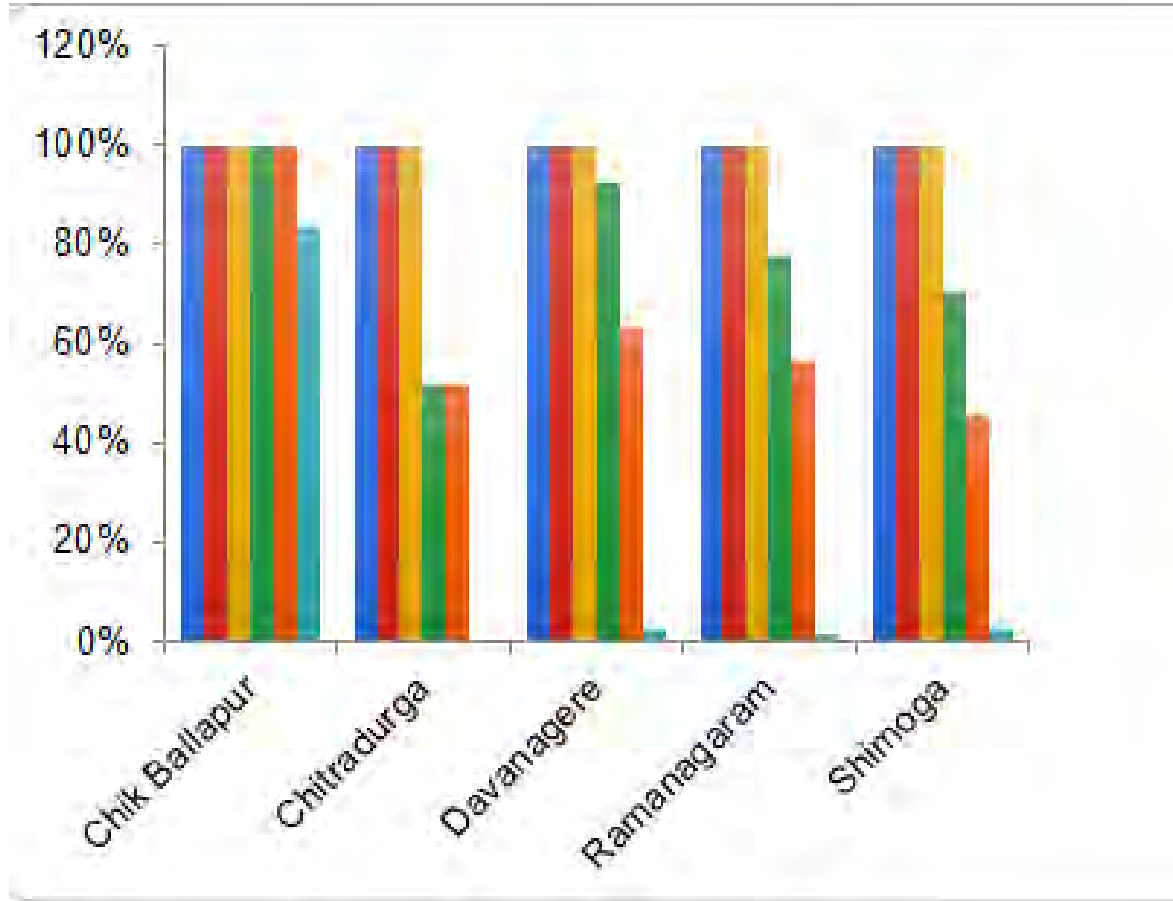
■ DPR finalised
■ ADM Approvals accorded

■ Technical sanctions given
■ Agreement executed (incl. piece works)

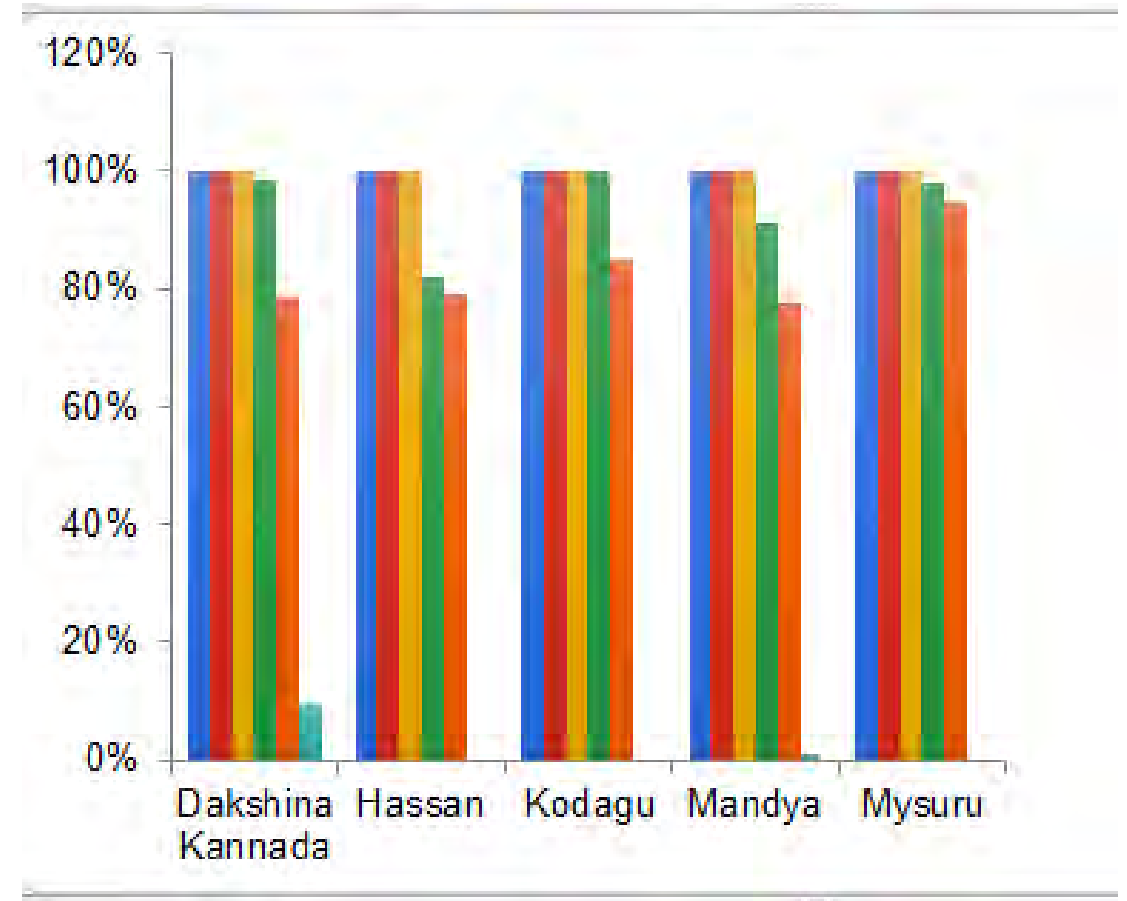
■ Works commenced
■ Works completed

TOP 5 DISTRICTS (wrto Works commenced)

Bangalore circle



Mysore circle



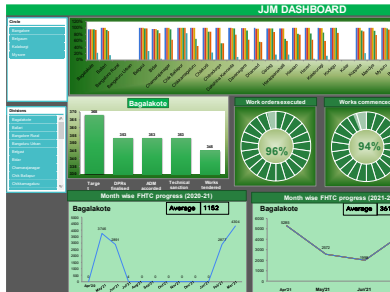
■ DPR finalised
■ ADM Approvals accorded

■ Technical sanctions given
■ Agreement executed (incl. piece works)

■ Works commenced
■ Works completed

Monitoring of Progress

1. Periodic review of progress
2. Frequent site visits and follow up reviews
3. Daily updation of progress in a dedicated spreadsheet
4. Updation of data in IMIS
5. Real time dashboard



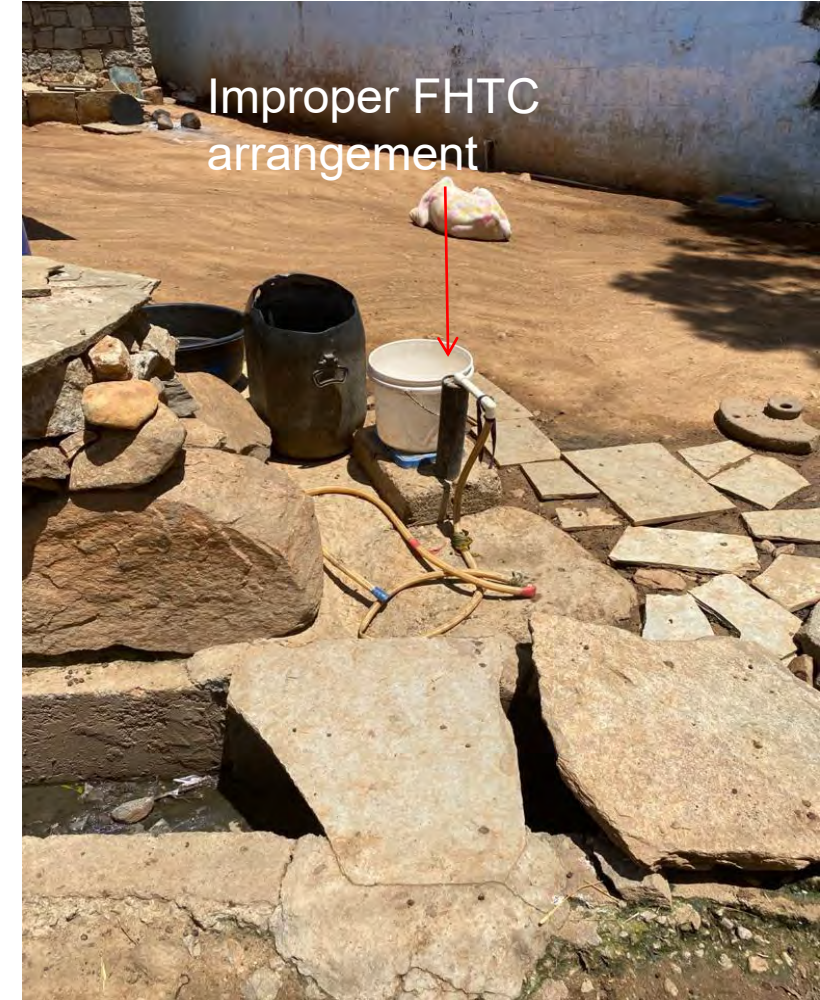
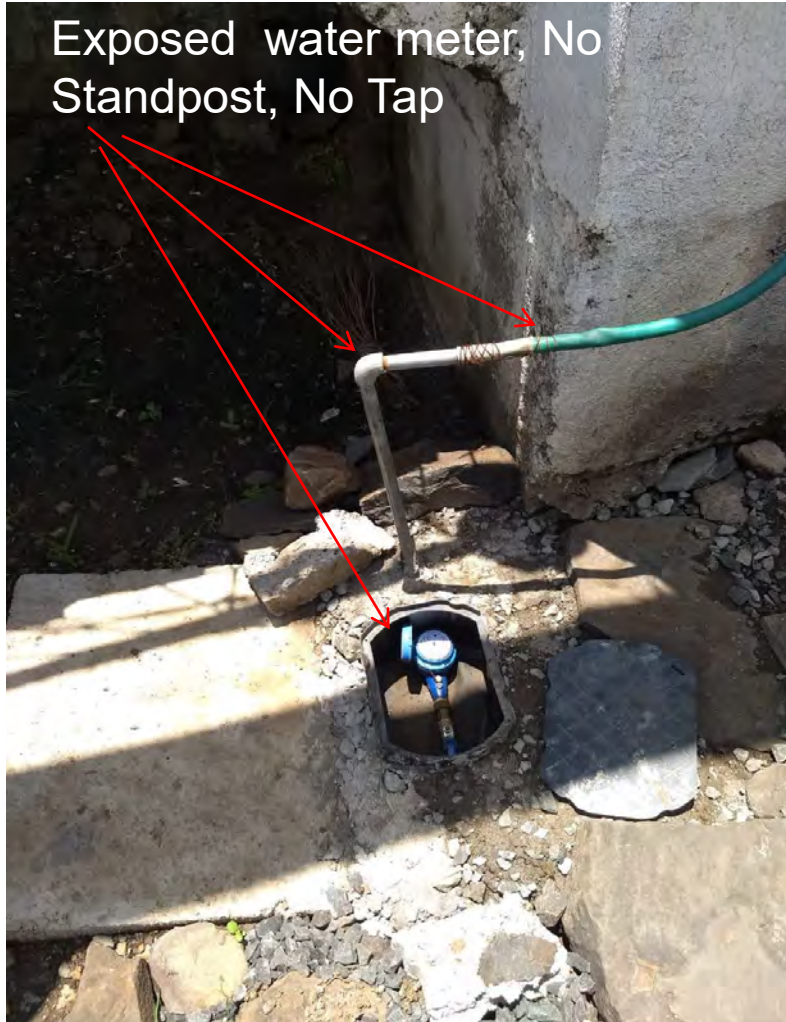
Good Practices



Good Practices



Bad Practices



Bad Practices



THANK YOU



Rural Drinking Water & Sanitation Department
Rural Development & Panchayat Raj Department
Government of Karnataka

Swachh Bharat Mission (Gramin)

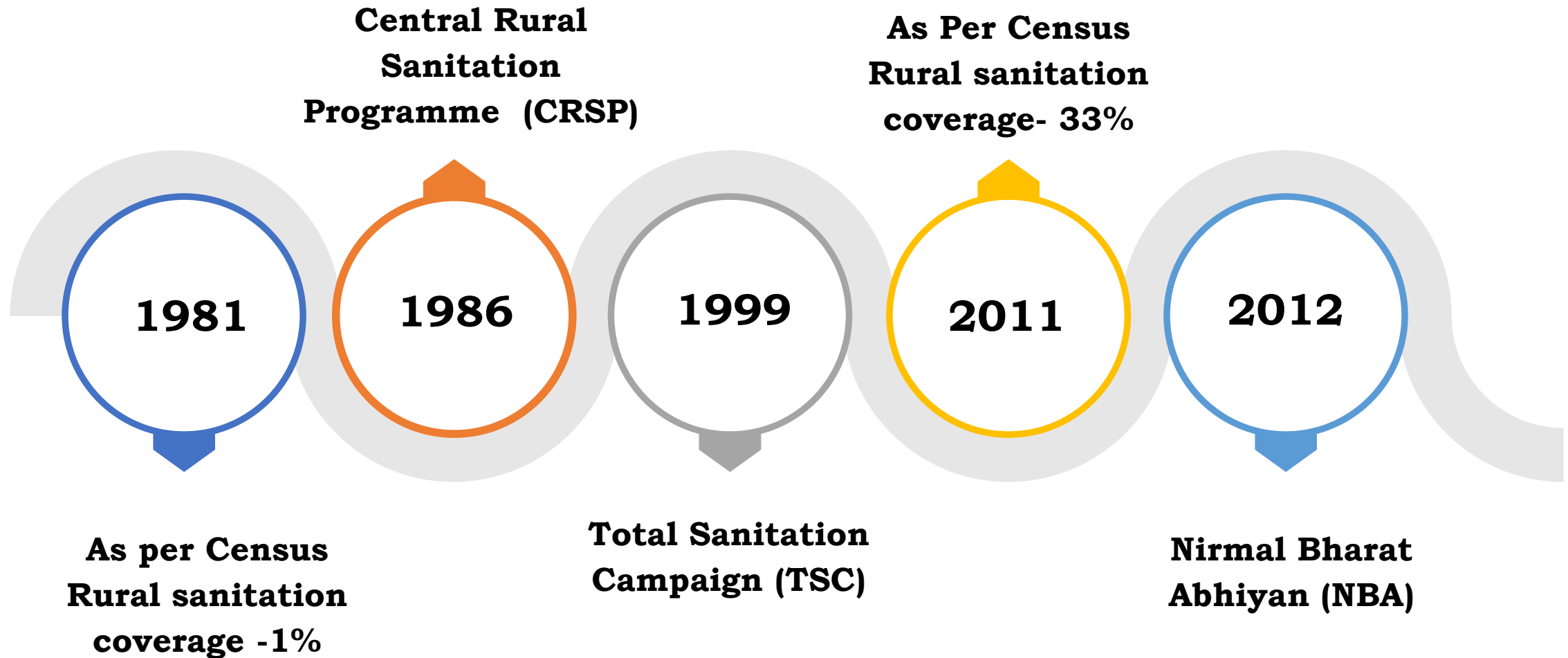


ನಮ್ಮ ಸುತ್ತಮುತ್ತಲಿನ ಪರಿಸರವನ್ನು ಸ್ವಚ್ಛವಾಗಿರಿಸೋಣ,
ಭೂಮಿಯನ್ನು ಹಸಿರುಮಯವಾಗಿರಿಸೋಣ

OVERVIEW OF SBM-G & ODF PLUS

INTRODUCTION

Brief history:



Brief history: Cont....,

SBM-G



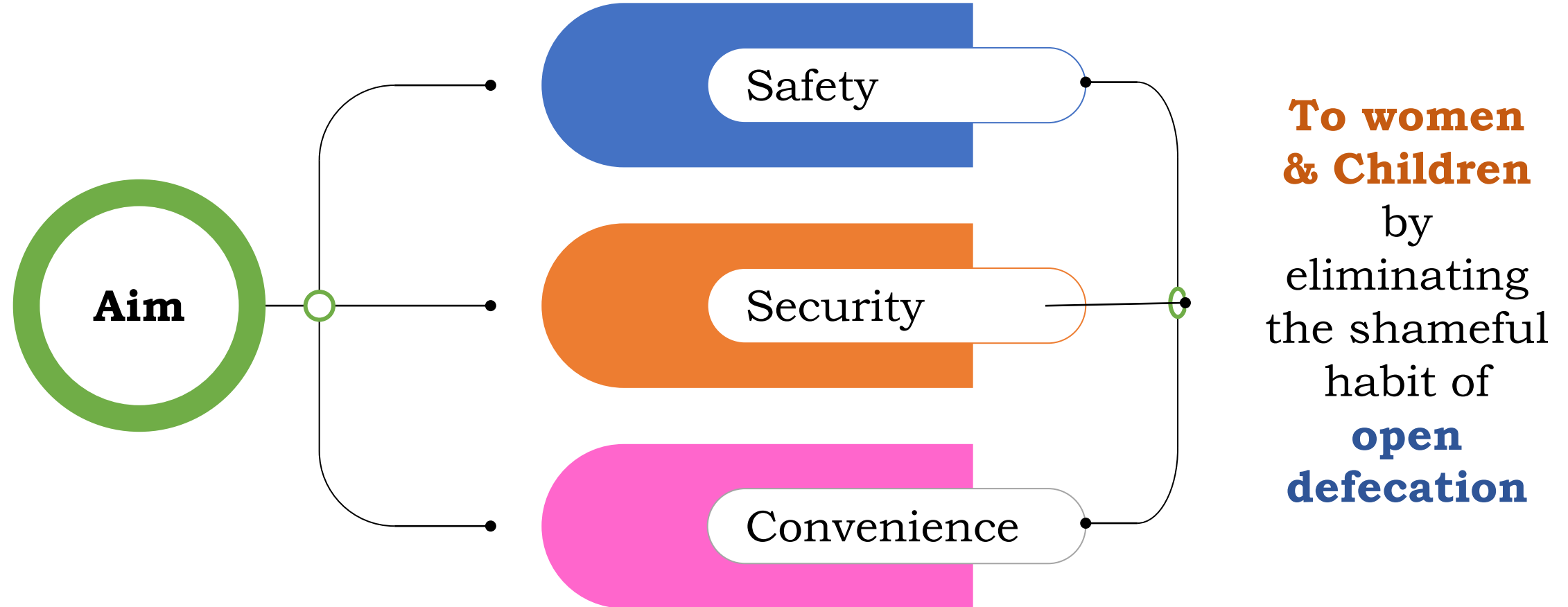
Year 2014-2019



Year 2020 -2025

LAUNCH OF SBM-G (PHASE-I)

Swachh Bharat Mission (Gramin) was launched on **2nd October 2014**



Sanitation coverage achieved:

- ❖ As per **BLS 2014** the rural Sanitation coverage was **39%**
- ❖ SBM(G) achieved **100%** coverage in 2019 (as per BLS 2019)
- ❖ **India became ODF** by building **10.28 Cr toilets** across 36 States/Union territories.

Key Components

IEC

(Information Education
Communication)



IHHL

(Individual House
Hold Latrines)



LWM

(Liquid Waste Management)

1. FSM
2. GWM



CSC

(Community
Sanitary Complex)



SWM

(Solid Waste Management)

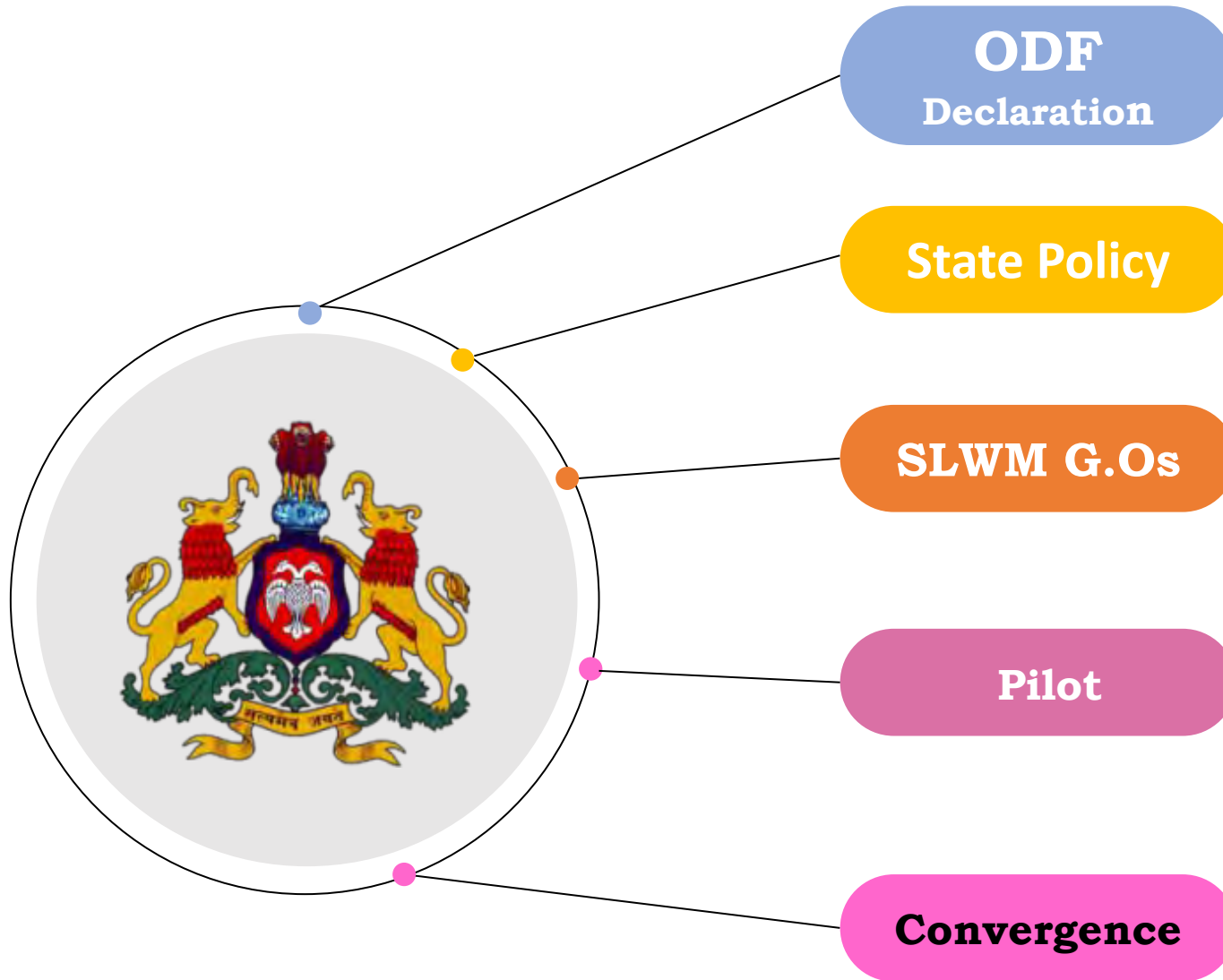
1. GOBARDHAN
2. MRF
3. MHM



ODF
Sustainability



KEY ACHIEVEMENTS



19th, November 2018

(Constructing around 45 lakhs IHHL)

Policy, Strategy & Bye law

GO- 12th March, 2020

Gazetteer - 28th May -2020

In principle approval

SLWM (14-10-2019) – All GPs’

LWM (13-11-2020) – 4464 GPs’

SWM (15-01-2021) - 2545 GPs’

Approved – 4829 Nos

Operational- 2065 Nos

FSM – 17 Nos. MRF- 4 Nos.

Gobardhan – 11 Nos

Incinerators -32 Nos

SWM Vehicle – 15th FC

DWCC – MGNREGA

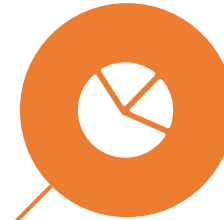
MOUs- GP Clusters & ULBs

SBM-G PHASE-II (2020-21 TO 2024-25)

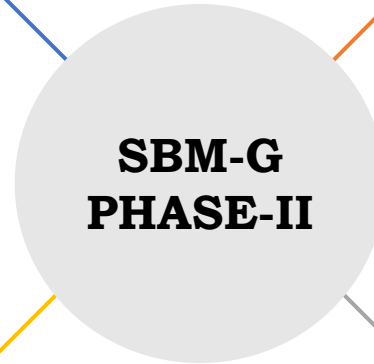
The GOI has approved Phase-II of the SBM-G in **February 2020**

Total **outlay** of **Rs.1,40,881 Crores**

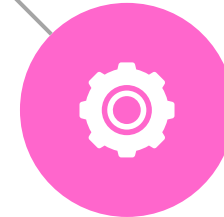
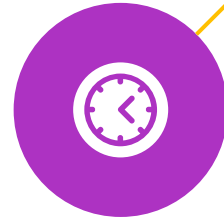
**CSR & Revenue
generation models**



15th FC



MLA & MPLAD

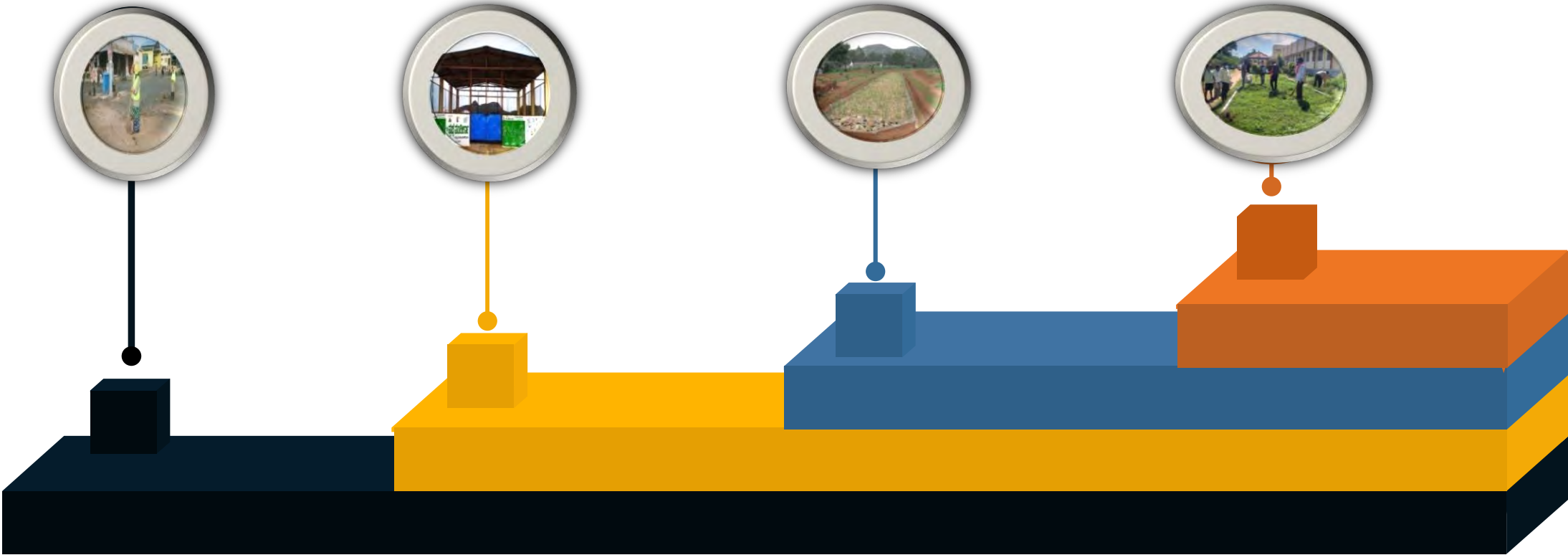


MGNREGA

Convergence model

SBM-G PHASE-II (2020-21 TO 2024-25)

KEY COMPONENTS OF SBM-G PHASE-II



**ODF
Sustainability**

**Solid Waste
Management**

**Liquid Waste
Management**

**Visual
Cleanliness**

FROM ODF TO ODF PLUS

ODF Sustainability

- New IHHL (including LOB/NOLB)
- Community Sanitary Complex (CSC)
- Third party verification of sustaining ODF status
- Capacity Strengthening of rural local self governments
- Sustainability centric IEC
- Awards, Incentives to Communities for Sustaining ODF Status
- Retrofitting through IEC

• ODF-Plus

- Solid & Liquid Waste Management



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INDIVIDUAL HOUSEHOLD LATRINE (IHHL)

STATUS OF IHHL

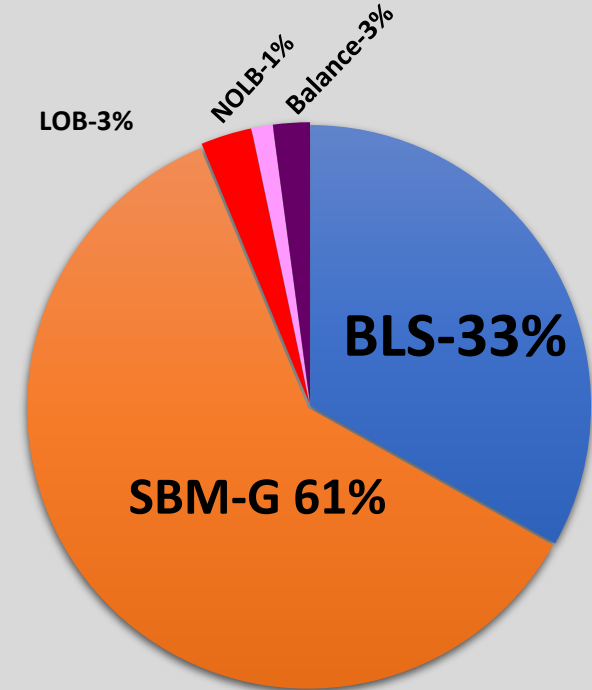
IHHL coverage

(Baseline survey (BLS) 2012-13)

- Total Rural Households: **70,26,518**
- Households with Toilets: **24,83,863**
- Households without Toilets: **45,42,655**

1. Completed Construction of IHHL Toilets - 45,42,655 and Rural Karnataka declared as ODF on 19th November, 2018.

Scheme	Target	Nos.	Status
LOB(2018-19)	Target	214575	Completed
NOLB(2019-20)	Target	210559	Completed
New IHHL- Phase-II(2020- 21)	Target	122562	On going
	Achievement	36808	
	Balance to be Constructed	85754	





COMMUNITY SANITARY COMPLEX (CSC)

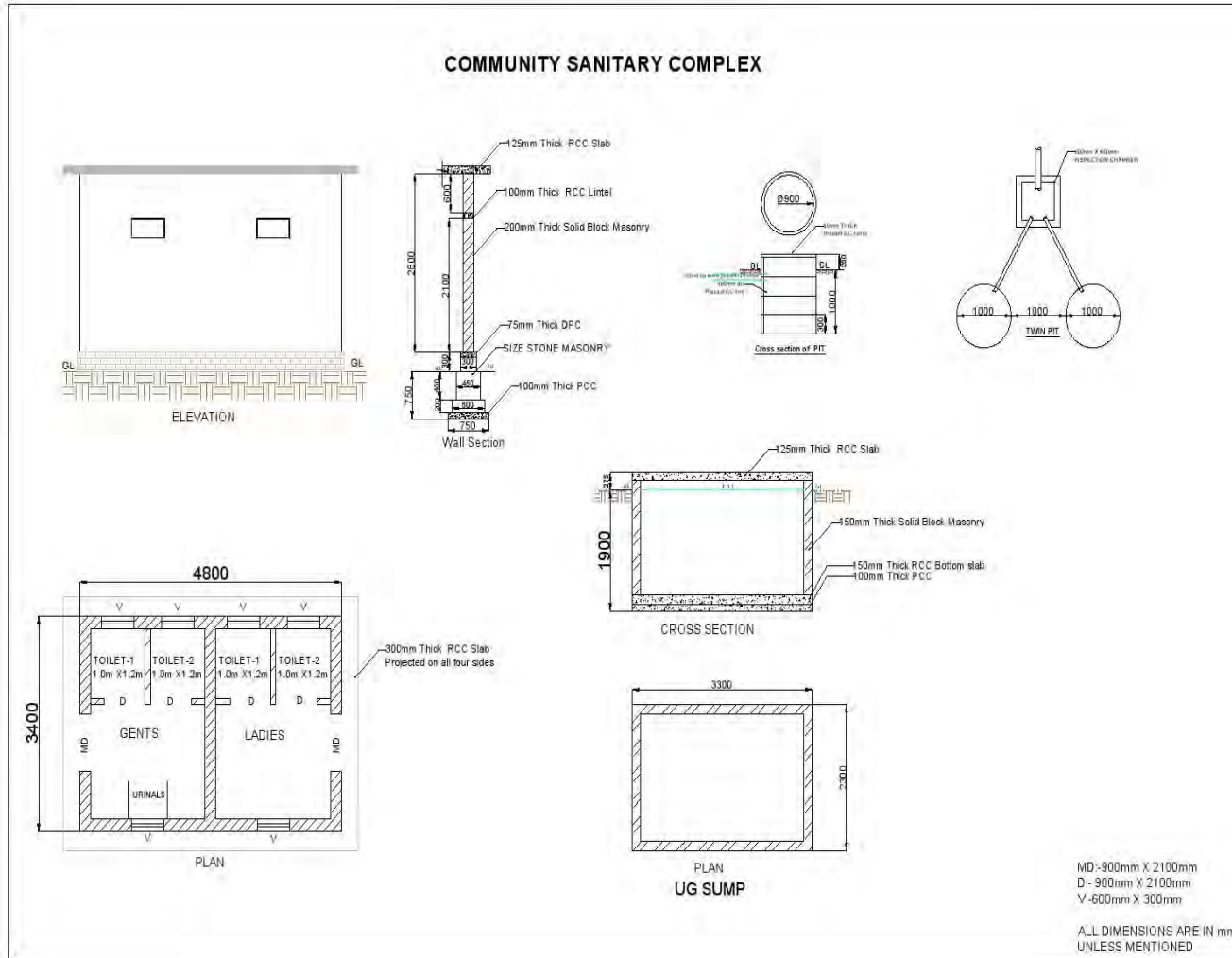
IMPORTANCE OF CSC

Community sanitary complex is a facility built for :

- Households /community who have **lack of space** for constructing an IHHL.
- **Floating population/migrant workers** tourists, public gathering places
- **Owned and maintained** by community based organisations or Gram panchayat.
- Other utilities-bathing facility, place for washing clothes, depending on the needs of the community.



REQUIREMENT OF A CSC



- Separate facilities for men and women,
- Appropriate number of toilet seats, bathing cubicles, washing and cleaning facilities.
- Accessible to **Divyangjans and Transgender.**
- Safe disposal of generated **black water** through twin pit, septic tank with soak pit and other suitable technology.

ARRANGEMENTS FOR OPERATION AND MAINTENANCE

1. A Model Template is designed by the State & shared to districts where the districts have to detail out the following points.

- Necessity of CSC
- Details of HH's which will be tagged to each CSC
- Documents of the land available to construct the Unit
- Details and certification by the GP regarding adequate supply of water and electricity.
- GP's plan for operating and maintaining the unit

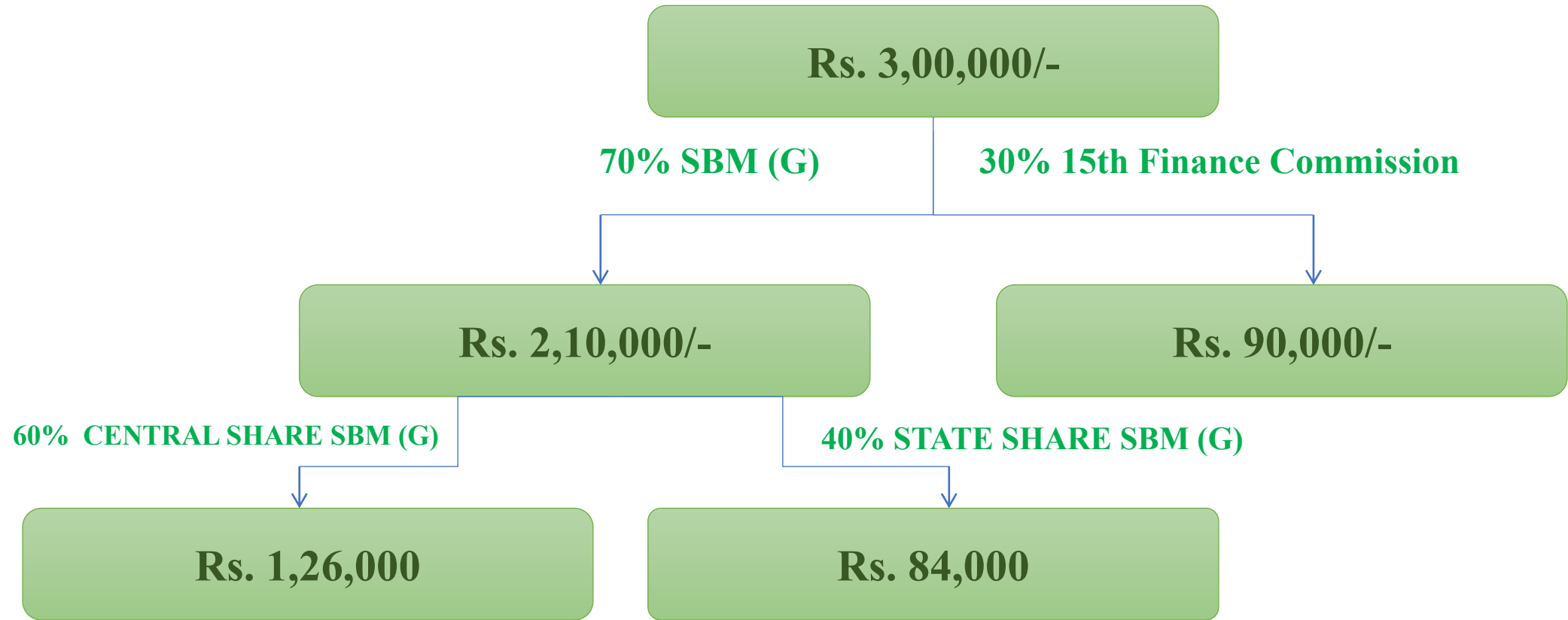
By this we make sure the proposals are approved only where there is necessity and a proper O&M mechanism is in place.

2. State reviews the GPs on maintenance of CSCs (On their own or through CBOs)-basic facilities like electricity, water, cleaning material, Sanitation Staff, maintaining structure and regular desludging of pits or Septic tanks connected to CSCs.

3. GoK issued a detailed advisory on utilisation of 15th FC grants to carry out O&M activities by GPs.



FUNDING PATTERN



Convergence under MGNREGA : 230 Days * Rs.289 per day =Rs.66,470

PROGRESS STATUS OF CSC



Year	Target	Approved	Completed	Ongoing	Approved amount	Release	Expenditure
2018-19	3000	1326	1258	68	2386.80	2293.80	2122.20
2019-20	1000	307	270	37	552.60	517.50	432.35
2020-21	1000	308	98	210	646.80	336.00	2.10
Total		1941	1626	315	3586.20	3147.30	2556.65



SOLID WASTE MANAGEMENT(SWM)

SOLID WASTE MANAGEMENT (SWM) AT GP LEVEL

- **Solid Waste Definition**

Discarded **Solid material** because it has served its purpose or is no longer useful



OBJECTIVES OF SWM

**Management
of bio-
degradable
waste**

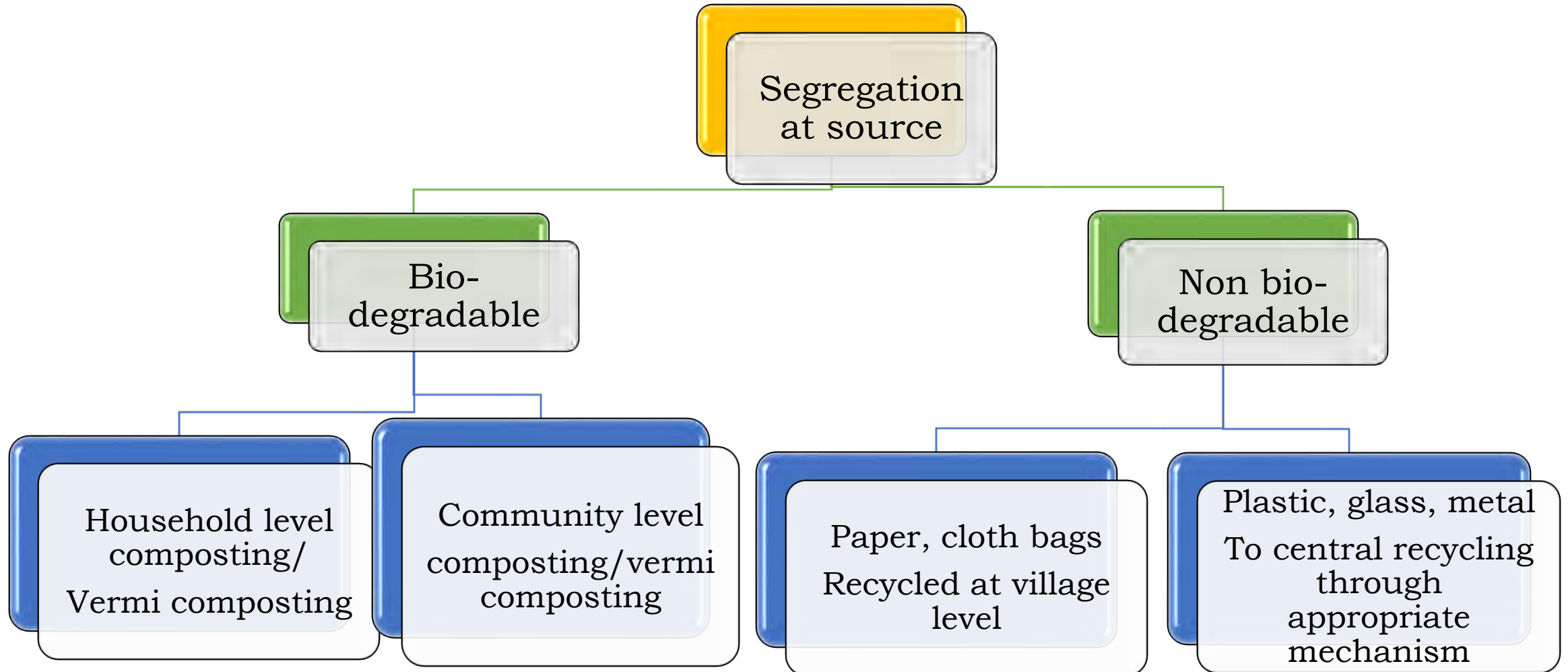


**80% of
Households
and public
places**

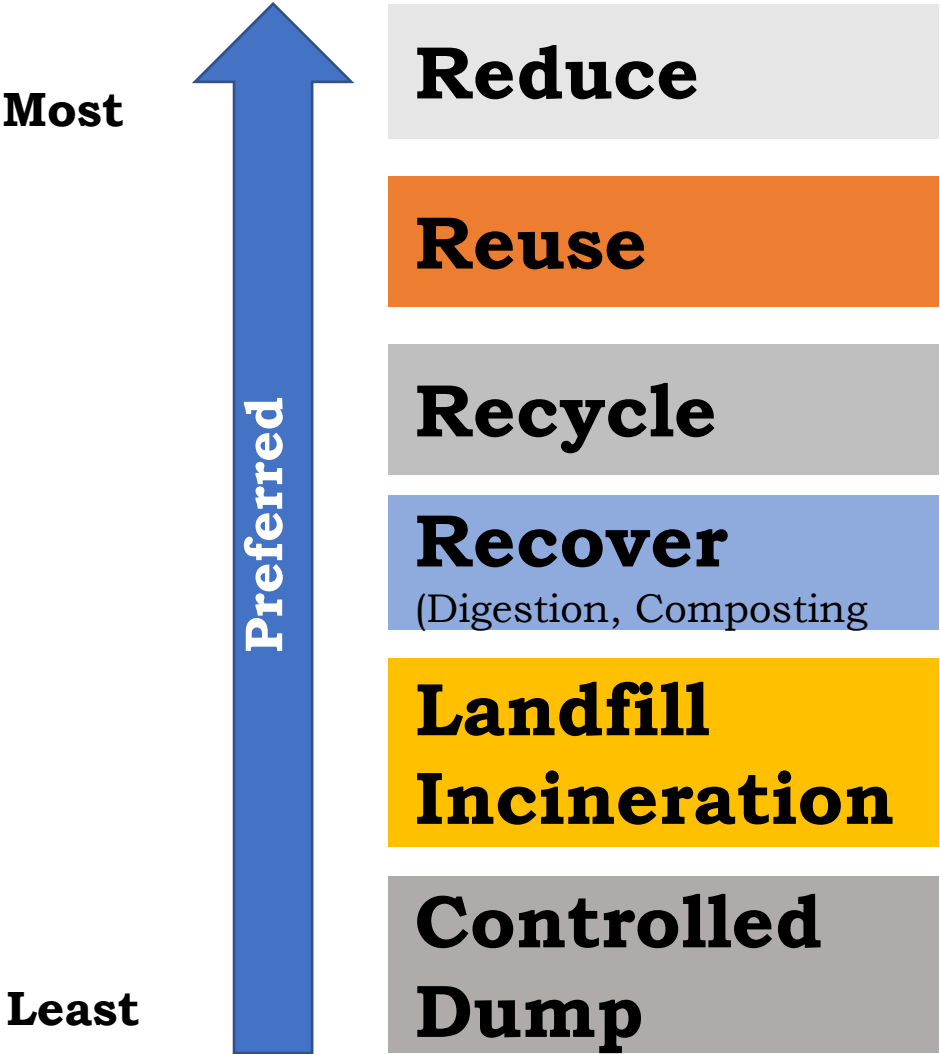


**Management of
plastic waste**

IDEAL SWM SYSTEM



Hierarchy of Waste Management



SWM – MANAGEMENT AT DIFFERENT LEVEL

Household

- Segregation (**Wet & Dry**)
- Composting, Biogas plant & Cattle feeding

Community / village

- Wet waste – Composting, Biogas plant
- Dry waste – Segregation, storage yard
- Inerts to landfill

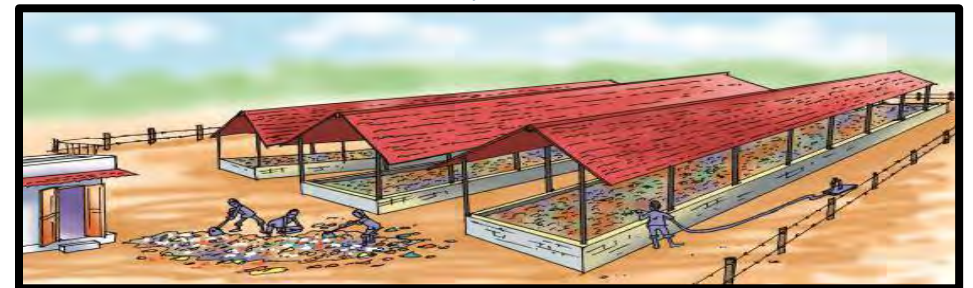
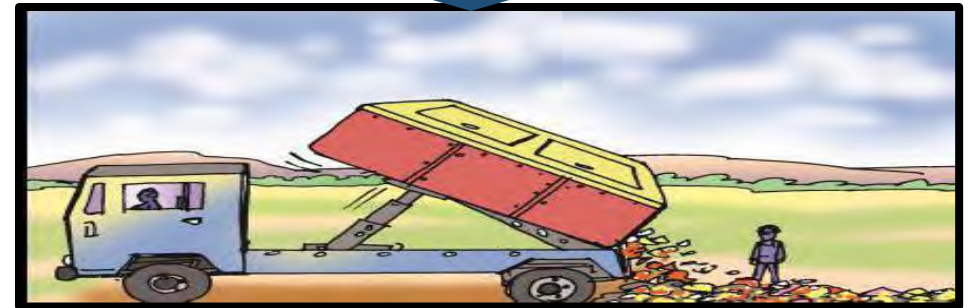
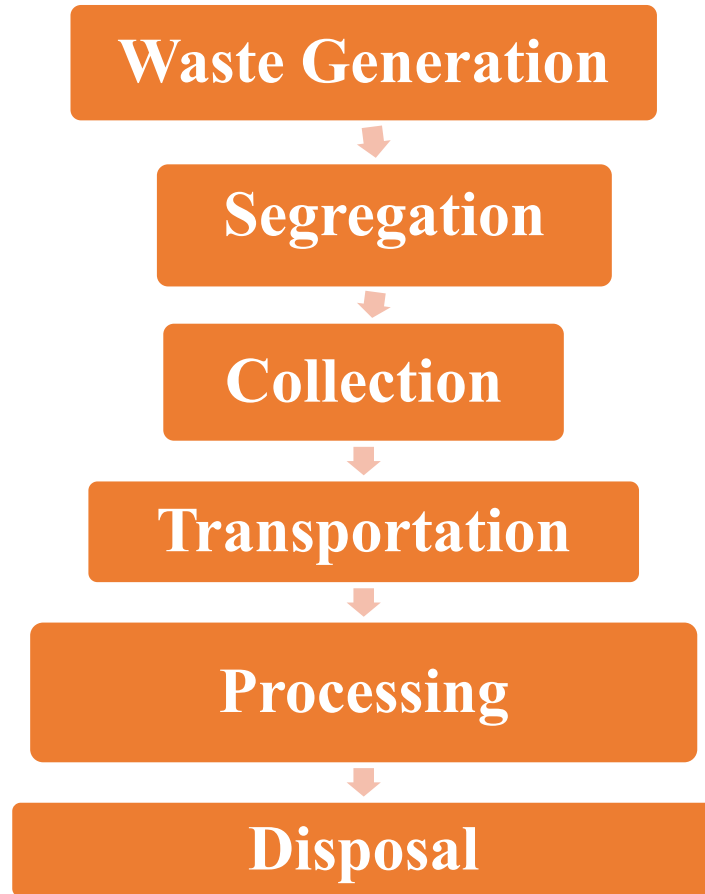
GP

- Wet waste – Composting, Biogas plant
- Dry waste – Resource Collection Centres, segregated dry items sold to authorised recyclers.

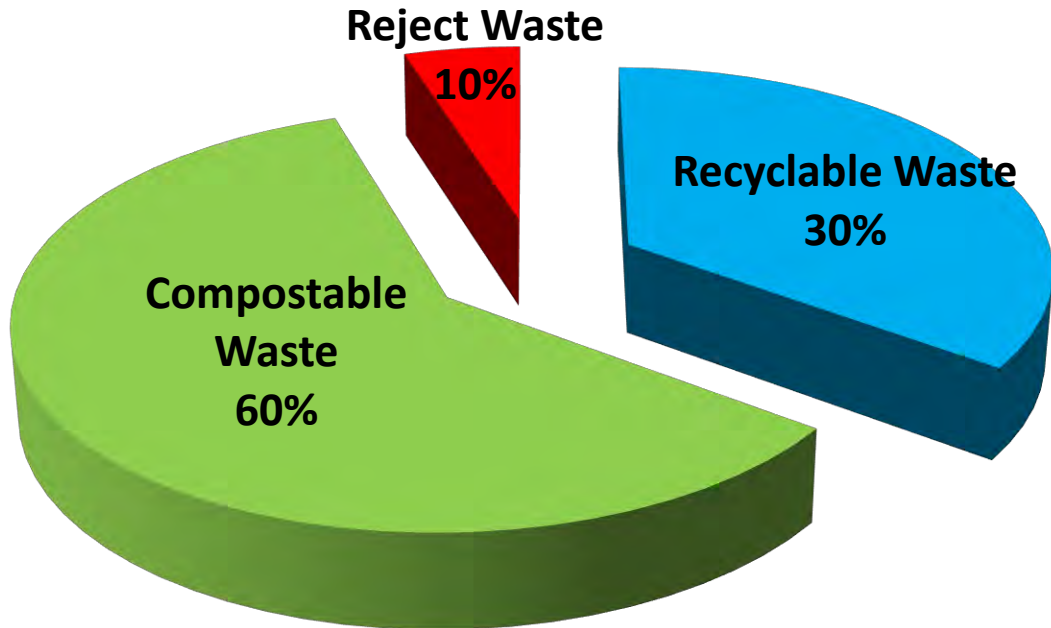
Taluka / District

- Material Recovery facility
- GOBARDHAN

Solid Waste Management



Importance of Segregation of Solid Waste



- Recyclable Waste
- Compostable Waste
- Reject Waste



Pipe Composting



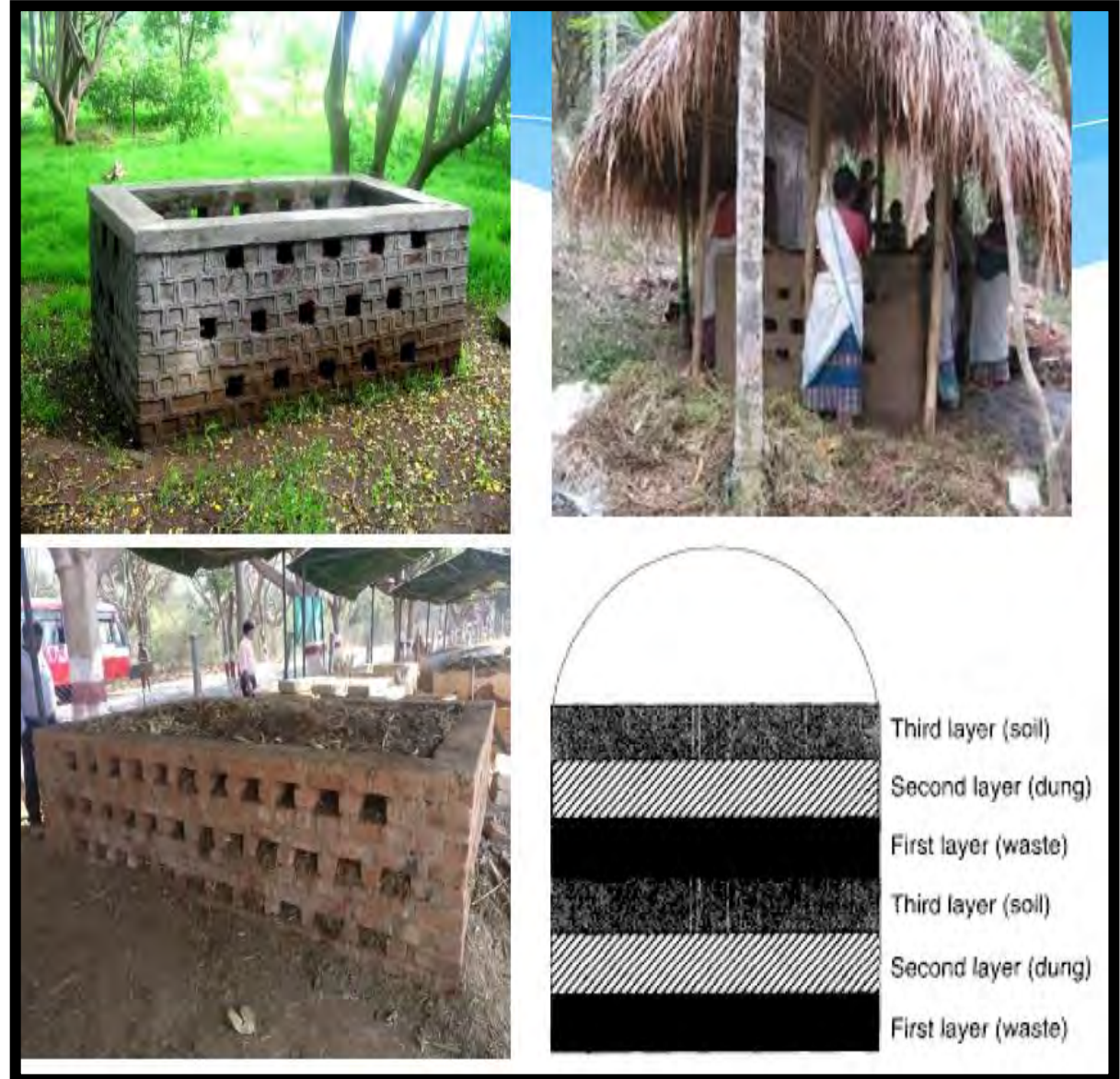
Pot Composting



Vermi composting



NADEP Composting



SWM ACTIVITIES AND CONVERGENCE MATRIX

Components	SBM-Phase II	15 th FC	MGNREGA	Business model/C SR
Segregation bins - households		*		
Segregation bins - Public places		*		
Compost pits, Tri-cycles / other vehicle, Storage for plastic waste	*	*	*	
Setting up of segregation, storage and compost premises			*	
Wages for collection and segregation		*		
Equipments for cleaning the premises and segregation of waste		*		*
O & M for solid waste management		*		

SBM-G PHASE-II FUNDING PATTERN FOR SWM

Village Size	Financial Support
Up to 5000 Population	Solid Waste Management: Up to Rs. 60 Per capita
Above 5000 Population	Solid Waste Management: Up to Rs. 45 Per capita

30% share to be borne by GP from 15th FC Grants, each village can utilize minimum of total Rupees 1 lakh based on their requirements. The remaining 70% share (60:40 Central & State Share) will be provided in SBM (G) Phase II.

SWM – PRESENT STATUS & ACTION PLAN 2020-21

PRESENT STATUS

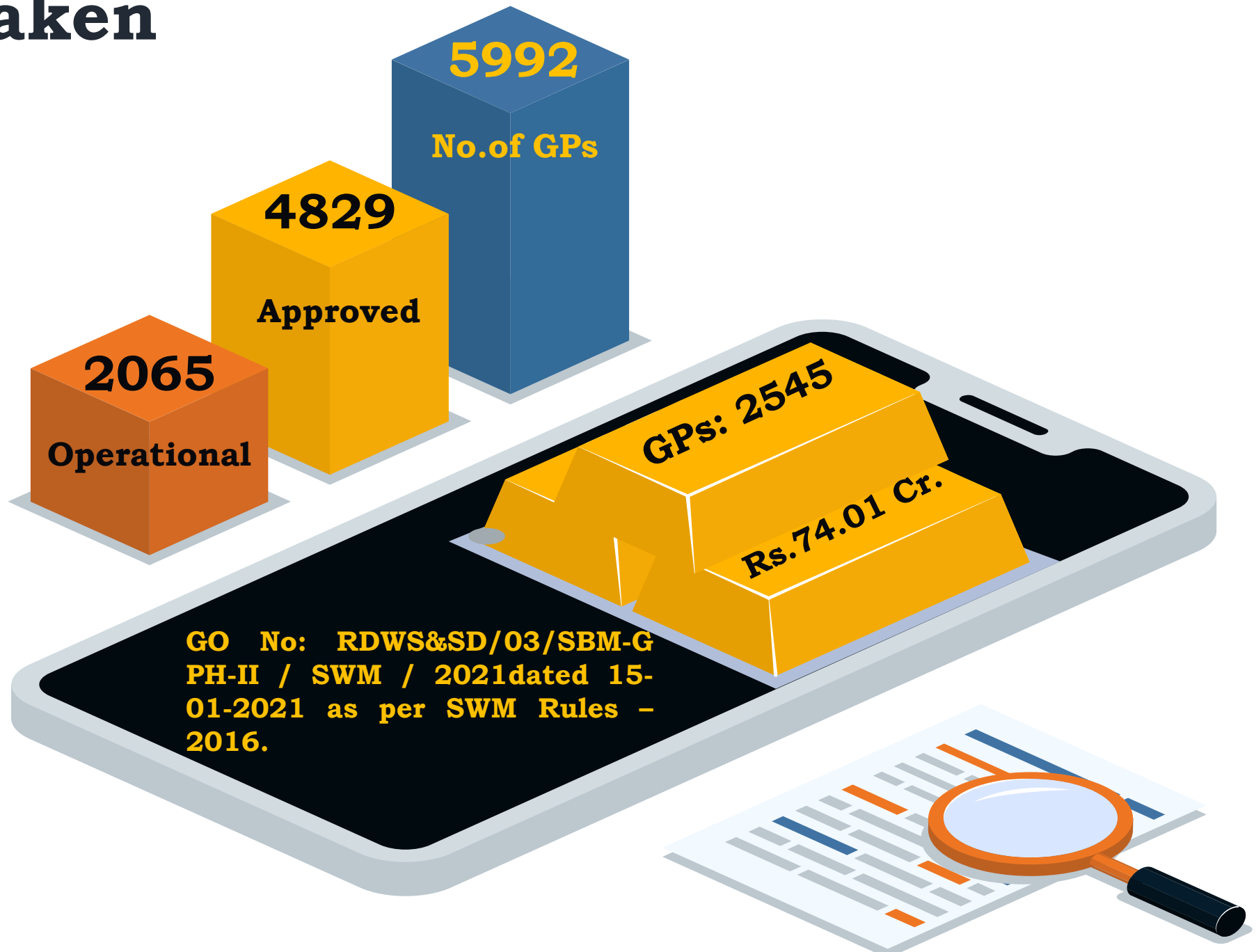
Rs. In Lakhs

Year	DPR Approved	Funds Approved	Funds Released	Funds Utilized	Function al
Total	4829	36836.95	29291.94	14470.84	2065

ACTION PLAN 2021-22

Year	No of GPs	No of Villages
2021-22	2580	15196

Action Taken



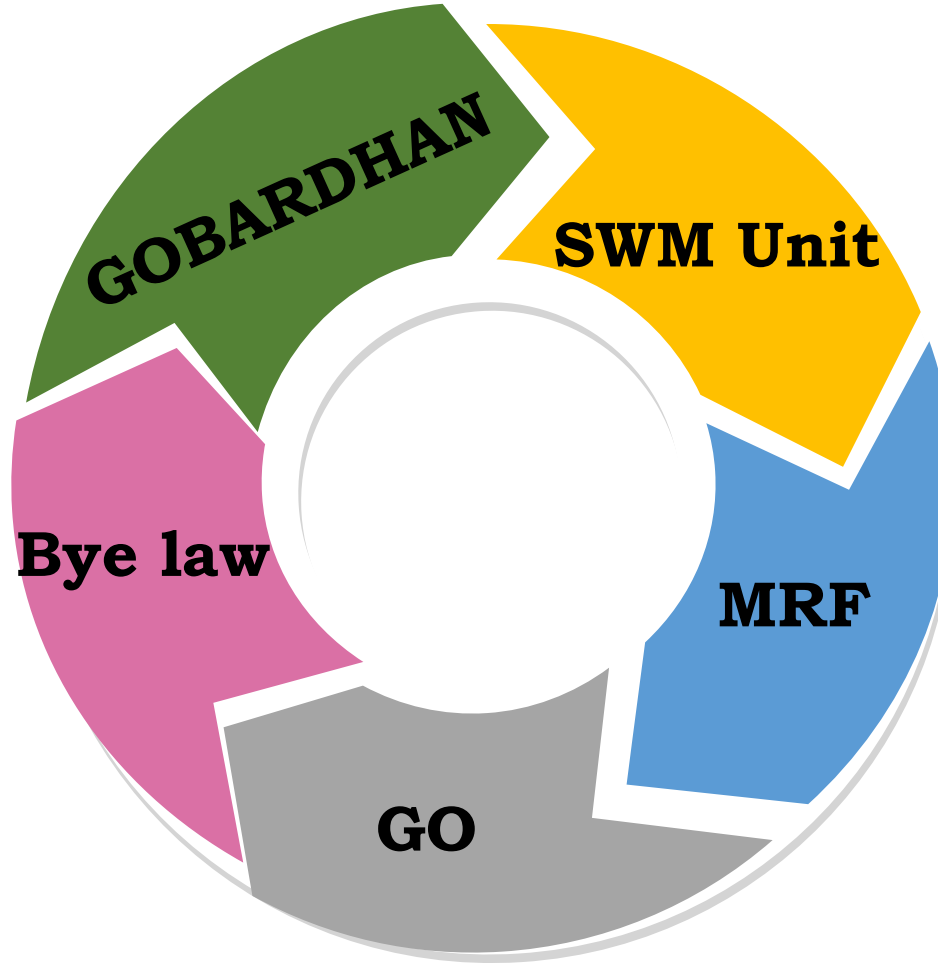
Action Taken

Pilot

1. Udupi
2. Bangalore (R)
3. Uttara Kannada
4. Bangalore (U)

- Adopted by GPs,
- enforcement mechanism
- Impose penalties

State Rural Sanitation and Waste Management Policy, Strategy & Model Bye laws on SWM and LWM



Land Constraints

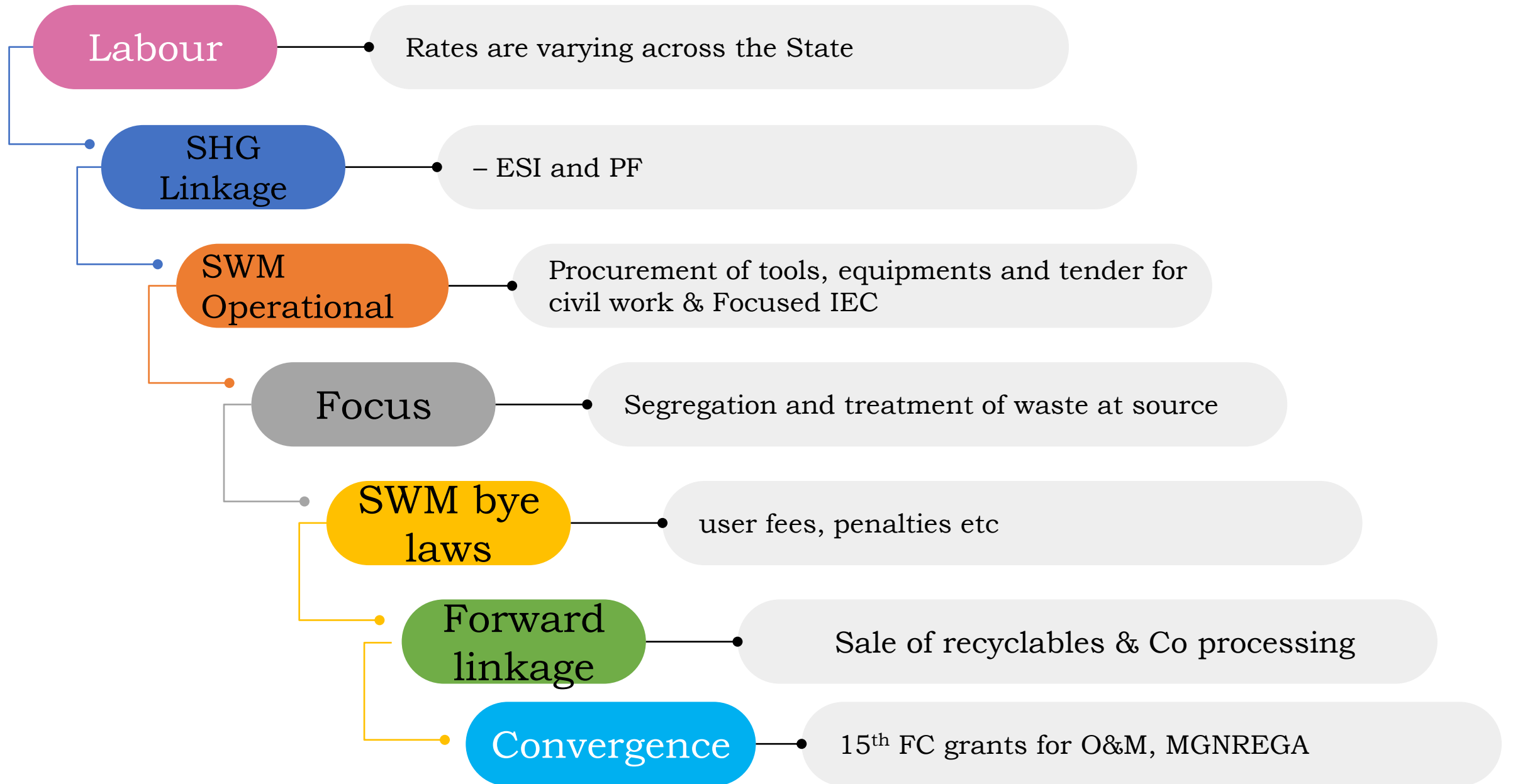
MOU

1. Inter GP
2. ULB

Pilot

1. Udupi
2. Dakshina Kannada
3. Ballari
4. Ramanagara

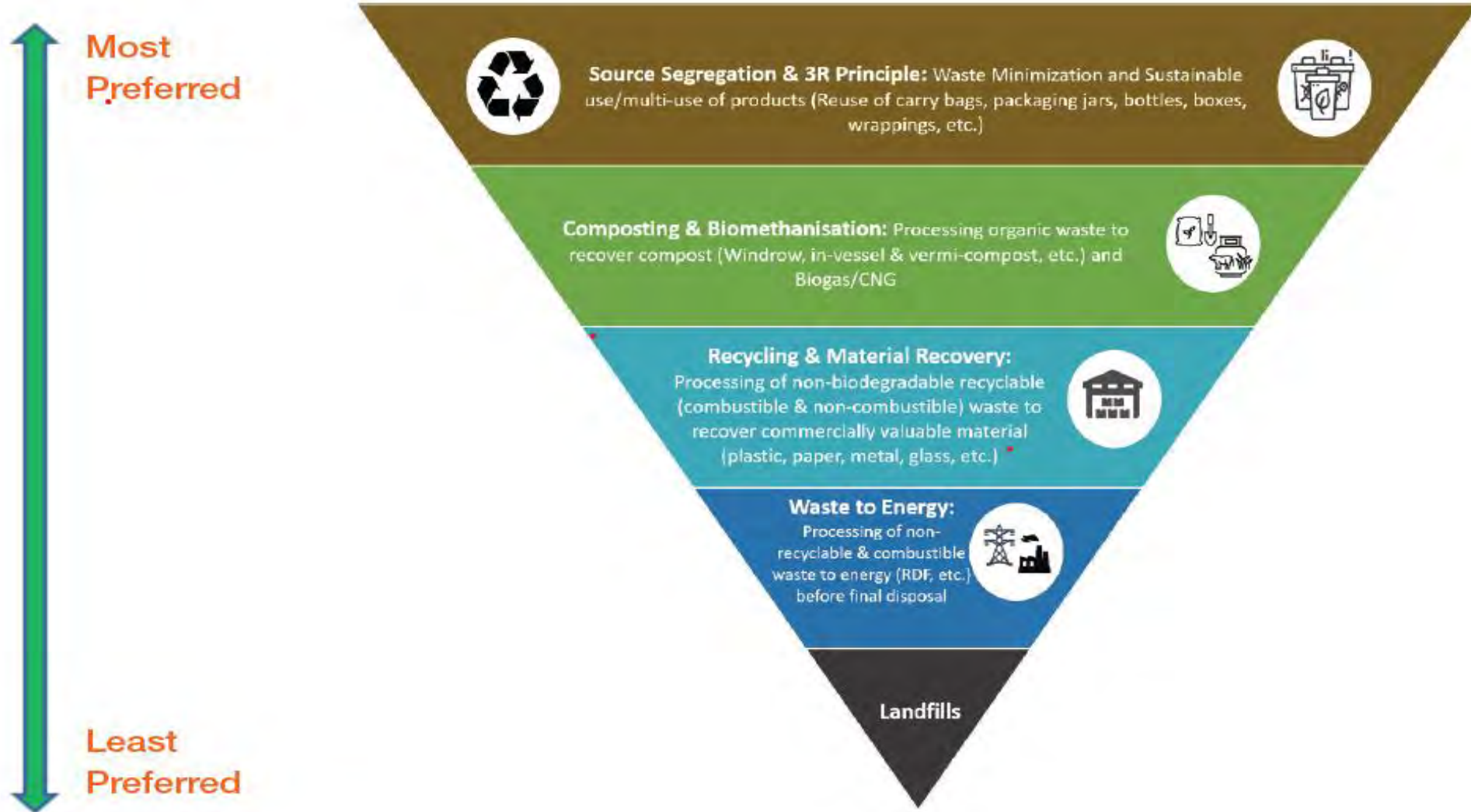
SWM – CONCERNS/PRIORITY AREAS





MATERIAL RECOVERY FACILITY

WASTE MANAGEMENT PRINCIPLES



PROBLEM STATEMENT – DRY WASTE MANAGEMENT

01

Waste dumping & open burning

Fragmented dry waste management across the state leading to dumping/open burning of waste



02

Lack of waste management infrastructure

Absence of aggregation facilities hence leading to unviable operations. Only selective high value waste streams being recovered currently



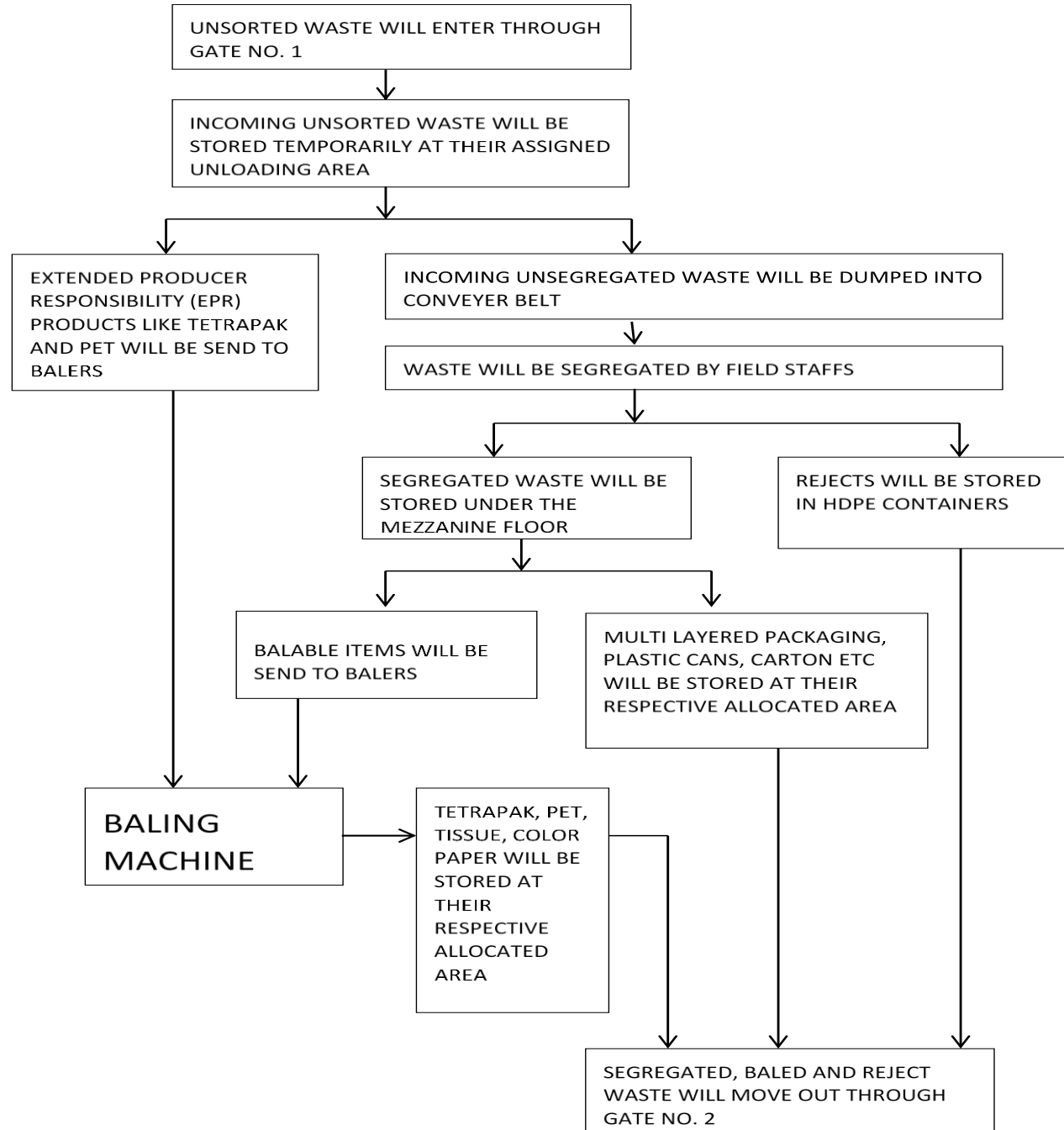
03

Lack of awareness & unskilled workforce

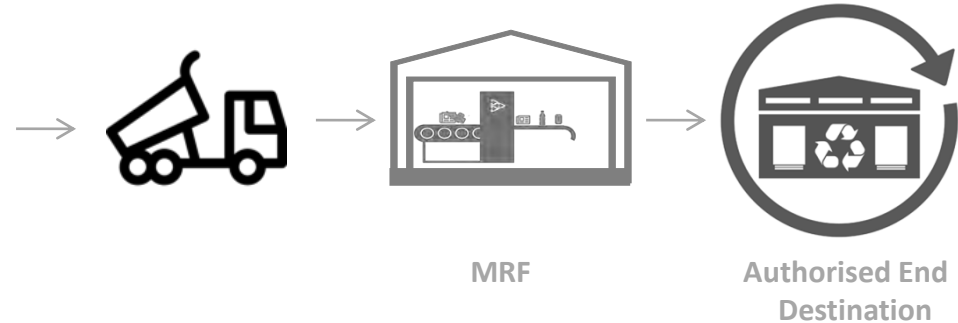
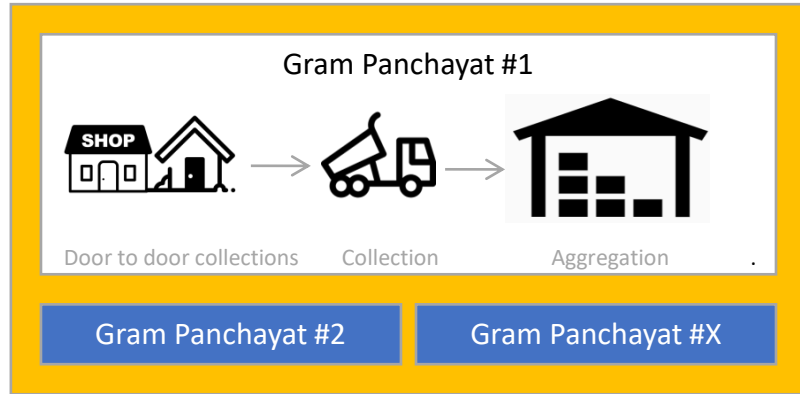
Public awareness of segregation at source and formalisation of waste management industry is critical



MRF Process Flow Diagram



STATUS OF 4 PILOT MRFs



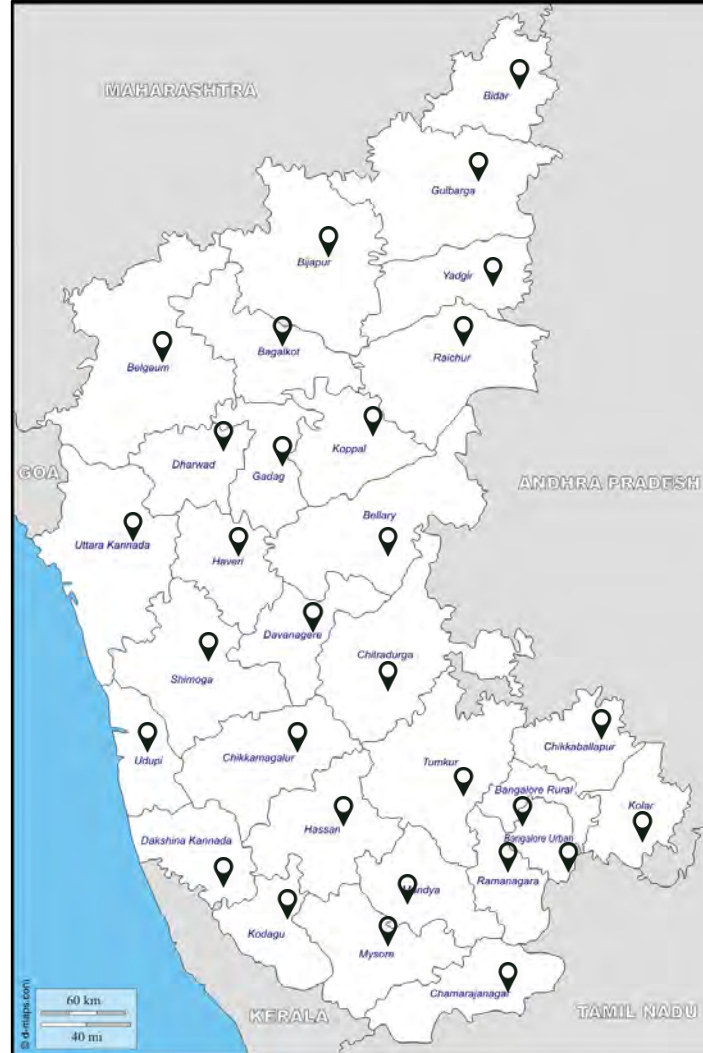
Highlights

- Uniform model with centralised monitoring
- Business model through service fees and EPR
- Sensitisation to ensure segregation at source
- Decentralised infrastructure development
- Mechanisation to ensure efficient operations
- Traceability and data capture

- Formalisation of the supply chain
- Job creation through fully formalised work force
- Maximum resource recovery and diversion from landfill, oceans and preventing open burning
- Circular economy through responsible waste management and consistent supply of quality raw material for the recycling industry
- Collaboration with Government, Industry and inclusive model of the existing waste supply chain

- [MRF video.mp4](#)

NETWORK OF DECENTRALISED SOLUTIONS

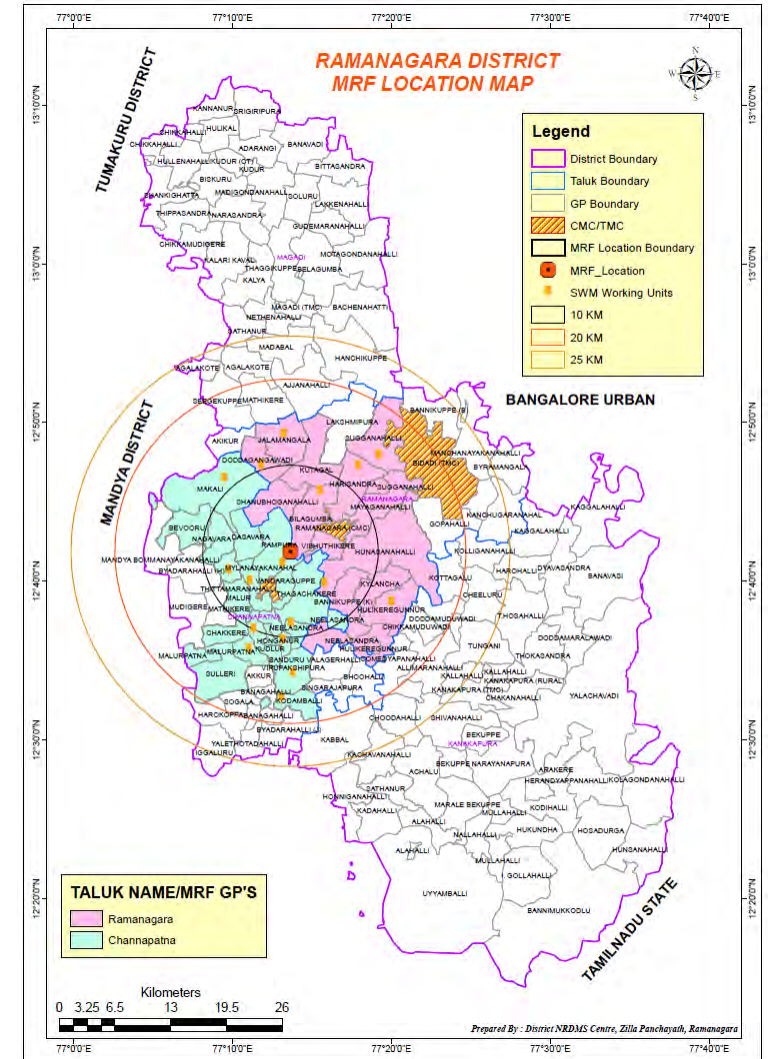
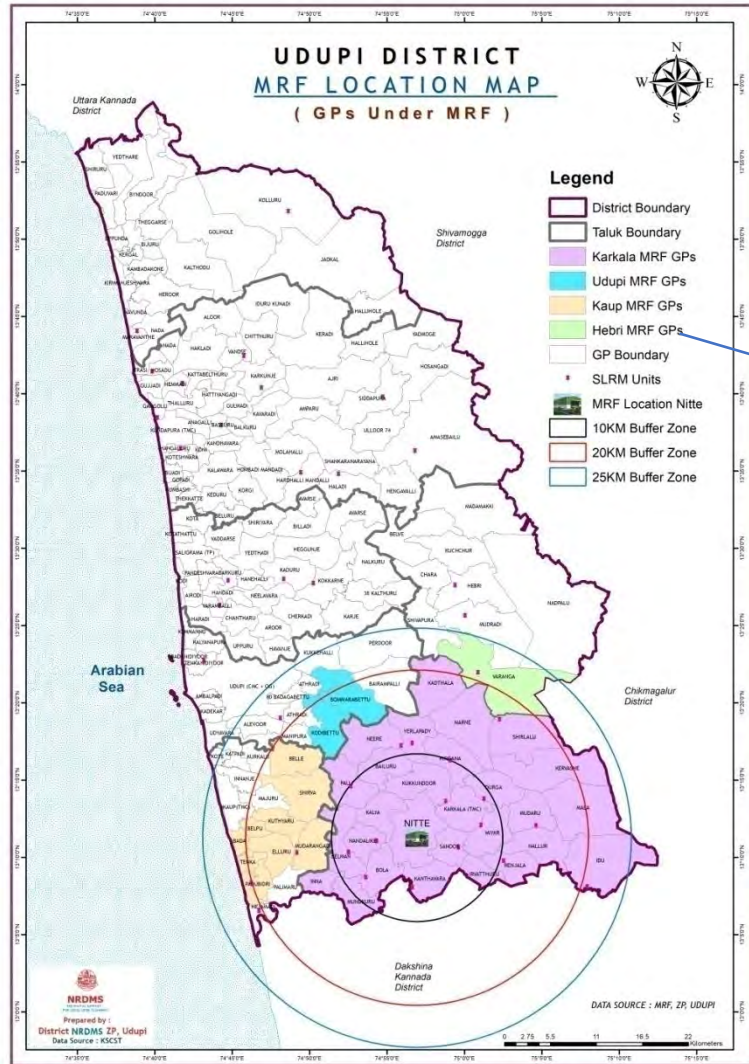


Expansion plan (tentative)

- 1) Pilot projects - Four pilot projects at Udupi, Ramnagara, Dakshin Kannada & Ballari
- 2) Awareness and workshops across various stakeholders by SAAHAS
- 3) Phase 1 - 40 MRFs during the 1st year of project execution
- 4) Phase 2 - 56 MRFs during the second year of project execution

Total of 100 MRFs within 2-3 years of project execution

CLUSTERING OF THE MRF'S – SAMPLE



STATUS OF PILOT MRFs

1. Udupi MRF

- MRF trial run of operations has been commenced
- Saahas Zero waste is engaged in onsite training of staff and operator at the Udupi MRF
- Mangala Resource Management Pvt Ltd have been selected as the MRF operator through a tender process
- 20 local staff from Nitte Gram Panchayat have been appointed for working at Udupi MRF
- MRF Truck for sourcing the waste from G.P has been delivered



STATUS OF PILOT MRFs



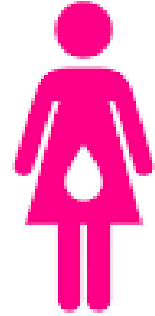
STATUS OF PILOT MRFs

Ramanagara MRF



Ballari MRF





MENSTRUAL HYGIENE MANAGEMENT (MHM)

MENSTRUAL HYGIENE MANAGEMENT



MENSTRUAL HYGIENE MANAGEMENT FRAMEWORK



Access to knowledge and information

Menstrual cloth



Reusable pad



Disposable pad



Menstrual cup



Tampon



Access to safe menstrual absorbents



Water, sanitation and hygiene infrastructure



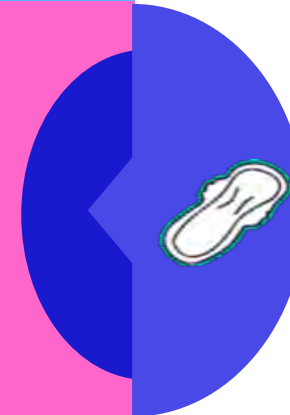
Access to safe disposal of used menstrual absorbents

MENSTRUAL HYGIENE MANAGEMENT UNDER SBM-G



Water, Sanitation and Hygiene Infrastructure.
Adequate water, agents and spaces for washing and bathing with soap.

Access to knowledge and information.
IEC activities to create awareness and provide information to manage menstruation with safety and dignity using safe hygienic materials.



Access to safe disposal of used menstrual adsorbents.
*Scientific management of menstrual waste-
Incinerators.*

WATER, SANITATION AND HYGIENE INFRASTRUCTURE



Adequate numbers of safely located toilets separated (with clear signage) from male facilities.



Safe and private toilets with inside door latch



Clear signs instructing girls and women to dispose of menstrual waste in the trash bin



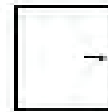
Night time light source both inside and outside of the toilets



Easily accessible water (ideally inside the cubicle) for girls and women to wash themselves and menstrual materials.



Trash bins (with lids) to dispose of used menstrual materials



Walls, door and roof are made of non-transparent materials with no gaps or spaces.



ACCESS TO KNOWLEDGE AND INFORMATION



ACCESS TO SAFE DISPOSAL OF USED MENSTRUAL ABSORBENTS

- RDWSD has taken initiative for safe disposal of sanitary waste as part of SWM under the SBM objective by facilitating installation of **Sanitary Napkin Incinerators** in rural areas.
- Pilot projects were carried out in **32 location** and the incinerators were periodically reviewed and evaluated.
- Detailed evaluation processed and tests were conducted to shortlist and finalize technical specifications that would be apt for installation.
- RDWSD released funds to the districts for the purchase of sanitary napkin incinerators in all GPs.
- A total of **Rs. 12 crores** were released to all the districts at the rate of Rs. 20,000/- per GP, out of performance-based incentive scheme funds.
- Additional funds required for the purchase of incinerators at the GP level was met by **converging 15th Finance Commission grants and other funds.**

EVALUATION CRITERIA

General Specification of Sanitary Napkins Incinerator Machine with Smoke Control Unit	
Type	Floor mounting/Wall mounting
Operation mode	Electronically operated, fully automatic
No of stages	2 stages
Material of construction	MS cabinet with epoxy anti rust proof painting for superior finish.
Display	LED Display
Ash tray	Ash tray should be detachable
Temperature	Minimum of 800 to 950 °C
Temperature indicator	Temperature indicator should be provided.
Door locks	Door locks to be provided
Burning chamber	To be thermally insulated
Smoke control unit	Two carbon control filters and Wet scrubbers to be provided for flue gas treatment
Burning capacity per hour	40 to 70
Availability of spare parts	Minimum 5 years from date of supply
ISI mark	All electrical parts must be ISI marked
Stand	Stand to be provided if floor mounted
Thickness of thermal insulation material (mm)	Minimum 25 mm

EVALUATION CRITERIA

- Incinerator should comply with all the norms specified by KSPCB, CPCB and the General Emission Standards mentioned under Standard for incineration section in SWM Rules, 2016.
- The total cost of the incinerator should include machinery cost, transportation and installation cost+ **AMC Component for at least 3 years** and proper training for handling
- Sanitary Napkin incinerators shall be made of electrical heaters and shall maintain the temperature between 800^oc-950^oc However, for efficiency of combustion two stage temperatures are required.
- The temperature shall be maintained at 200^oc for a 6-10 minutes in the first stage after this the temperature to be raised up to 800^oc-950^oc. So that the moisture in napkins will be removed in the 1st stage and efficient combustion will take place in the 2nd stage in the absence of moisture. An electronic device may be installed to have the two sets of temperature to be maintained with a pre-specified time gap.
- Ash generation should not exceed more than 5% per napkin.
- The periodical monitoring shall be done to check the functioning of the machines and quality of emissions
- (The total cost of the machine should also include transportation and installation cost+ AMC component for at least 3 years and proper training for handling).
- Proper trainings and SOP (Standard operation procedures) are to be given by the manufactures to the users on functioning of the incinerators.
- Awareness shall be created with display boards at the incinerators not to dispose of the out packing wrapper which is made with plastic along with the pad.

CURRENT STATUS

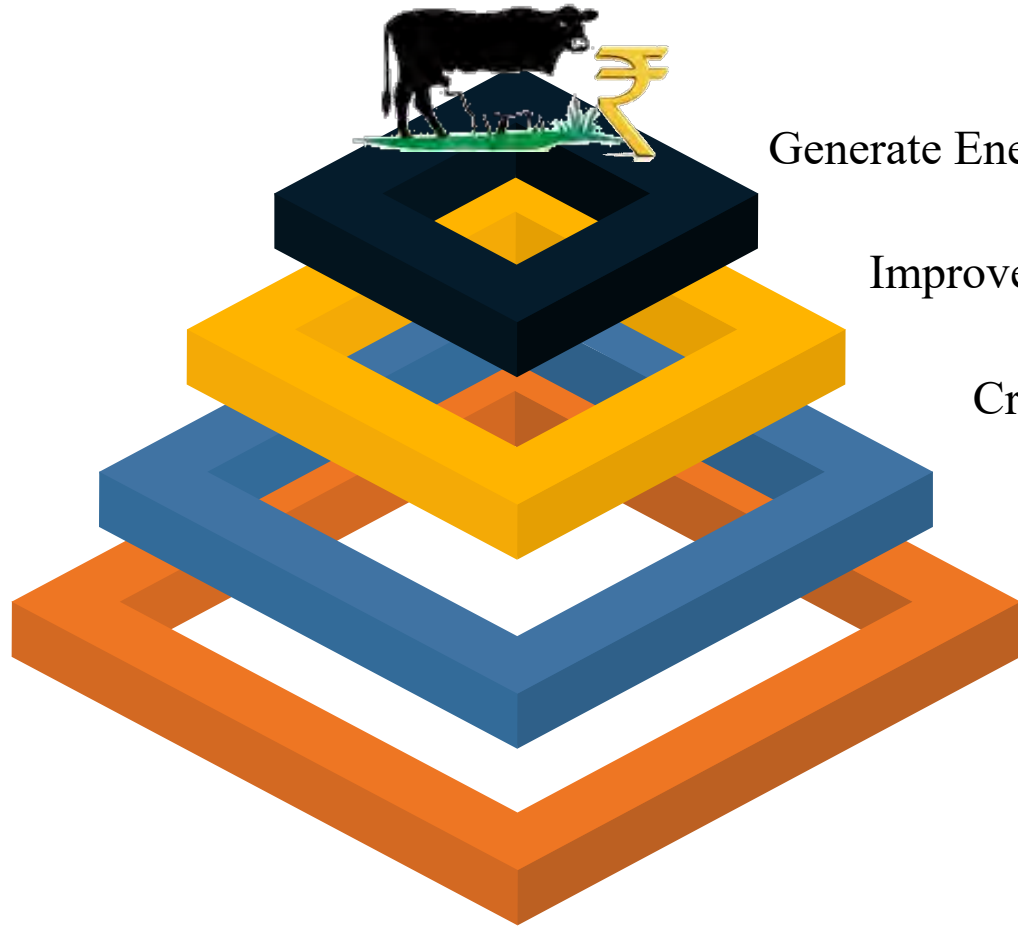


- Currently, stakeholders at the District/GP level are being trained on proper utilization, various technical specifications, and demand parameters of the incinerator.
- Intensive follow up taking place to ensure that incinerators can be installed and used in a timely manner.
- Regular follow up on installed incinerators to validate the usage, efficiency, and performance.
- IEC activities focusing on the personal hygiene of menstruating women, safe practices on MHM, and scientific disposal methods of used sanitary napkin.



GOBARDHAN

OBJECTIVES



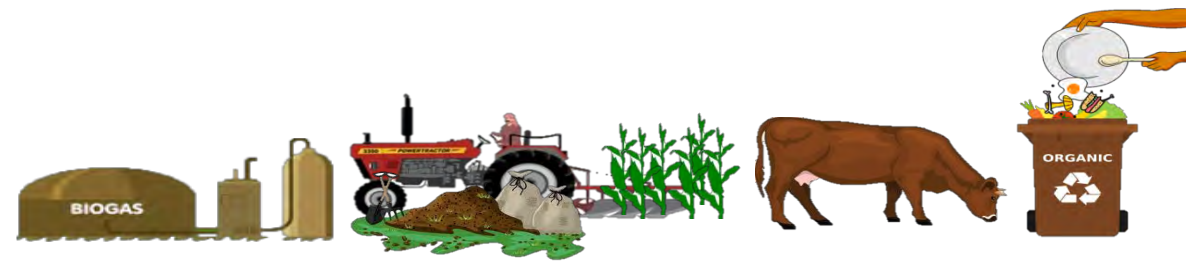
Generate Energy in the form of Biogas, Bio-CNG, Bio-Mass

Improved Sanitation and Health in the rural sector

Create Employment & Empowerment

Efficient management of animal

Crop residue and Kitchen leftovers

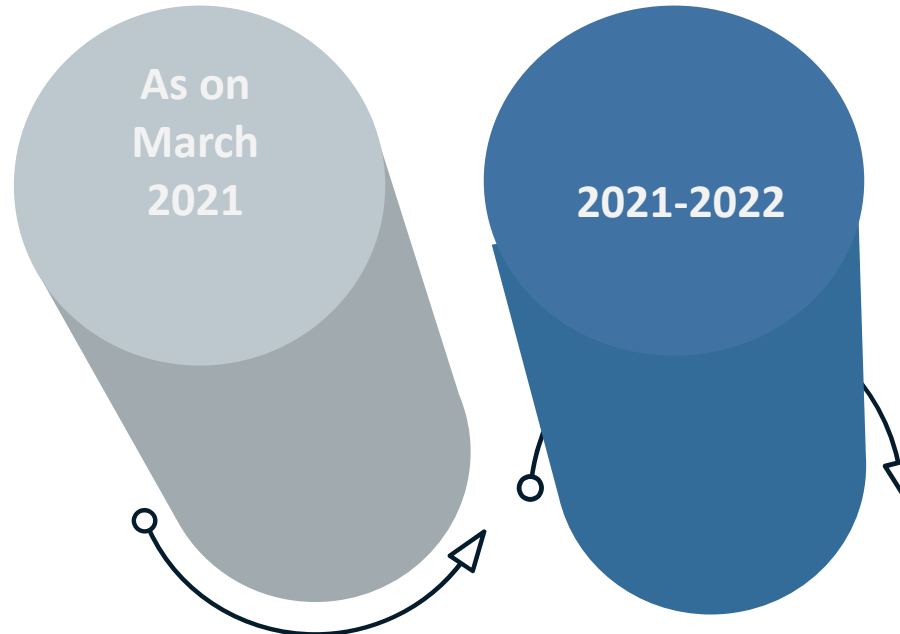


FUNDING PATTERN

No of Units	Fund allocation per district	Beneficiary
Model Project/District	Rs.50.00 lakhs	Community
Minimum 10units/Taluk	NNBOMP(NEW NATIONAL BIOGAS MANURE PROGRAM)under Ministry of New Renewable Energy(MNRE)	Individual /Cluster of Households

STATUS OF GOBARDHAN IMPLEMENTATION IN KARNATAKA

Projects approved : 11
Under Progress : 6
Functional : 5



Projects proposed: 10
Site identified and DPR preparation
is under progress

STATUS OF PROJECTS

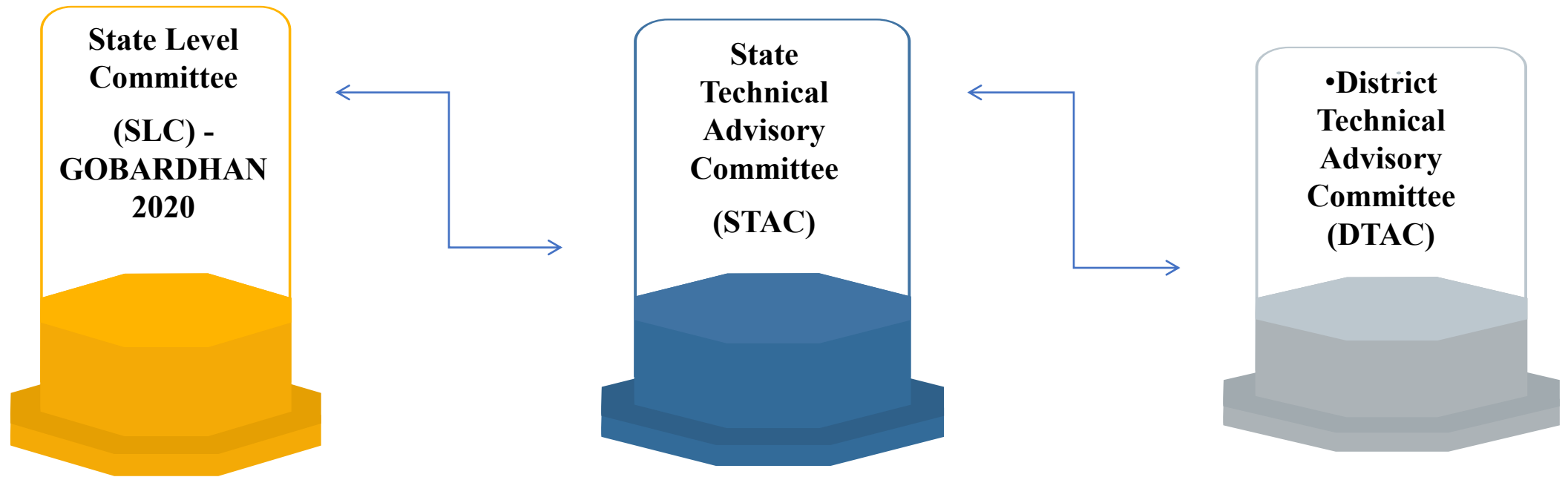
SL No	District	Village	Projects functional/under construction/tendering
1	Udupi	Nitte SWM Unit	Tendering
2	Udupi	Sri Mookambika temple Kolluru	
3	Udupi	Sri Durgaparameshwari temple,Mandarathi	
4	Udupi	Vandse SWM Unit	Under Construction
5	Uttara Kannada	Bangaramuki Amuruthadare, Gaushal	
6	Uttara Kannada	Sri Kshetra Ulavi	
7	Uttara Kannada	Bhanukuli Mutt,Bedakani	Functional
8	Uttara Kannada	Vandiraj Mutt, Sonda	
9	Udupi	Varamballi SWM Unit	
10	Bengaluru Rural	Kolipura SWM Unit	
11	Bengaluru Urban	Rajanukunte SWM Unit	

SCALE UP OF IMPLEMENTATION(FY 2021-22)

SL No	District	Gram Panchayat	Site Location identified	Type of Biogas plant	Remarks
1	Chikkamagluru	Heruru	Gaushala	KVIC (Floating Drum Type)	Detailed Project Report preparation is under progress
2	Chikkamagluru	B.Kanaburu	Gaushala		
3	Chikkamagluru	Harnduru	Gaushala		
4	Uttar Kannada	Haladipura	Gaushala		
5	Uttar Kannada	Salkani	Gaushala		
6	Uttar Kannada	Mavalli	Gaushala		
7	Tumkuru	Mydala	Mutt		
8	Raichuru	Mitti malkapur	Gaushala		
9	Bagalkote	Bennuru	Gaushala		
10	Belgaum	Inchala	Gaushala		

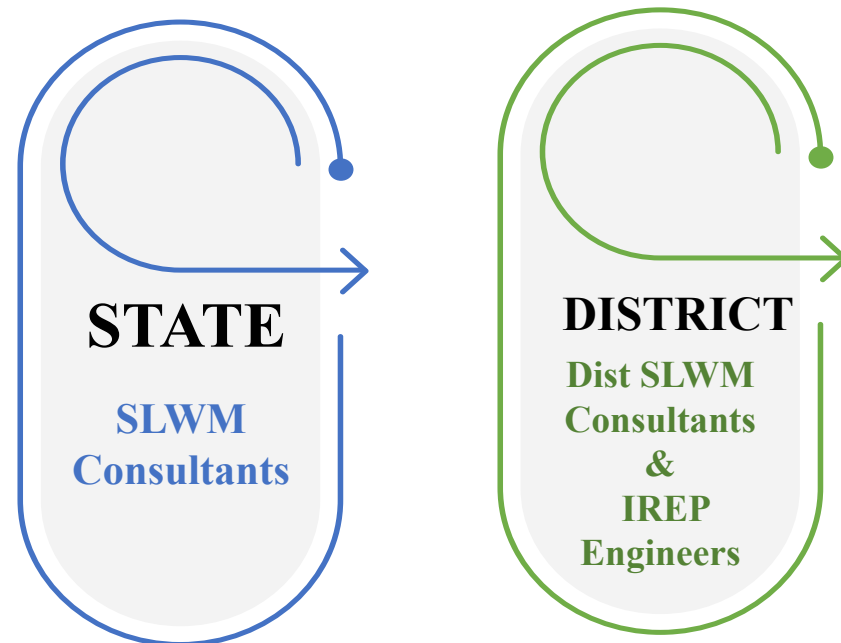
INSTITUTION SET UP & TECHNICAL AGENCY

INSTITUTIONAL ARRANGEMENTS



INSTITUTION SET UP & TECHNICAL AGENCY

- Had a series of discussions with **The Energy Resource Institute (TERI) & Karuna Rural Development Society(KRDS) for technical inputs**
- The State has prepared Standard DPR template & Circulated to all Districts
- Technical resource pool available at State & District office



GOBARDHAN 2020 (WASTE TO WEALTH)

- **State Level Committee(SLC)** under the chairmanship of **ACS & Development Commissioner GoK** is constituted vide GO No–RDW&SD/62/SBM-G/GOBAR-DHAN/2020-21, dated 05.12.2020
- As per **First SLC Committee** held on 15.12.2020 the following decision were taken
 - **APMC to do feasibility analysis in selected APMC Yards and to implement pilot projects**
 - **Endowment department to take up GOBAR-DHAN Projects in 20 GRADE -A temples**
 - **KMF to implement at least 4 community based GOBARDHAN Projects across Karnataka**

TRAININGS & WORKSHOPS

- Conducted training to all District consultants, Panchayat Development Officers related to **GOBARDHAN Implementation & GOBARDHAN 2020**
- Conducted training & arranged exposure visit to **Temple authorities (Endowment department) & Panchayat Development Officers** of respective Gram Panchayats where in **20 Grade A temples** are situated to disseminate planning, implementation and technology options related to waste management.



OPERATIONAL BIOGAS PLANTS

District - Bengaluru Rural

Bashettihalli Biogas Plant in SWM Unit



District - Uttara Kannada

Bhanukuli Mutt Biogas Plant, Bedakani GP

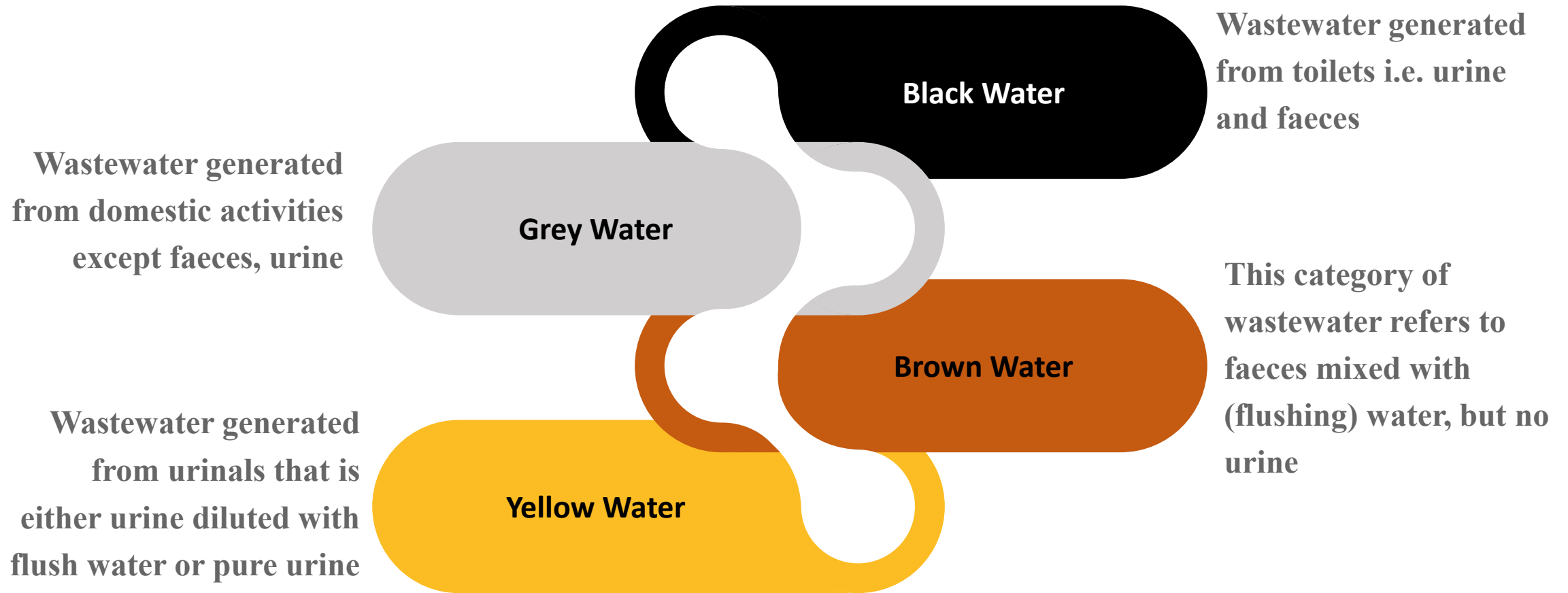




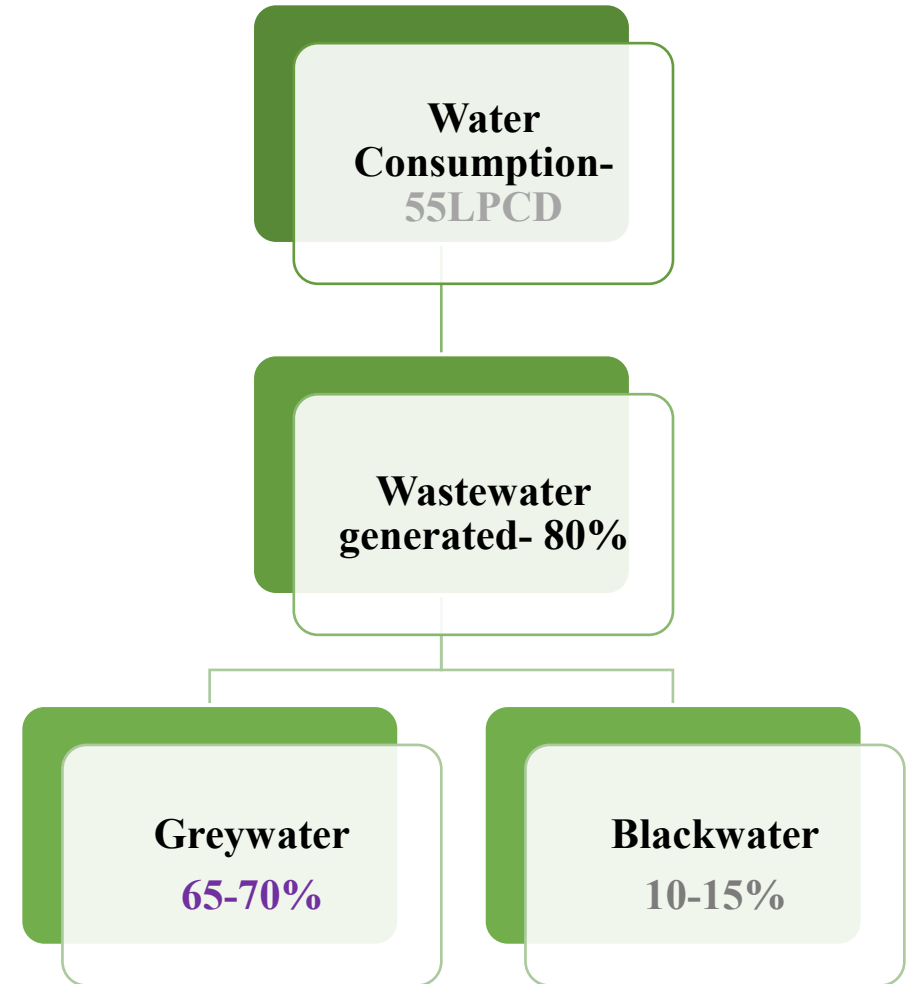
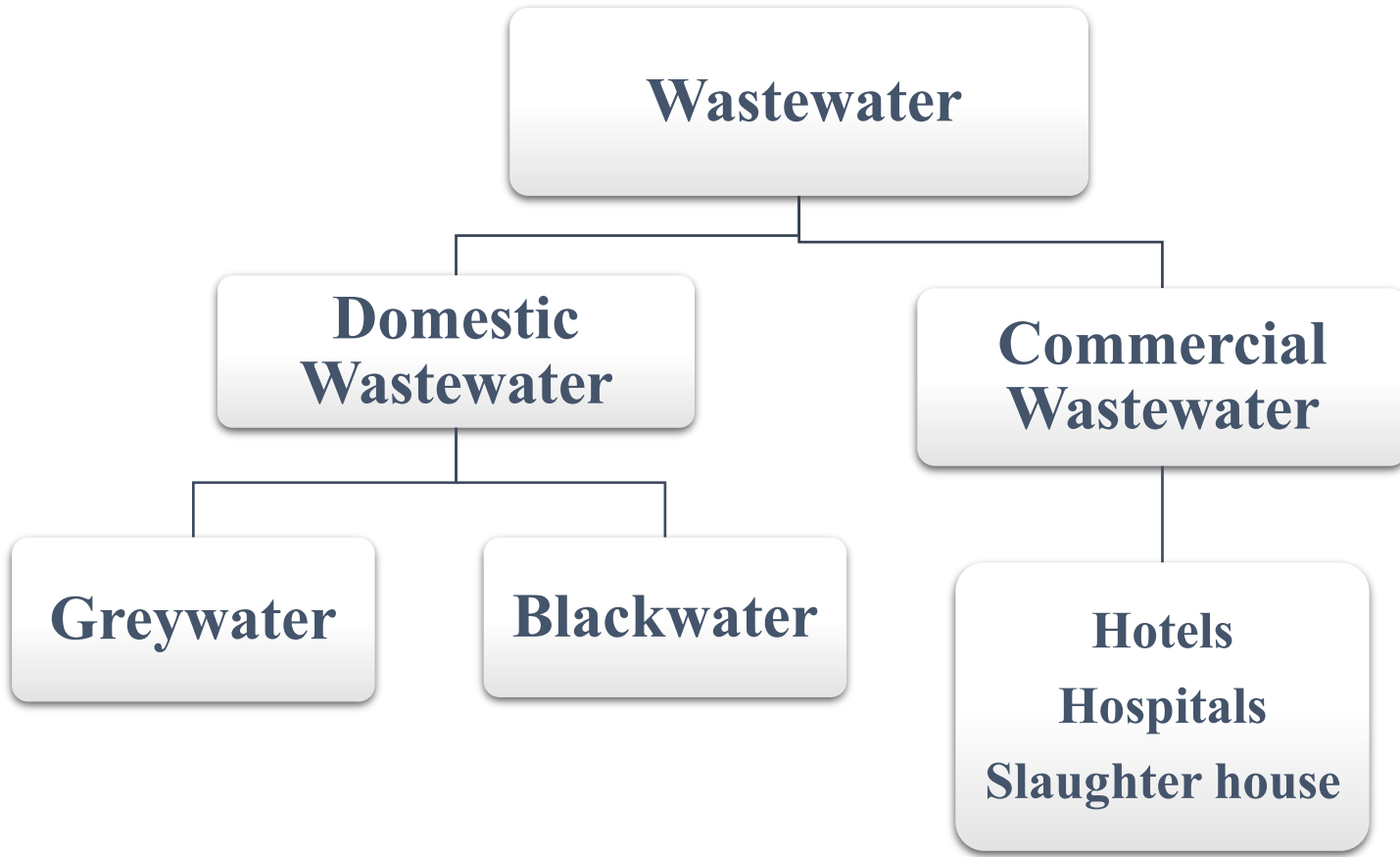


OVERVIEW OF LIQUID WASTE MANAGEMENT

WHAT IS BLACKWATER AND GREYWATER?



WASTEWATER GENERATION PATTERN



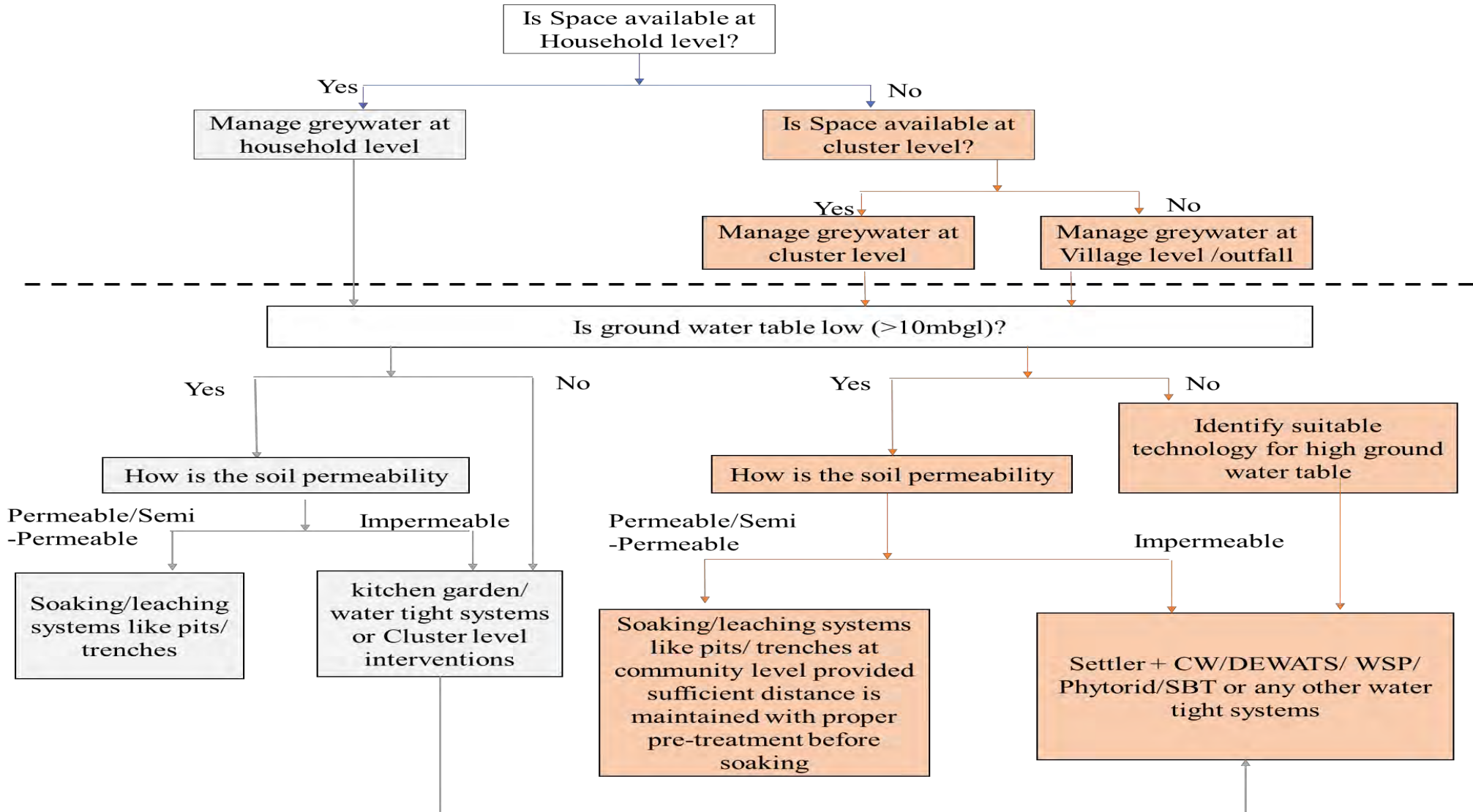
FUNDING PATTERN- AS PER SBM-G PHASE-II GUIDELINES

Description	Village Size	Financial Support
Greywater Management	Up to 5000 Population	Rs. 280 Per capita
	Above 5000 Population	Rs. 660 Per capita
	70% share (60:40 Central & State Share) from SBM-G 30% share to be borne by GP from 15 th FC Grants	
Blackwater Management (Faecal Sludge Management - FSM)	Rs.230 per capita	

CATEGORY A- GREYWATER MANAGEMENT- APPROACH

Space Availability

Technology Selection

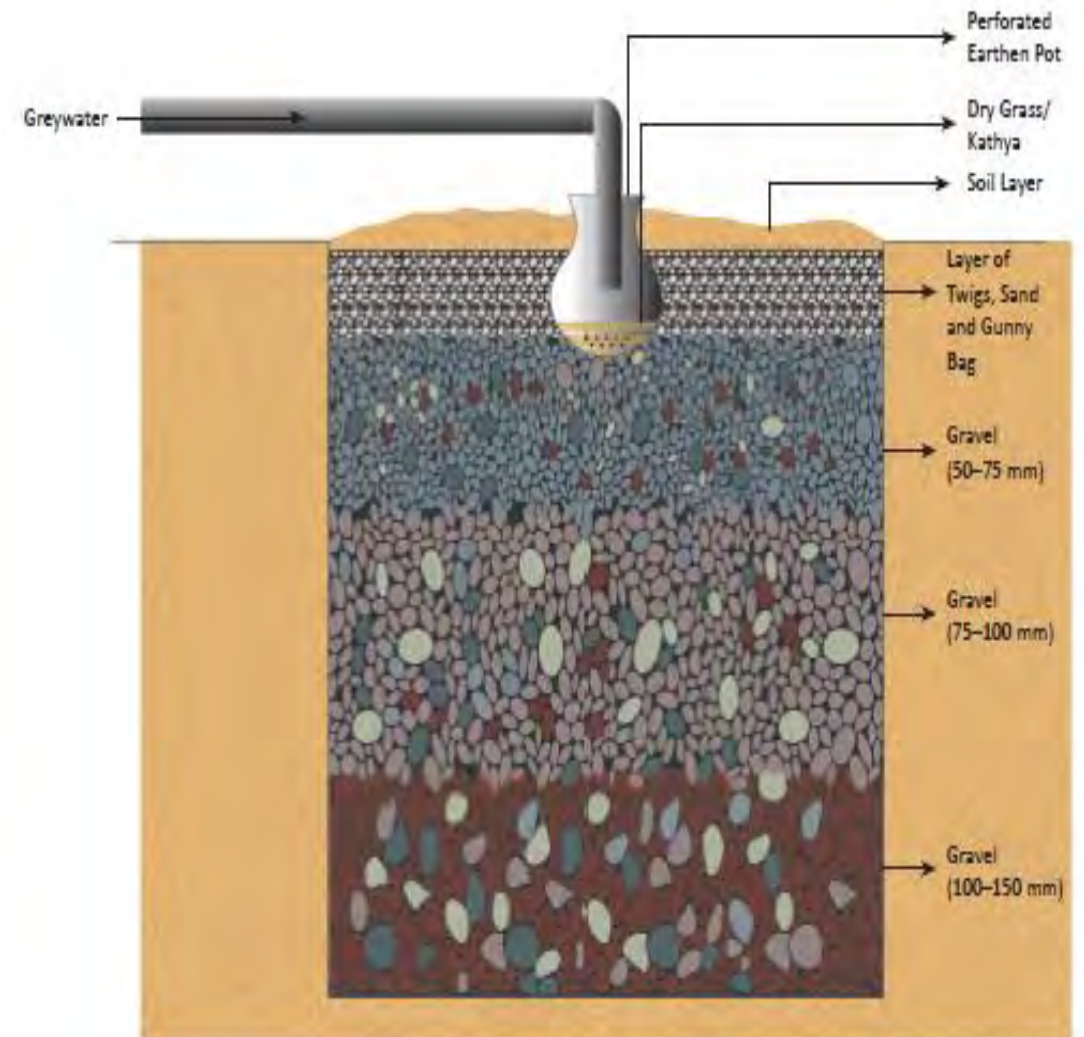


I- KITCHEN GARDEN



II (A)- SOAK PIT

- Soak pits are best suited for soil with good absorptive properties
- The performance of a soak pit depends on the permeability of the soil
- A rectangular/circular pit of 1 m x 1 m x 1 m can be designed for a 5–7 member household in permeable soil, which functions for a period of 7–8 years. The bottom of the pit must be a minimum of 1 m above the high water table or bedrock
- Most workable solutions in places where water table is low and soil type promotes soaking
- Needs to be located at a safe distance from water supply source to avoid any contamination



II (B)- LEACH PIT

A leach pit works on the principle of percolation of water similar to that of the soak pit. However, leach pits can deal with higher incoming flows as compared to soak pits.

It is best suited for community level intervention (upto 35 HH)

Construction

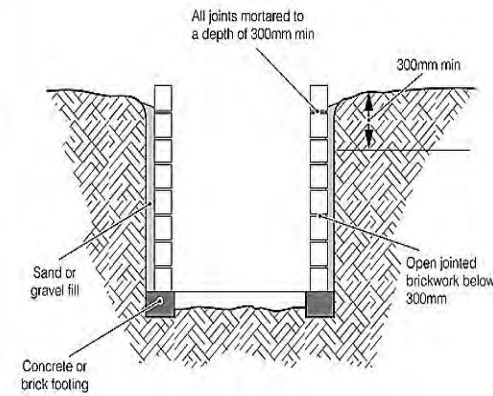
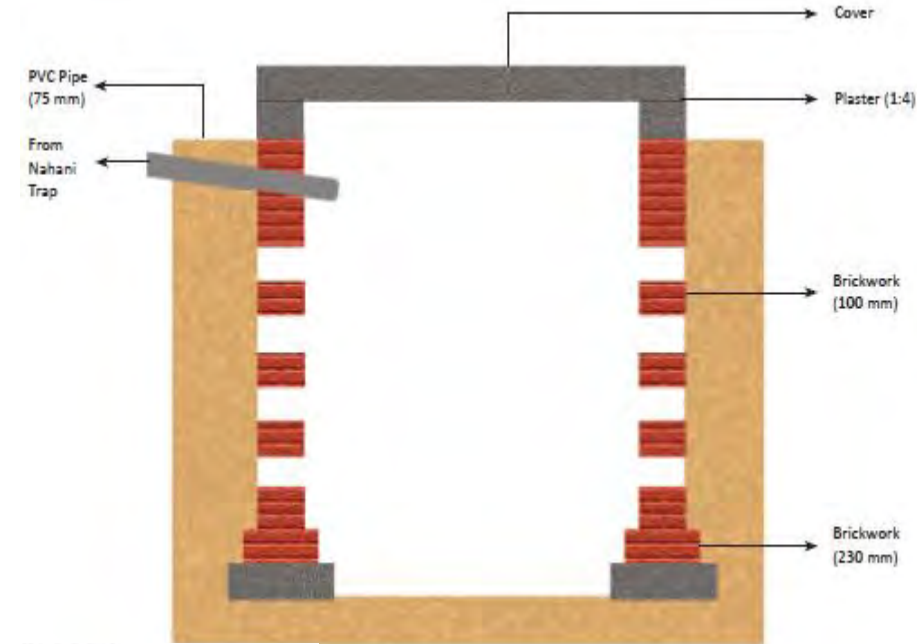
- Honeycombing 6 to 8 holes of 40 mm each.
- Brick masonry is in 1:6 cement mortar
- Bottom of the pit not to be cemented or concreted
- Pipe at a height of 1 m from the bottom and pipe should protrude 100 mm inside the pit

Cover

- 40 mm thick RCC cover cast in two halves/ferrocement slabs/flag
- Soil layer of about 200 mm

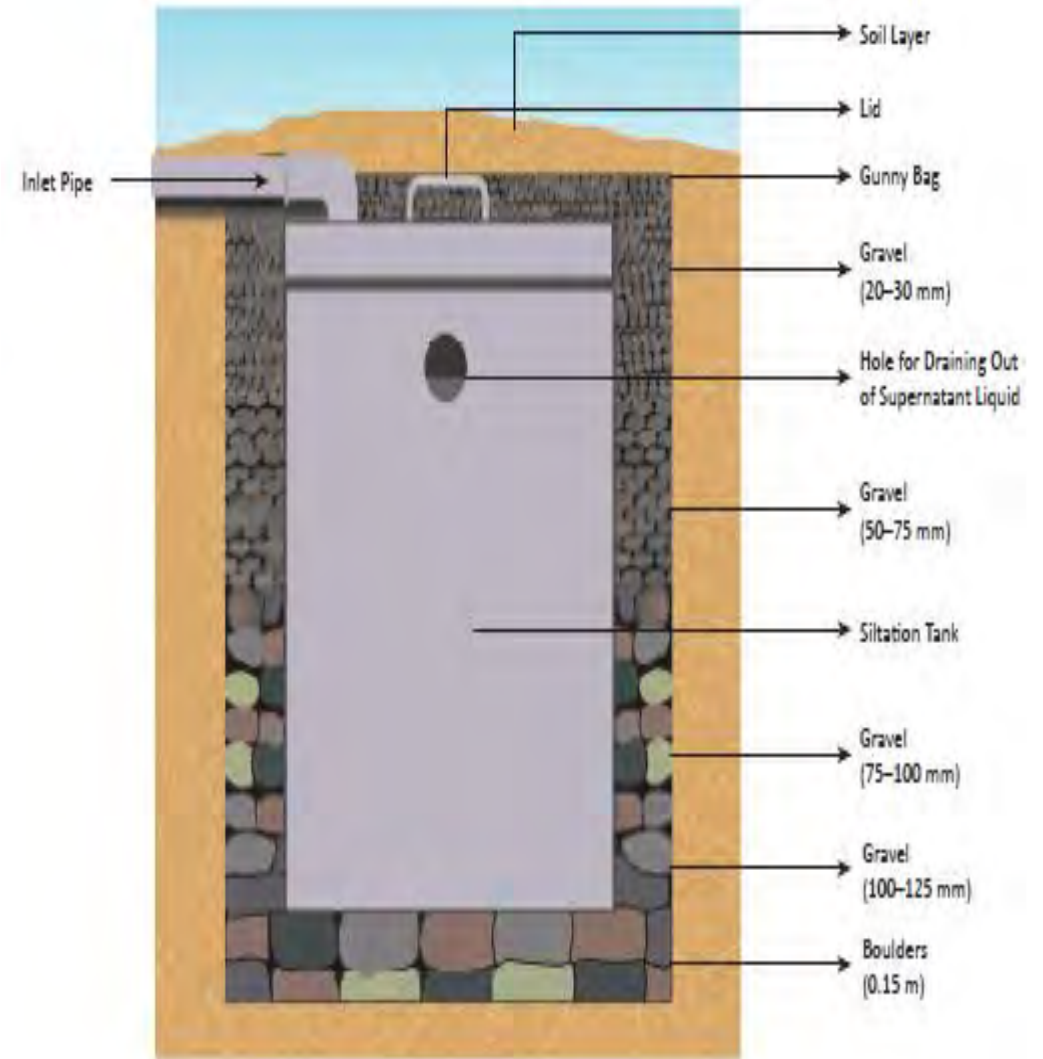
Excavation

- 1.5m diameter
- 1.25m depth



II (C)- MAGIC PIT

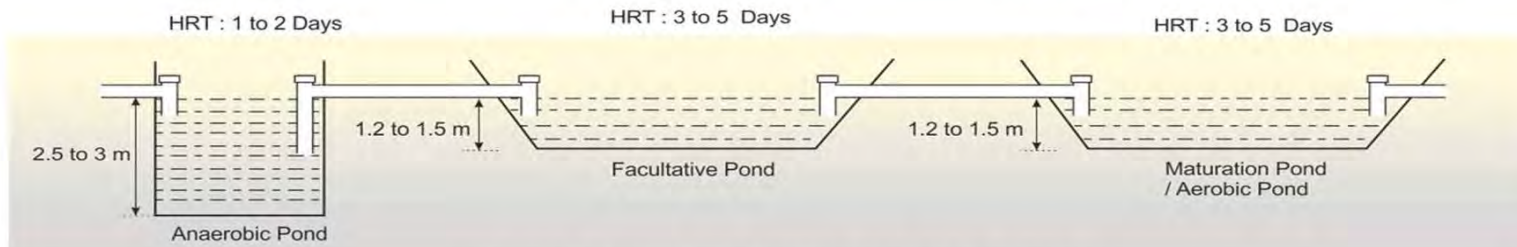
- A magic soak pit is a structure that consists of a cement/plastic tank at the centre surrounded by different grades of boulders and stones. Water is discharged into the tank placed in the centre where suspended particles from greywater settle, allowing cleaner water to flow through different sizes of boulders and stones provided at the periphery, and to percolate into the ground.
- The tank placed in the middle should be able to carry the greywater generated for 2–3 days. An area of 1.2 m x 1.2 m x 1.2 m is dug at a place suitable for a household of 5 people. The bottom of the pit must be a minimum of 1 m above the high water table or bedrock.



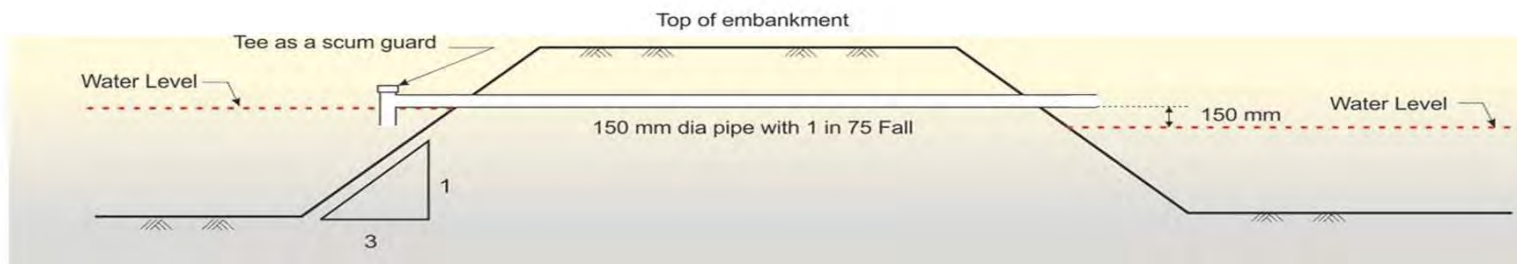
III- WASTE STABILIZATION POND

- This system contains a series of ponds constructed in sequence and combines anaerobic and aerobic treatments
 - Anaerobic ponds: Depth: 2-5 m, retention time: 1-2 days for stabilization and aerobic for pathogen removal
 - Facultative ponds: Depth: 1-2.5 m, retention time: 3-5 days
 - Aerobic : depth: 0.5 -1.5 m, retention time:3-5 days : Fishes and algae can be grown to reduce phosphorous and nitrogen
- Requires pre-screening and lining of all ponds
- Requires large areas and post treatment of sludge hence suitable for areas where ample space is available

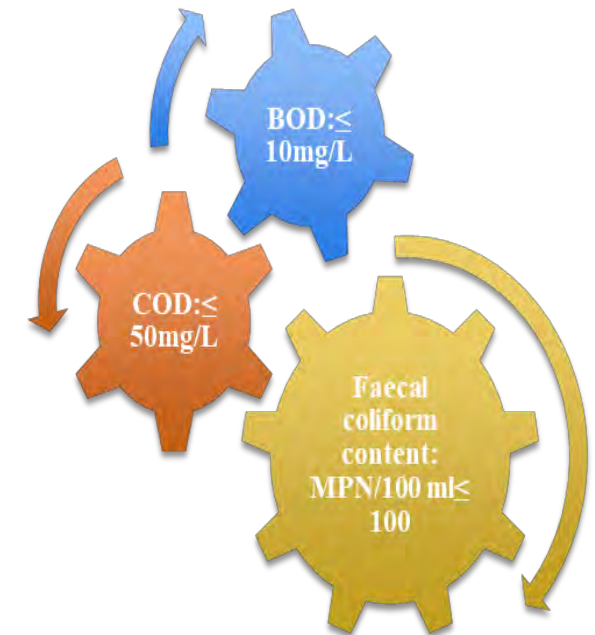
Grey water stabilization Pond



Design of Grey Water Stabilization Pond (Schematic)

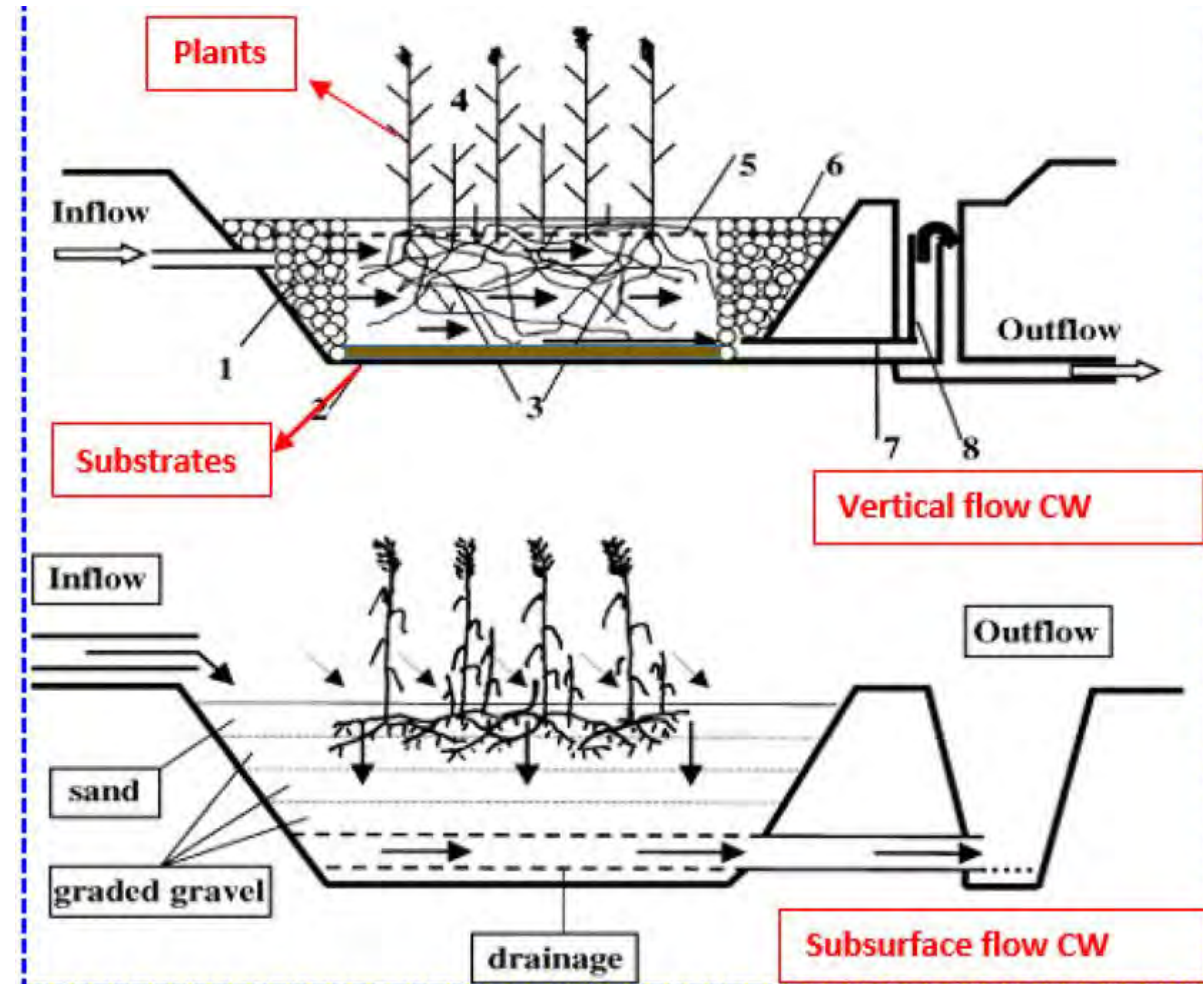
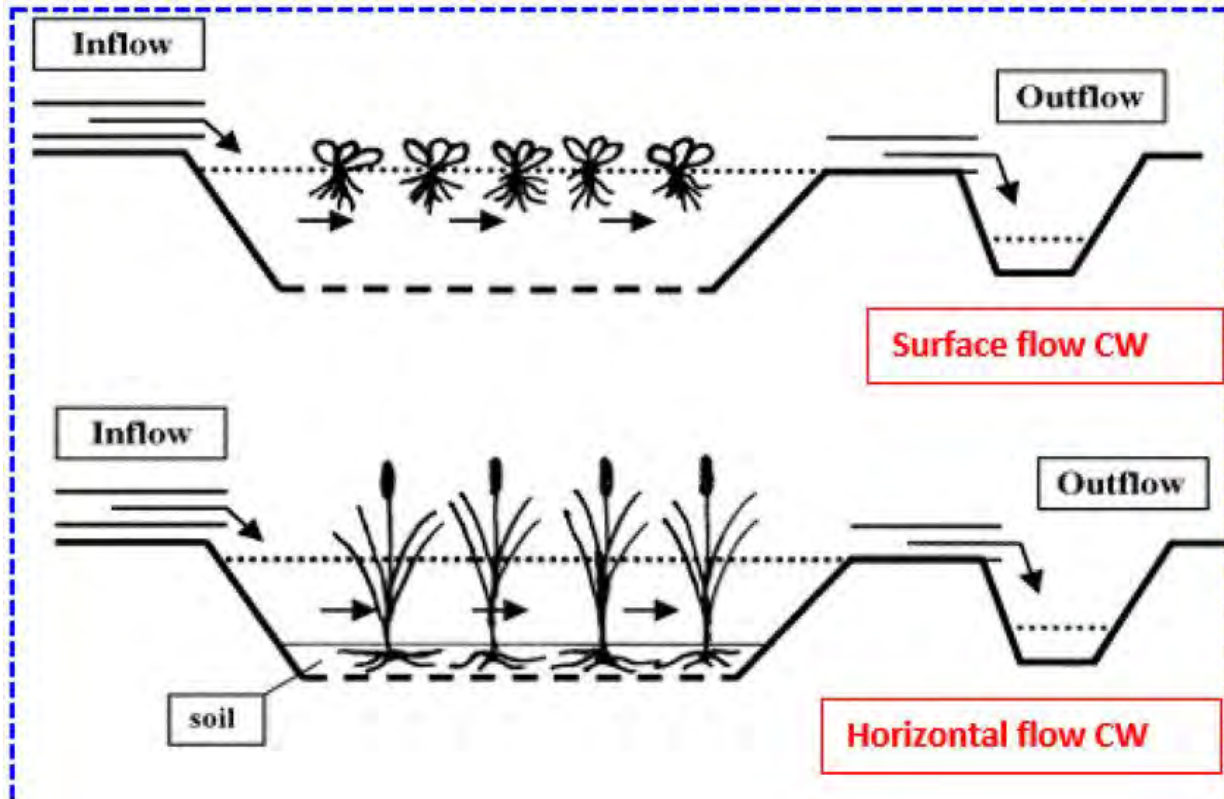


Inter pond connections

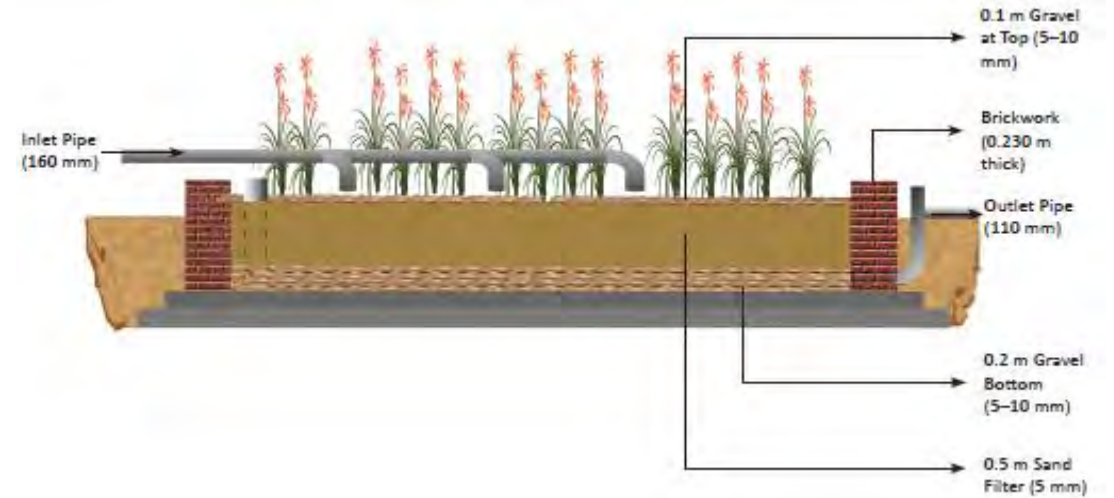


IV- CONSTRUCTED WETLANDS

Constructed wetlands are man-made systems in which wastewater treatment is achieved through natural processes involving soil, vegetation, and microbial communities.

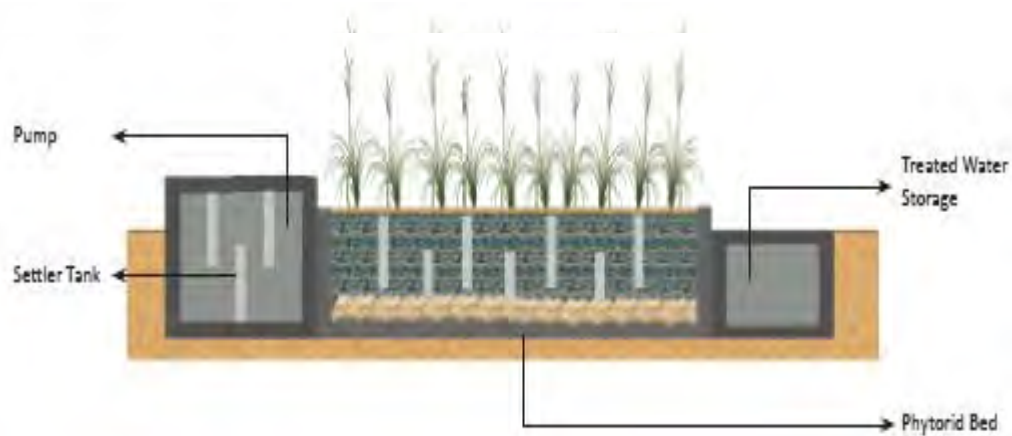


IV- CONSTRUCTED WETLANDS- PLANT SPECIES



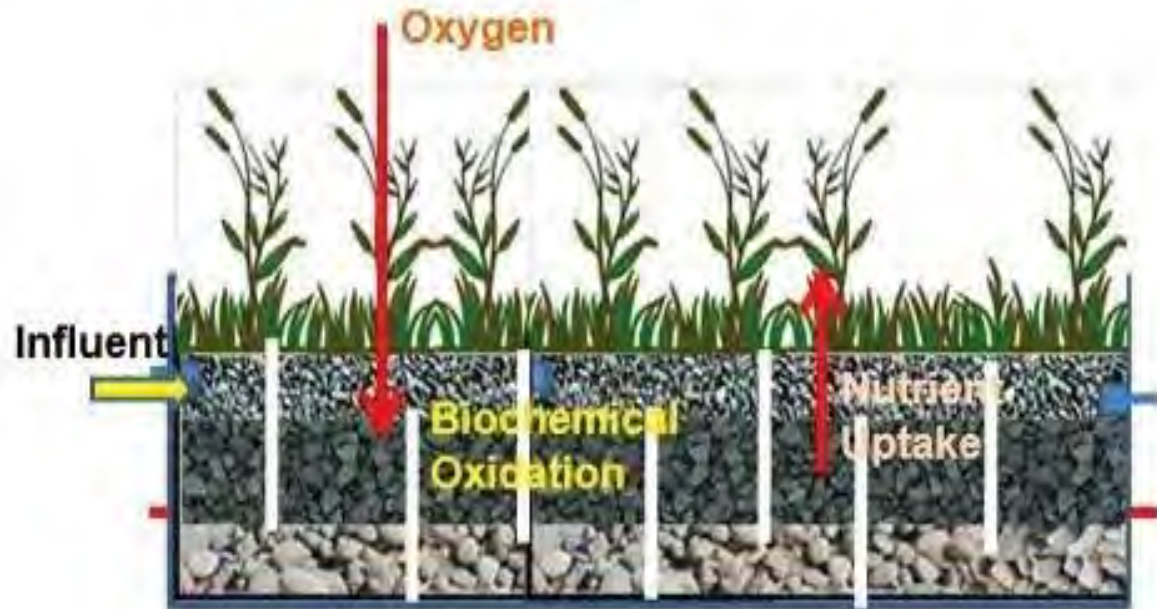
➤ This kind of treatment basically is done to mimic the nature which also tends to treat wastewater with a lighter load of pollution naturally, using plants and sunlight over a few days.

V- PHYTORID



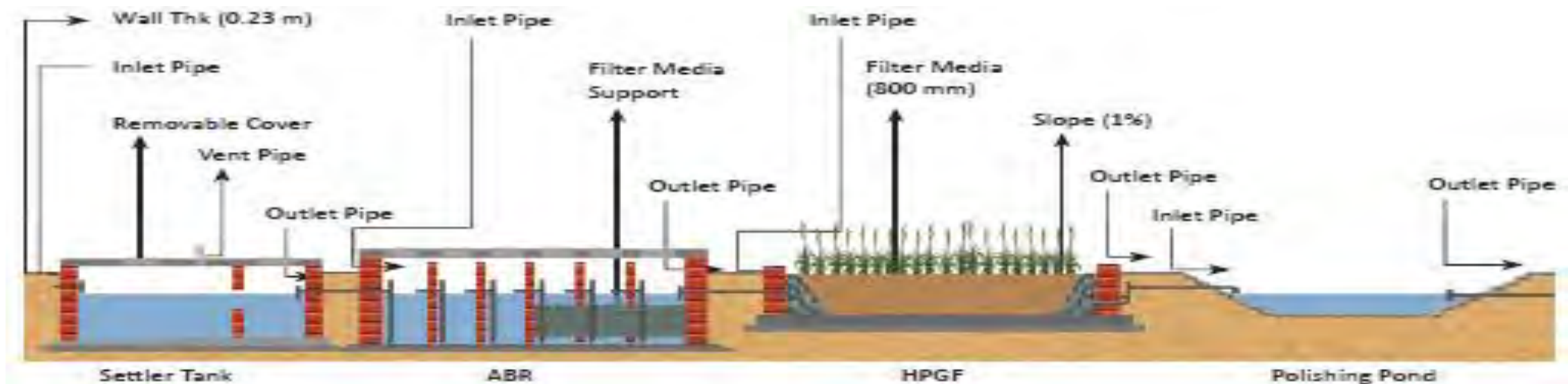
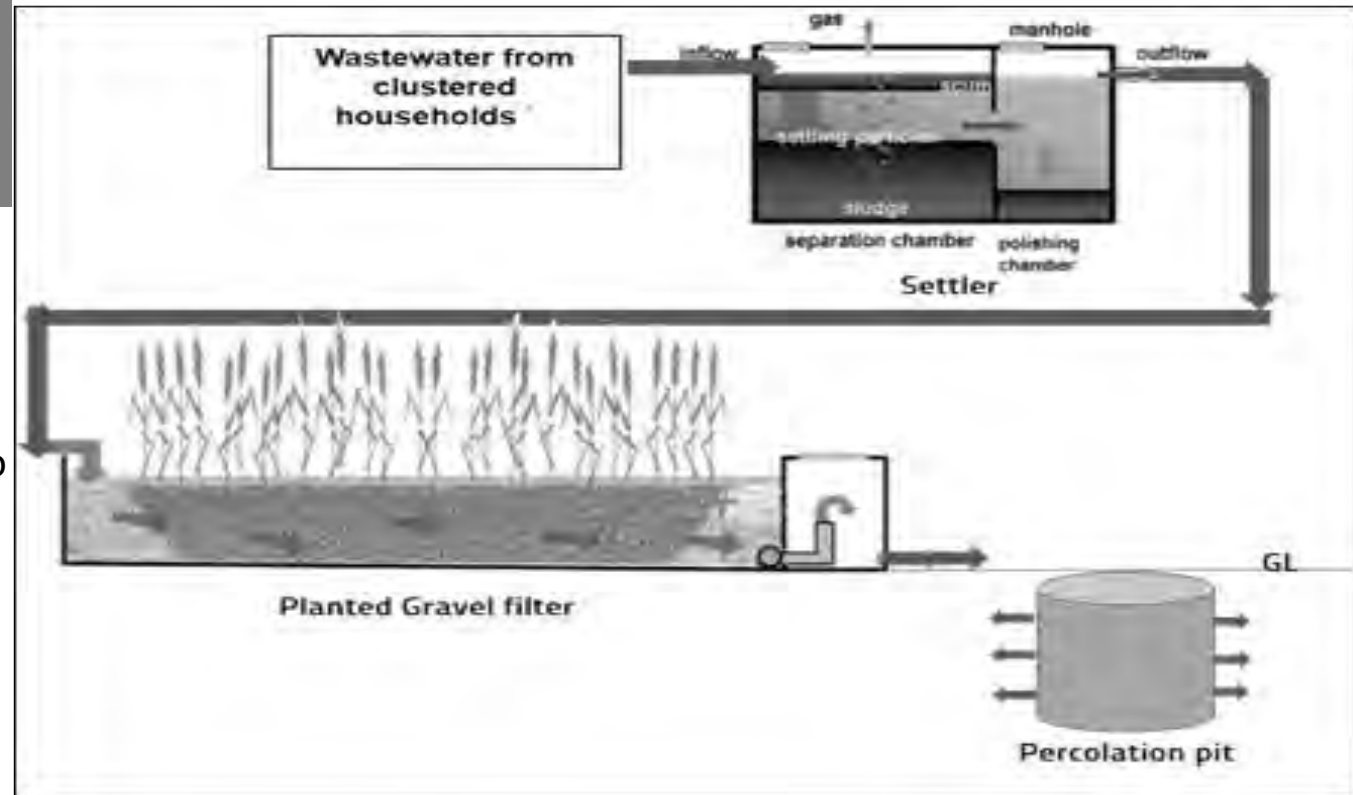
Phytorid is a subsurface mixed flow constructed wetland system (SSFCW) developed and patented by the National Environmental Engineering Research Institute (NEERI), Nagpur.

- ✓ Varying capacities of 5000 L/day to 8-10 MLD
- ✓ Various species of aquatic plants: *Phalaris arundinacea*, *Glyceria Maxima*, *Typha spp* etc

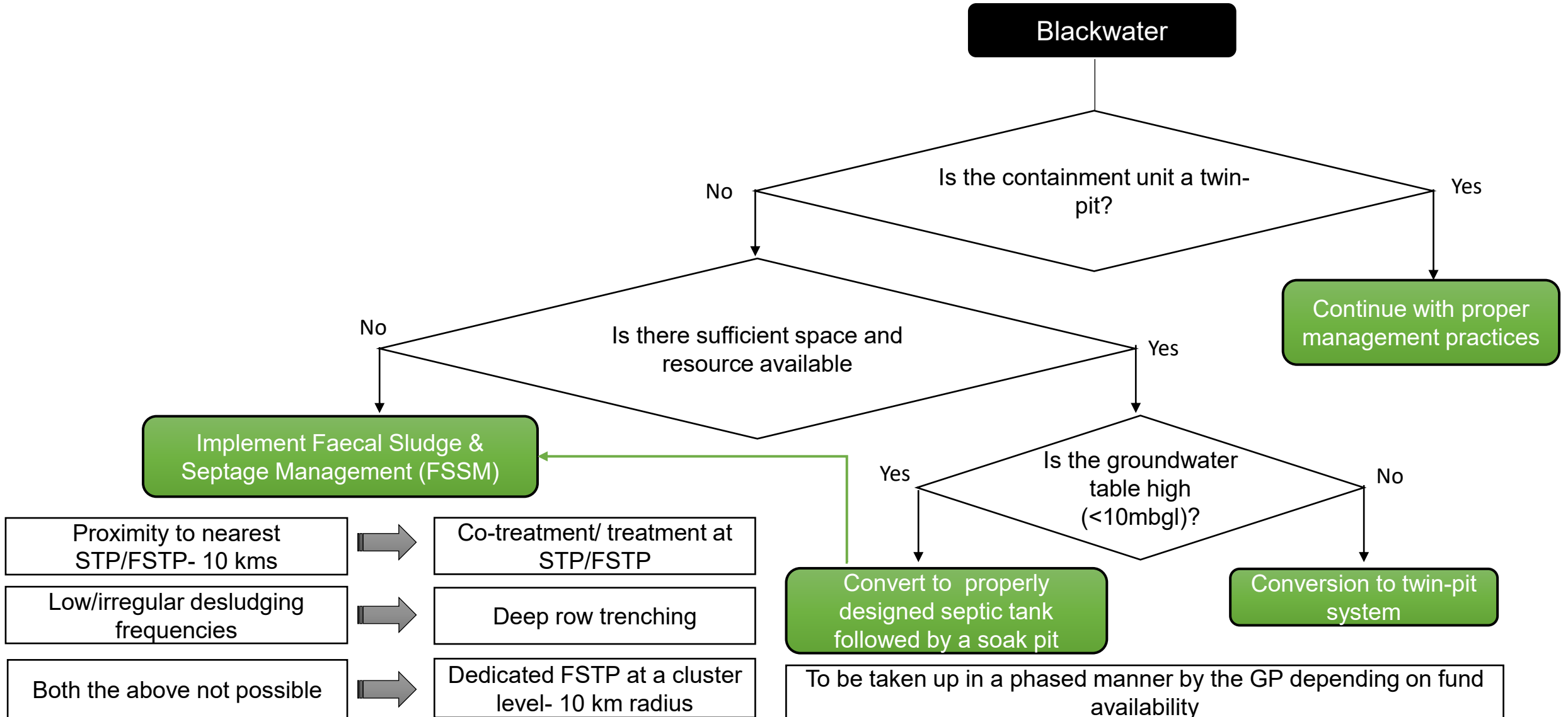


VI- DEWATS

- An advanced alternative to soaking systems, where treatment happens before soaking the greywater
- Needs minimum operation and maintenance by the community on a monthly/annual basis. Consists of a settler to allow settlement of both solids and capture of grease.
- The second module is a planted gravel filter which provides further treatment and digestion of the greywater before it is discharged into a soak pit



CATEGORY B- BLACKWATER MANAGEMENT (FSM)-APPROACH



I- RETROFITTING

- Converting single pit latrines to twin pit
- Correcting defective septic tanks-adding soak pit for discharge, adding the chamber separation wall, sealing the bottom
- Improving twin pits -ensuring functional junction chamber, honeycombing or perforations in pit wall, adequate distance between pits, safe distance from water sources

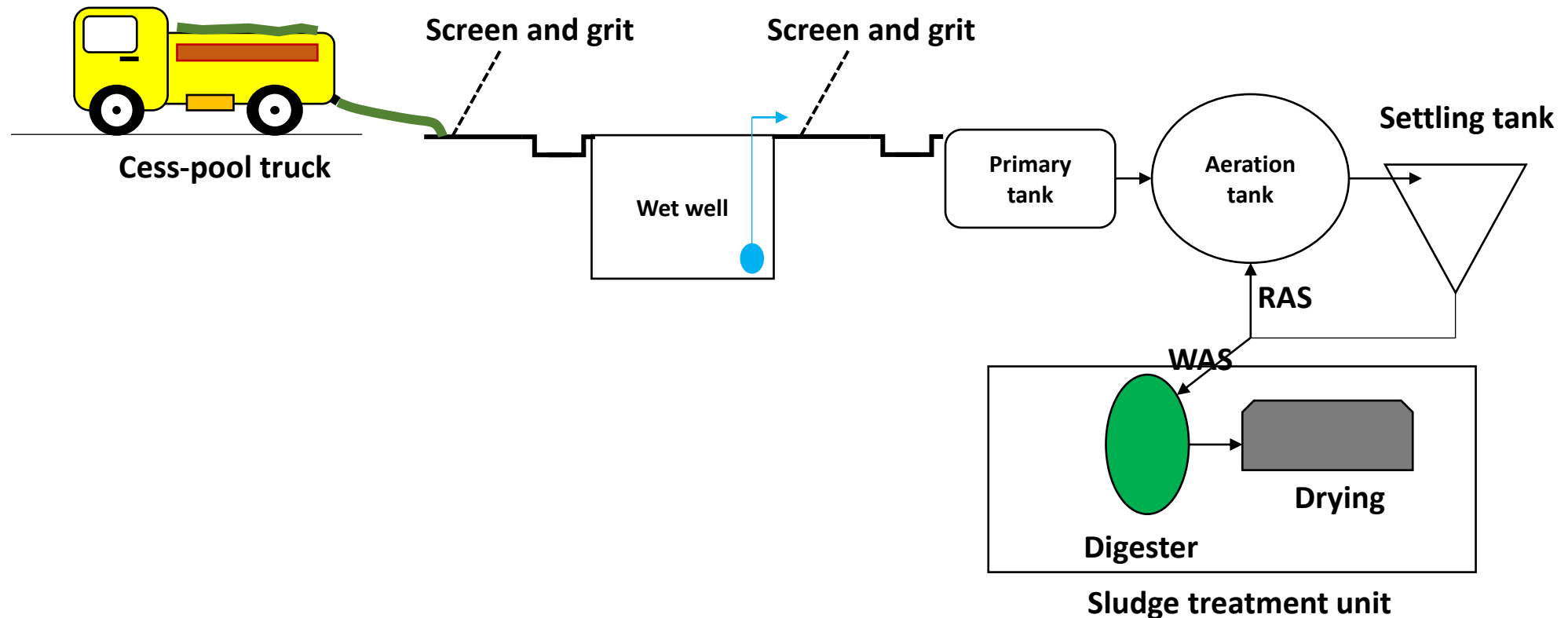


Defective Septic Tank & Soak pit



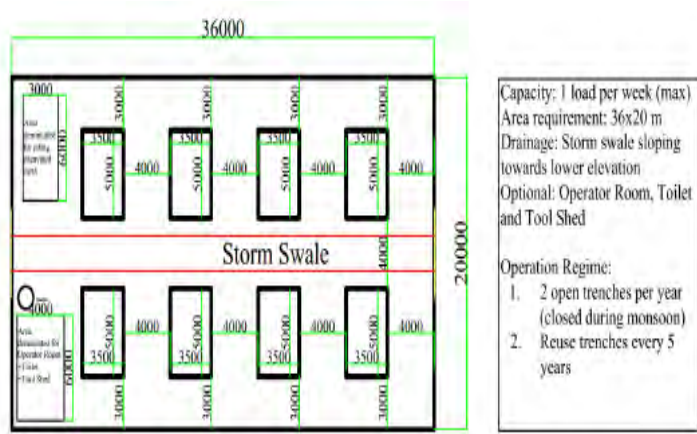
II- CO-TREATMENT

Managing faecal sludge from Gram Panchayat is to utilize existing sewage treatment infrastructure-existing under-utilized STP in the closest town/city within 15 km traveling distance



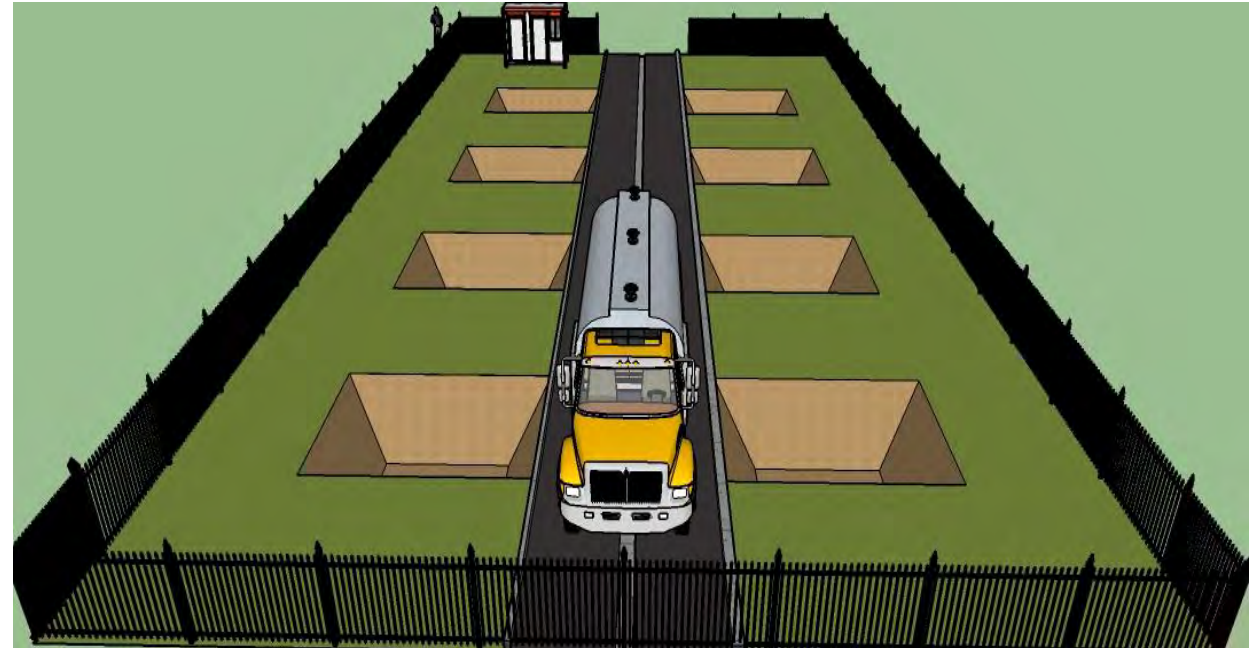
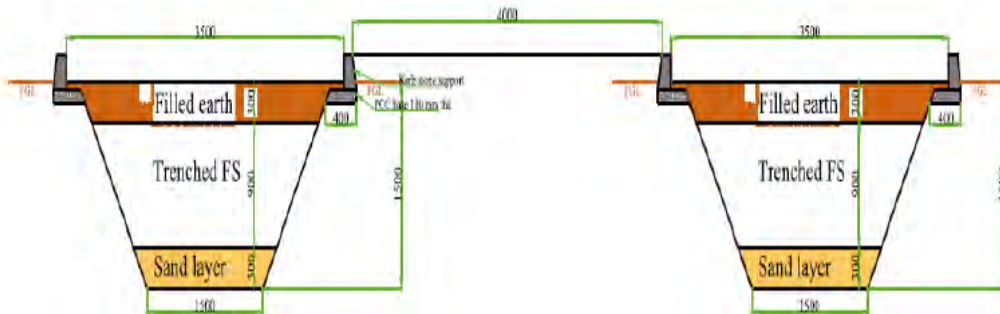
III- TRENCHING

- Trenching is the simplest method for managing faecal sludge
- Could be used as an intermittent solution till there is sufficient demand for treatment of faecal sludge at a dedicated treatment facility

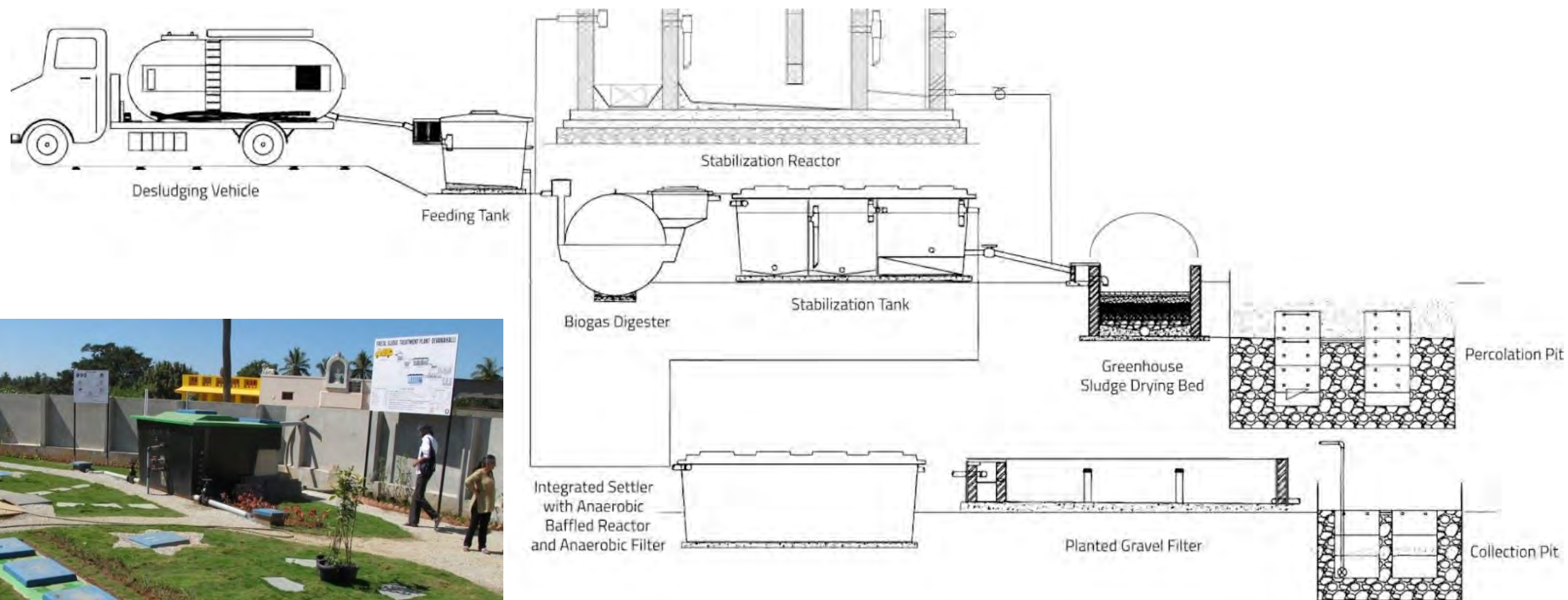


Capacity: 1 load per week (max)
 Area requirement: 36x20 m
 Drainage: Storm swale sloping towards lower elevation
 Optional: Operator Room, Toilet and Tool Shed
 Operation Regime:
 1. 2 open trenches per year (closed during monsoon)
 2. Reuse trenches every 5 years

Distance between trenches for vehicular movement



IV- FAECAL SLUDGE TREATMENT PLANT



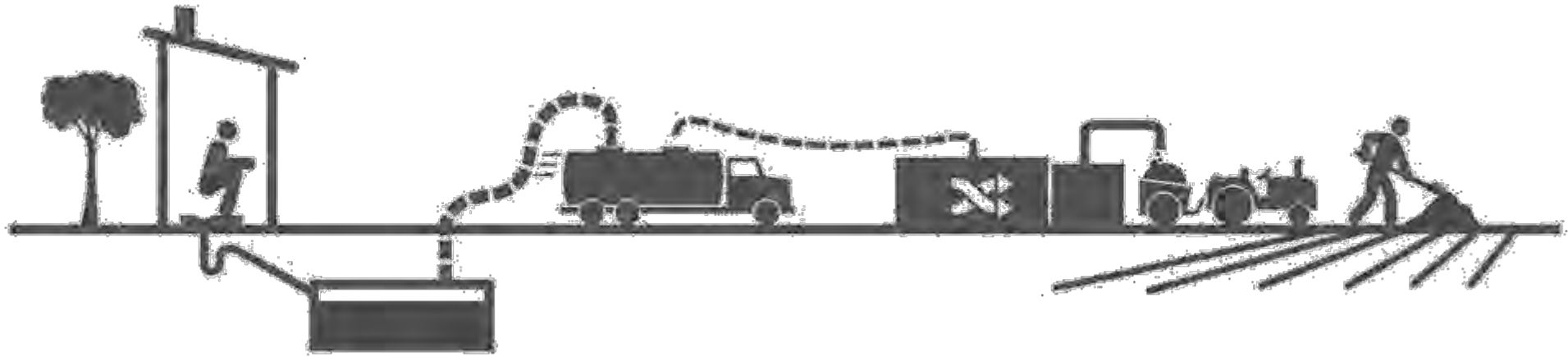
CURRENT STATUS OF LIQUID WASTE MANAGEMENT

1. Faecal Sludge Management (FSM)

- 16 Pilot FSTP Projects
- 49 Scale Up FSM Project

2. Greywater Management (GWM)

- 90 pilot GW projects
- 6000 village level Scale up GW projects in FY 2021 -2022



FSM UNITS

16 PILOT FSTP PROJECT STATUS

Sl. No	District	GP Name	No Of Associated GPs	No Of Associated Villages	Amount Released (in Lakhs)	Expenditure (in Lakhs)	Progress of Construction	Progress Description	Remarks
1	Udupi	Kukkundoor	9	12	52.96	0	30%	Drying bed under construction	Construction under Progress
2	Udupi	80 Badagubettu	6	12	55.13	0	75%	Drying bed & stabilization reactor completed	Construction under Progress
3	Chikkamagaluru	Amruthapura	11	55	51	0	5%	Site marking is completed	Work will start in this week
4	Bangalore Urban	Rajaanukunte	7	48	44.4	0	10%	Excavation Completed	Construction under Progress
5	Ballari	Malpanagudi	11	16	44.05	0	-	-	Revised tender to be called
6	Ballari	Rupangudi	8	16	27.29	0	40%	Drying beds completed	Construction under Progress
7	Haveri	Tumminakatti	8	35	77.74	0	-	-	Local issues
8	Dakshina Kannada	Golthamajal	24	33	63.48	0	-	Site marking Scheduled on 06.08.2021	Work Order Issued
9	Dakshina Kannada	Ujire	24	37	69.87	0	-	Site marking Scheduled on 06.08.2021	Work Order Issued
10	Kalaburagi	Taj Sultanpur	7	15	34.33	0	10%	Excavation Completed	Construction under Progress
11	Dharwad	Kubihal	10	10	45.98	0	5%	Site marking is completed	Excavation stopped due to rains
14	Dharwad	Koliwad	6	8	0	0	-	-	Land issues- DC order
12	Belagavi	Karoshi	14	32	56.57	0	-	-	Tender Called, Contractor to be finalized
13	Belagavi	Sambra	16	30	73.14	0	-	-	Land issues- Flood Zone
15	Uttar Kannada	Gokarna	38		0	0	-	-	Land issues
16	Yadgir	Doranhalli	14	36	0	0	-	-	Land issues
Total			213	395	695.94				

ABSTRACT OF 16 PILOT PROJECTS

Description	No of Pilot	Project Location
Total No. of works started	7	Amruthapura, Kukandur,80 Badagabettu, Rupanagudi, Rajanukunte, Kubihala, Taj Sulthanpur
Marking given but the work to be start	0	
Due for marking	3	Tumminakatte, Ujire, Golthamajalu
Financial bid opened n due for evaluation	1	Koliwada
Retendered	2	Sambra, Karoshi
Due for survey and DPR preparation	1	Malpanagudi
Land problem	2	Gokarna, Doranahalli
Total	16	

STATUS OF 16 PILOT PROJECTS



80-Badagabettu



Kukandooru



Rupangudi



Tajsultanpur



Rajankunte

PROPOSED SCALE UP OF FSMS SIZING AND TECHNOLOGY

Sr. no.	District	Mother Gram Panchayat	Associate Gram Panchayat Number	FSTP Size	Proposed Technology
1	Ramanagara	Doddamaralawadi	9	3KLD	Planted Drying Bed
2	Ramanagara	Kodihalli	12	3KLD	Planted Drying Bed
3	Ramanagara	Kabballu	09	6KLW	Planted Drying Bed
4	Ramanagara	Byramangala	04	3KLD	Planted Drying Bed
5	Raichur	Kothnal	15	18KLW	Planted Drying Bed
6	Raichur	Nagaddinni	9	12KLW	Planted Drying Bed
7	Chamarajnagara	Kongarahalli	7	9KLW	Planted Drying Bed
8	Chikkamagaluru	Sakarayapattana	15	6KLD	Unplanted Drying Bed
9	Chikkamagaluru	Shivane	12	6KLD	Unplanted Drying Bed
10	Bangalore Rural	Samethahalli	7	12KLW	Planted Drying Bed
11	Bangalore Rural	Shivanapura	12	6KLD	Unplanted Drying Bed
12	Bangalore Rural	Thippuru	10	6KLD	Unplanted Drying Bed
13	Bangalore Rural	Jalie	5	12KLW	Planted Drying Bed

Sr. no.	District	Mother Gram Panchayat	Associate Gram Panchayat Number	FSTP Size	Proposed Technology
14	Chikkaballapur	Hudugur	6	12 K LW	Planted Drying Bed
15	Hassan	Ramanathapura	12	3 K LW	Planted Drying Bed
16	Uttara Kannada	Tergaon	18	9 K LW	Planted Drying Bed
17	Dakshin Kannada	Uppinangdy	10	3 K LD	Planted Drying Bed
18	Haveri	Motabennur	6	6 K LD	Planted Drying Bed
19	Ballari	Sirigeri	15	3 K LW	Planted Drying Bed
20	Kalaburagi	Telkur	18	3 K LD	Planted Drying Bed
21	Kalaburagi	Kuknoor	9	3 K LD	Planted Drying Bed
22	Shivamogga	Rippenpete	6	3K LW	Planted Drying Bed
23	Kolar	Bethamangala	5	9K LD	Unplanted Drying Bed
24	Tumakuru	Naduru	5	3K LD	Planted Drying Bed
25	Raichur	Alabnur	21	12K LW	Planted Drying Bed
26	Belagavi	Sankonatti	13	18K LW	Planted Drying Bed
27	Yadagir	Saidapur	8	10K LW	Planted Drying Bed

Sr. no.	District	Mother Gram Panchayat	Associate Gram Panchayat Number	FSTP Size	Proposed Technology
28	Yadagir	Khanapur SH	9	10KLW	Planted Drying Bed
29	Yadagir	Gogi k	11	3KLW	Planted Drying Bed
30	Shivamogga	Udri	4	NA	Trenching
31	Shivamogga	Hosabale	5	NA	Trenching
32	Shivamogga	Gajanuru	8	NA	Trenching
33	Shivamogga	Talaguppa	8	NA	Trenching
34	Shivamogga	Gudavi	4	NA	Trenching
35	Shivamogga	Guddekoppa	4	NA	Trenching
36	Koppal	Mangaluru		NA	Trenching
37	Mandya	Belagola	7	6KLW	Planted Drying Bed
38	Mandya	Goruvanahalli	5	6KLW	Planted Drying Bed
39	Davangere	Kodaganuru	11	-	Trenching
40	Davangere	Diddigi	9	-	Trenching
41	Gadag	Harati	15	9KLW	Planted Drying Bed

Sr. no.	District	Mother Gram Panchayat	Associate Gram Panchayat Number	FSTP Size	Proposed Technology
42	Bidar	Gahtboral	18	3KLD	Planted Drying Bed
43	Bidar	Sastapur	13	-	Trenching
44	Bangalore urban	Kannamangala	7	3KLD	Un-Planted Drying Bed
45	Belagavi	Khanagaon	10	12KLW	Planted Drying Bed
46	Ballari	Devaragondanahally	7	3KLW	Planted Drying Bed
47	Davangere	Kurki	8	-	Trenching
48	Hassan	Hagare	8	12KLW	Planted Drying Bed
49	Kodagu	Suntikoppa	12	3KLW	Planted drying Bed
	Total		466		

PROPOSED SCALE UP OF FSMS SIZING AND TECHNOLOGY

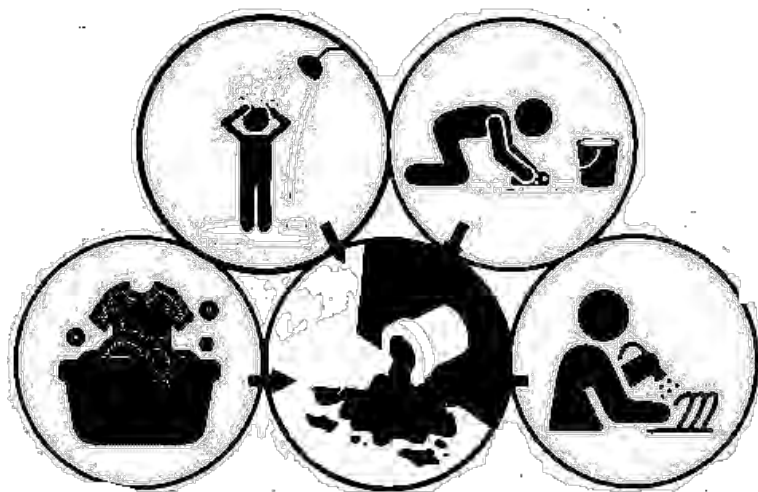
➤ **115 Clusters were formed for scale up of FSTP across the state, out of which 65 Clusters were found to be feasible and in 49 Clusters faecal load is assessed and suitable technology is finalized**

- 32 FSM clusters the proposed treatment technology is Planted drying bed
- 11 FSM cluster the proposed treatment technology is Trenching
- 6 FSM clusters the proposed treatment technology is Un-Planted drying bed



➤ **Trenching method suggested for 11 clusters can be executed within a time frame of one month**

➤ **Topography & Geo-technical survey completed for 7 sites. Chamrajnagar-1, Chikkaballapur-1, DK-1, Ramnagar-3, Kodagu-1**



GREYWATER MANAGEMENT AT VILLAGE LEVEL

GREYWATER MANAGEMENT

- A Government Order was issued on 13.11.2020 for releasing 25% (205.35 Cr) of the available funds under SBM-G for implementation of Greywater management (GWM) to all districts
- A joint circular was issued in convergence with MGNREGA to utilize the available funds under SBM-G for material component during implementation of GWM
- On-boarded CDD Society for technical handholding & capacity building across the State
- Phase –I, 3 Gram Panchayats were identified in each District for initial implementation
 - Totally 113 Gram Panchayats were identified
 - Data collection forms were received from 90 GPs, out of which suitable technological options were proposed for 15 GPs

GREYWATER MANAGEMENT

- DPR template for GWM projects prepared and shared with all Districts
- Advanced Module training are scheduled and in progress for engineers and consultants involved in implementation of GWM will be completed by September 2021.
- 5 day's Training of Trainers (ToT) module was completed for State & district SLWM consultants from 26.08.2021 to 30.08.2021
- Orientation training regarding GWM for GPPs/PDOs is being scheduled to start from third week of August 2021 and in Chamrajnagar, Belagavi and Kolar district the orientation training is completed.

ADVANCED MODULE TRAINING CALENDAR

Si No	District	Date of Training	Maximum 60 Participants, RWS Engineers, MGNREGA Engineers, SLWM Consultants
1	Chamrajanagar	15.07.2021 - 17.07.2021	CDD TEAM-1
Reports submission and feedback collection			
2	Ramnagara	26.07.2021 - 28.07.2021	CDD TEAM-1
3	Chikkaballapura	29.07.2021 - 31.07.2021	CDD TEAM-1
4	Mandya	02.08.2021 - 04.08.2021	CDD TEAM-1
5	Shivamogga	05.08.2021 - 07.08.2021	CDD TEAM-1
6	Bangalore Urban	09.08.2021 - 11.08.2021	CDD TEAM-1
7	Bangalore Rural	12.08.2021 - 14.08.2021	CDD TEAM-1
8	Kolar	16.08.2021 - 18.08.2021	CDD TEAM-1
9	Tumkur	19.08.2021 - 21.08.2021	CDD TEAM-1
10	Tumkur	23.08.2021 - 25.08.2021	CDD TEAM-1
11	Dakshina Kannada	27.08.2021 - 29.08.2021	CDD TEAM-1
12	Udupi	30.08.2021 - 01.09.2021	CDD TEAM-1
13	Chitradurga	02.09.2021 - 04.09.2021	CDD TEAM-1
14	Davangere	06.09.2021 - 08.09.2021	CDD TEAM-1
15	Haveri	13.09.2021 - 15.09.2021	CDD TEAM-1
16	Hassan	16.09.2021 - 18.09.2021	CDD TEAM-1
17	Chikkamagaluru	20.09.2021 - 22.09.2021	CDD TEAM-1
18	Kodagu	23.09.2021 - 25.09.2021	CDD TEAM-1
19	Mysore	27.09.2021 - 29.09.2021	CDD TEAM-1
20	Mysore	30.09.2021 - 02.10.2021	CDD TEAM-1

Si No	District	Date of Training	Maximum 60 Participants, RWS Engineers, MGNREGA Engineers, SLWM Consultants
1	Ballari	12.07.2021 - 14.07.2021	CDD TEAM-2
2	Vijaynagara	15.07.2021 - 17.07.2021	CDD TEAM-2
Reports submission and feedback collection			
3	Gadag	26.07.2021 - 28.07.2021	CDD TEAM-2
4	Koppal	29.07.2021 - 31.07.2021	CDD TEAM-2
5	Belgaum	02.08.2021 - 04.08.2021	CDD TEAM-2
6	Belgaum	05.08.2021 - 07.08.2021	CDD TEAM-2
7	Bagalkot	09.08.2021 - 11.08.2021	CDD TEAM-2
8	Bagalkot	12.08.2021 - 14.08.2021	CDD TEAM-2
9	Vijayapura	16.08.2021 - 18.08.2021	CDD TEAM-2
10	Vijayapura	19.08.2021 - 21.08.2021	CDD TEAM-2
11	Kalburgi	23.08.2021 - 25.08.2021	CDD TEAM-2
12	Kalburgi	26.08.2021 - 28.08.2021	CDD TEAM-2
13	Bidar	30.08.2021 - 01.09.2021	CDD TEAM-2
14	Yadgir	02.09.2021 - 04.09.2021	CDD TEAM-2
15	Raichur	06.09.2021 - 08.09.2021	CDD TEAM-2
16	Raichur	13.09.2021 - 15.09.2021	CDD TEAM-2
Reports submission and feedback collection			
17	Uttarakannada	16.09.2021 - 18.09.2021	CDD TEAM-2
18	Uttarakannada	20.09.2021 - 22.09.2021	CDD TEAM-2
19	Dharwad	23.09.2021 - 25.09.2021	CDD TEAM-2

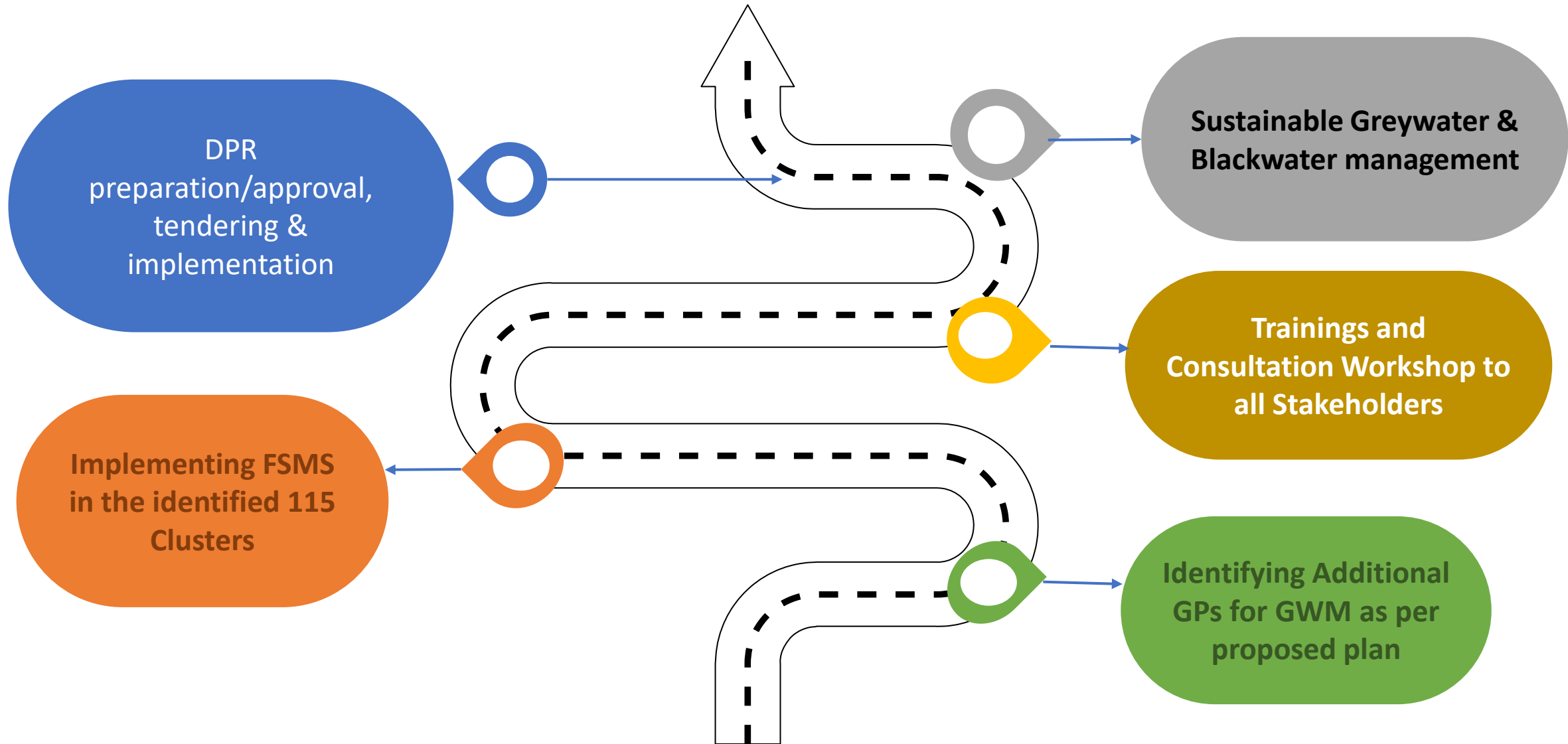
PROPOSED PLAN FOR GREYWATER MANAGEMENT

Si No	District	Total No of Talukas	Total Number of Gram Panchayat	Total Number of Villages	Quarter-1 No of Gram Panchayat Targeted	Quarter-1 No of Villages Targeted	Quarter-2 No of Gram Panchayat Targeted	Quarter-2 No of Villages Targeted	Quarter-3 No of Gram Panchayat Targeted	Quarter-3 No of Villages Targeted
1	Bengaluru Urban	5	87	648	26	194	35	259	26	194
2	Ramanagara	4	127	762	38	229	51	305	38	229
3	Shivamoga	7	269	1485	81	446	108	594	81	446
4	Kolar	6	156	1285	47	386	62	514	47	386
5	Chickmagaluru	8	226	1117	68	335	90	447	68	335
6	Kodagu	3	104	302	31	91	42	121	31	91
7	Dakshina Kannada	7	223	354	67	106	89	142	67	106
8	Udupi	7	155	247	47	74	62	99	47	74
9	Gadag	7	122	316	37	95	49	126	37	95
	Total	54	1469	6516	441	1955	588	2606	441	1955
10	Bengaluru Rural	4	102	955	15	143	20	191	15	143
11	Chikkaballapura	6	157	1327	24	199	31	265	24	199
12	Davangere	6	195	740	29	111	39	148	29	111
13	Hassan	8	267	2451	40	368	53	490	40	368
14	Mandya	7	233	1455	35	218	47	291	35	218
15	Mysuru	8	266	1250	40	188	53	250	40	188
16	Dharwad	7	144	348	22	52	29	70	22	52
17	Haveri	8	223	716	33	107	45	143	33	107
	Total	54	1587	9242	238	1386	317	1848	238	1386
18	Chithradurga	6	189	1369	28	205	38	274	28	205
19	Tumakuru	10	330	2554	50	383	66	511	50	383
20	Chamarajanagar	5	130	507	20	76	26	101	20	76
21	Bagalakote	9	197	658	30	99	39	132	30	99
22	Belagavi	14	506	1295	76	194	101	259	76	194
23	Uttara kannada	12	231	1285	35	193	46	257	35	193
24	Vijayapura	12	212	695	32	104	42	139	32	104
25	Ballari	11	237	613	36	92	47	123	36	92
26	Bidar	8	185	631	28	95	37	126	28	95
27	Kalaburagi	11	262	913	39	137	52	183	39	137
28	Koppala	7	153	591	23	89	31	118	23	89
29	Raichur	7	179	793	27	119	36	159	27	119
30	Yadgir	6	122	467	18	70	24	93	18	70
	Intermediate Total	118	2933	12371	440	1856	587	2474	440	1856
	Total Grand	226	5989	28129	1119	5197	1492	6929	1119	5197

CHALLENGES ENCOUNTERED

- Capacity building of Engineers at ground level
- Capacity building of all the Stakeholders involved before implementation of Grey & Blackwater management
- Land identification, ownership & possession
- Fast tracking payments for initial Topography & soil test
- Monsoon- This is major setback as it will be difficult to quantify Greywater in drains
- Local issues regarding awareness

WAY FORWARD





MANAGEMENT INFORMATION SYSTEM (MIS)

Support Application



Central



State

MONITORING OF DIFERENT COMPONENTS OF SBM-G ON MIS

❖ **Progress of construction of Individual House Hold Latrine(IHHL).**

- **PM-12** for entry of New IHHL(Phase-II).
- **PM-14** for entry of physical and financial progress of New IHHL(Phase-II).

❖ **Progress of Community Sanitary Complexes(CSCs).**

- **SBM 2.0** Mobile app- entry of physical progress of CSC
- **C-10-** entry of financial progress of CSC

❖ **Progress of Solid & Liquid Waste Management.**

- **SBM 2.0 Mobile app-** entry of physical and financial progress of SWM and LWM.

❖ **Entry the expenditure of IEC,HRD activities and Administration expenditure.**

- **D-04: modules** of IEC,HRD activities and Administration expenditure.

❖ **Updating the existing modules of progress entry** as and when there is a need for improvement as per requests from districts

CONTINUED...

- ❖ **Analysis and fix the issues** related to SBM(G) components as addressed by GP level about application.
- ❖ **Analysis of weekly progress reports**, with qualitative interpretation of trends, bottlenecks, and issues requiring corrective attention.
- ❖ **Analysis and prepare the progress report** for review meetings, VC, seminars, workshops of the SBM (G) program.

MIS V/S PANCHATANTRA

MIS

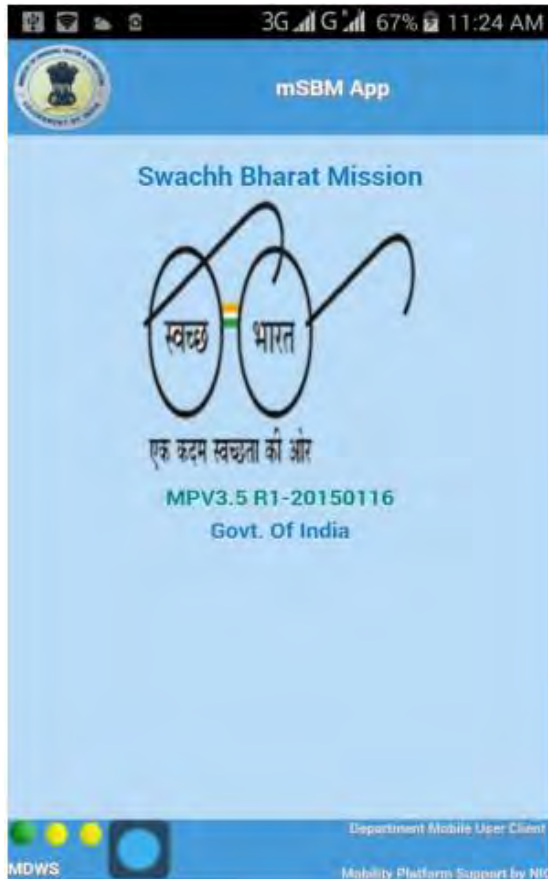
- Developed by Central NIC team
- User Login and dashboard URL: <https://sbm.gov.in/SBMphase2/Secure/Login.aspx>
- Different login at different level(Upto Taluk level)
- Not real-time updation (Manual entry)
- Entry and approve the progress of different components of SBM(G) in Taluk/District /State level manually.
- Geo-tag will be done through mobile app only.
- Msbm app -> IHHL progress
- ODF Plus app -> CSC, SWM and LWM progress

Panchatantra

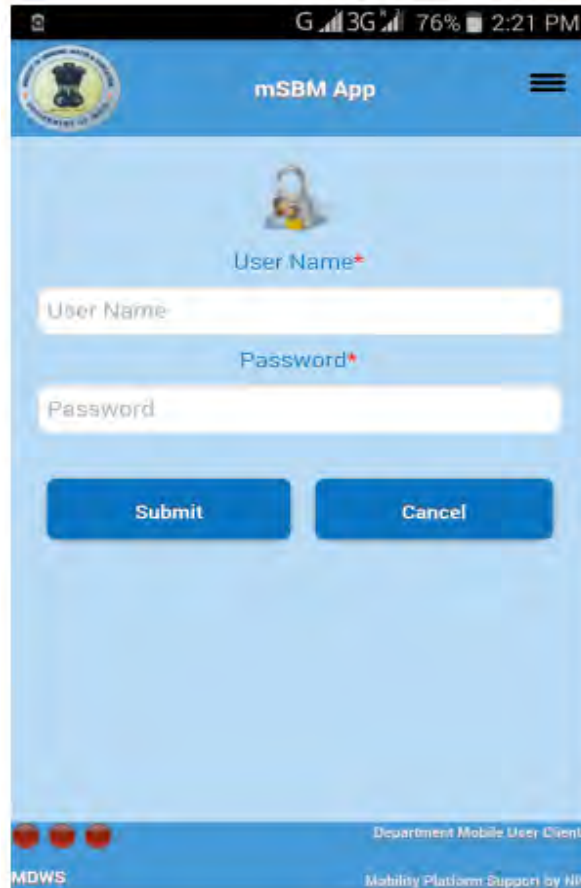
- Developed by State NIC team
- User Login URL: <https://panchatantra.kar.nic.in>
- To view progress report URL: <http://panchatantra.kar.nic.in/stat/>
- Different login at different level(Upto GP level)
- Real-time updation.(No manual intervention)
- Construction progress and payment for IHHL in GP level.
- Option to enter geo co-ordinating manually.
- Nirmal Bharat Abhiyan -> IHHL progress

MSBM MOBILE APP(GEO-TAG)

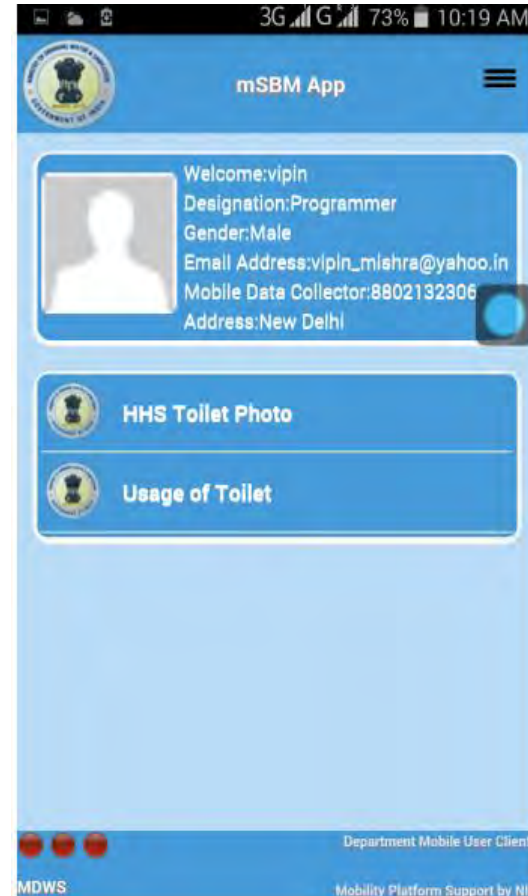
1. Splash screen



2. User login screen



3. Home screen

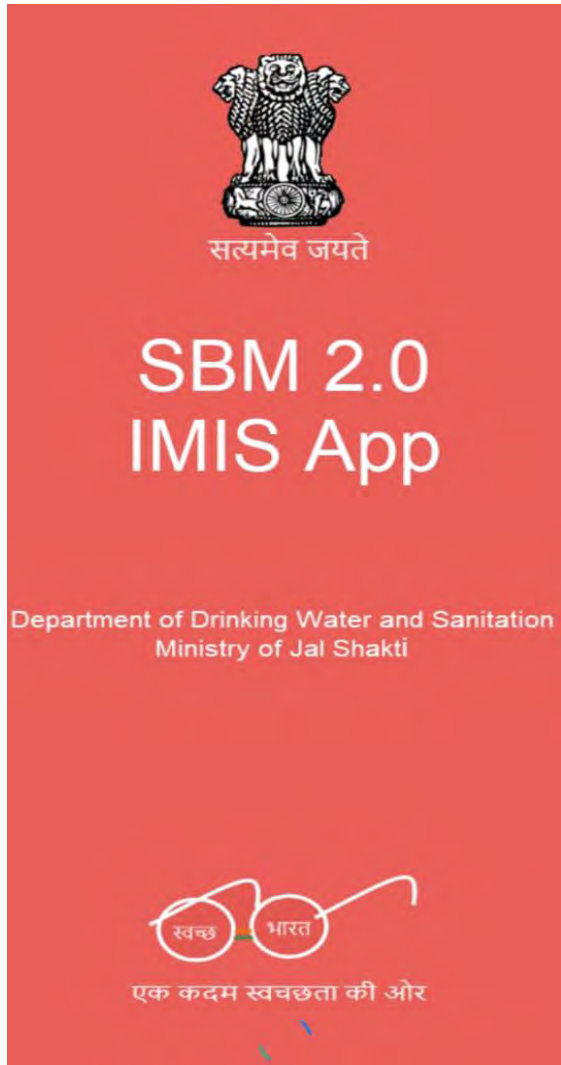


4. Photo upload

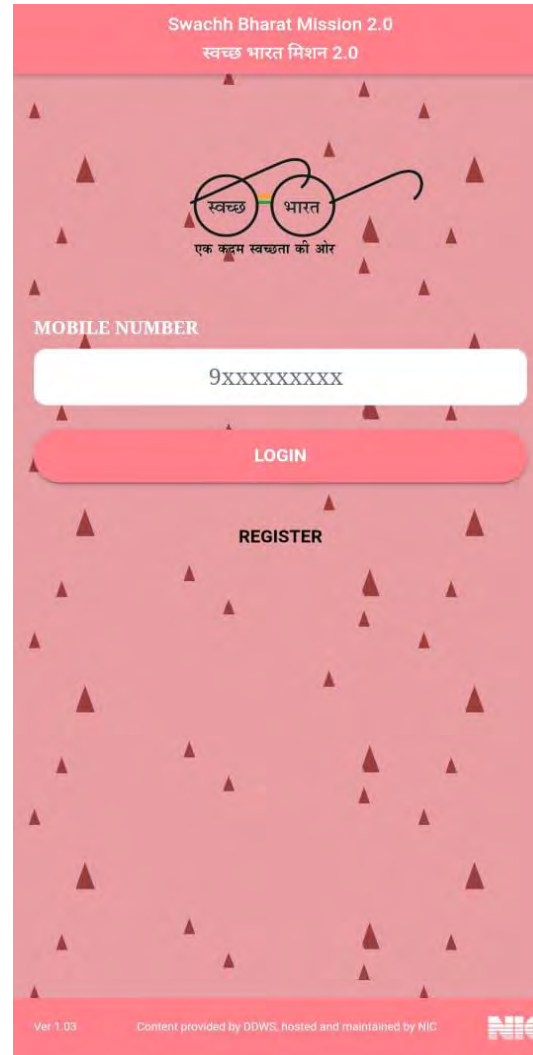


ODF PLUS MOBILE APP (SBM 2.0 APP)

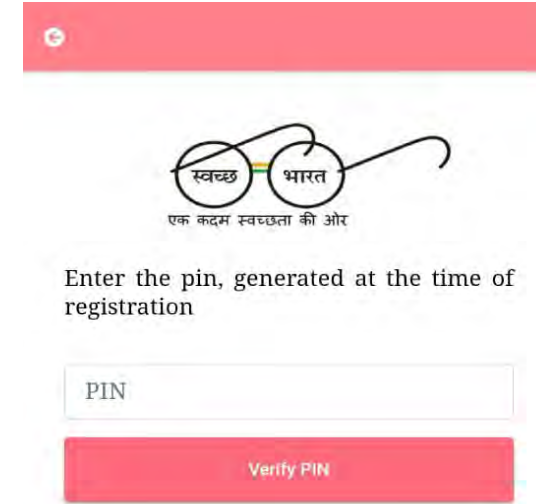
1. Splash screen



2. User login entry



3. OTP entry



4. Home screen





Plant new trees



Water your plants regularly.



Don't waste too much water for taking a bath. Harvest rain water.

Thank you



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ



ಐ.ಇ.ಸಿ ಮತ್ತು ತರಬೇತಿ ಚಟುವಟಿಕೆಗಳು ಜಲ ಜೀವನ್ ಮಿಷನ್-ಸ್ವಚ್ಛ ಭಾರತ್ ಮಿಷನ್ (ಗ್ರಾ)



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನಾವು ಯಾವುದಕ್ಕಾಗಿ ಶ್ರಮಿಸುತ್ತಿದ್ದೇವೆ?



ಗ್ರಾಮೀಣ ಸಮುದಾಯಕ್ಕೆ
ಶಿಕ್ಷಣ/ ಸಂವೇದನಾಶೀಲತೆ



ಸಮುದಾಯ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು
ಹೆಚ್ಚಿಸುವುದು.



ಸುಸ್ಥಿರ ಅಭ್ಯಾಸಗಳು



ಜವಾಬ್ದಾರಿ ಮತ್ತು ಹೊಣೆಗಾರಿಯನ್ನು ಹುಟ್ಟು
ಹಾಕುವುದು



ನಡವಳಿಕೆ ಬದಲಾವಣೆ

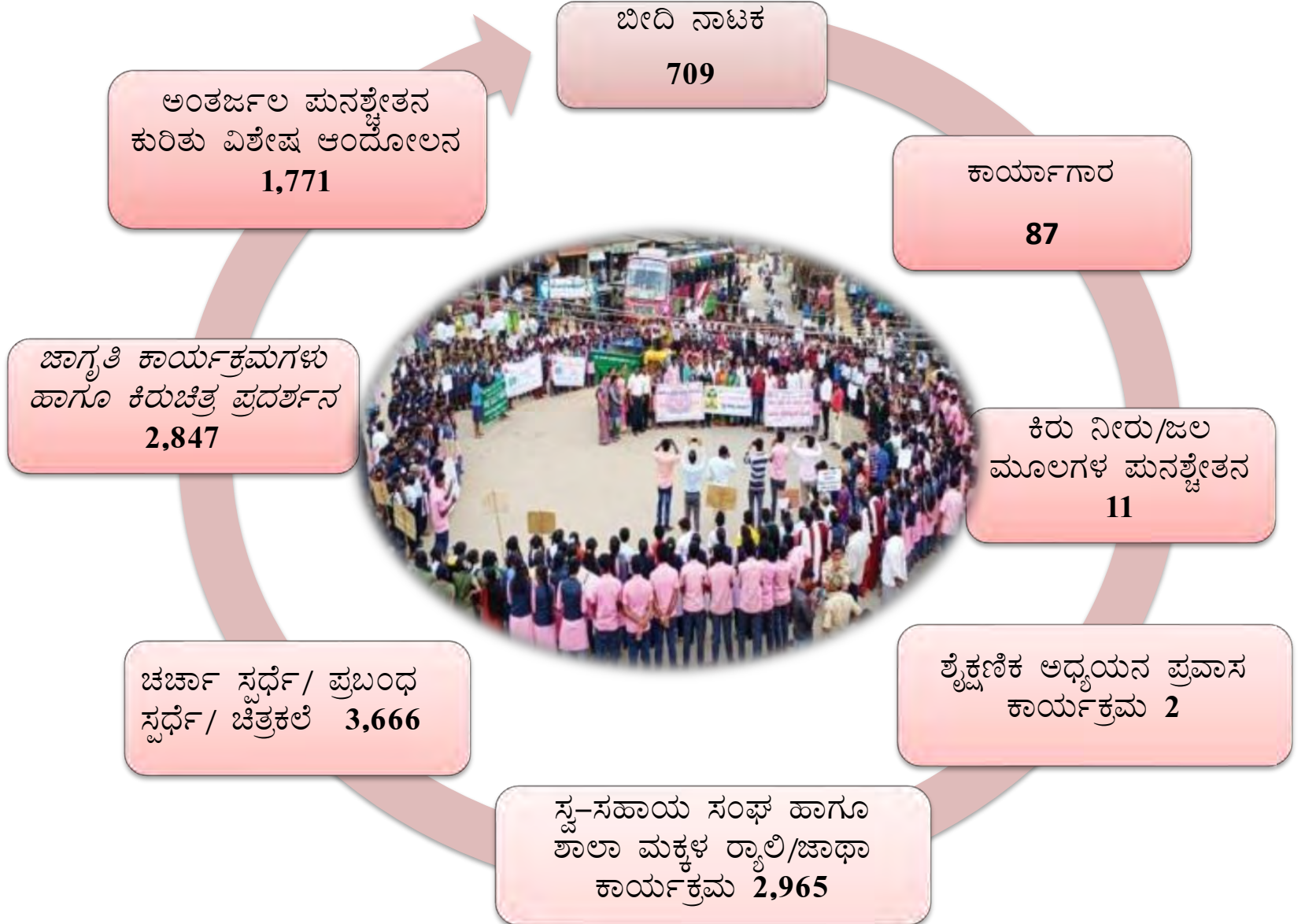


ನೀರಿನ ಸಾಕ್ಷರತೆ

ಅನುದಾನ ಹಂಚಿಕೆ - IEC/HRD

ಯೋಜನೆ	ಅನುದಾನ ಹಂಚಿಕೆ
ಜಲ ಜೀವನ್ ಮಿಷನ್ (ಅನುಷ್ಠಾನ ಬೆಂಬಲ ಚಟುವಟಿಕೆಗಳು)	ಶೇ.5%
ಸ್ವಚ್ಛ ಭಾರತ್ ಮಿಷನ್ (ಗ್ರಾ) ಹಂತ-2 (ಐ.ಇ.ಸಿ/ತರಬೇತಿ ಚಟುವಟಿಕೆಗಳು)	ಶೇ.3%

JJM- ಐ.ಇ.ಸಿ ಚಟುವಟಿಕೆಗಳು



ಐ.ಇ.ಸಿ ಕಾರ್ಯಕ್ರಮ

➤ ಬೀದಿ ನಾಟಕ



➤ ಕಾರ್ಯಾಗಾರ



ಐ.ಇ.ಸಿ ಕಾರ್ಯಕ್ರಮ

- ಸ್ವ-ಸಹಾಯ ಸಂಘ ಹಾಗೂ
ಶಾಲಾ ಮಕ್ಕಳ ರ್ಯಾಲಿ /
ಜಾಥಾ ಕಾರ್ಯಕ್ರಮ



- ಚರ್ಚಾ / ಪ್ರಬಂಧ / ಚಿತ್ರಕಲೆ
ಸ್ಪರ್ಧೆ



ಐ.ಇ.ಸಿ ಕಾರ್ಯಕ್ರಮ

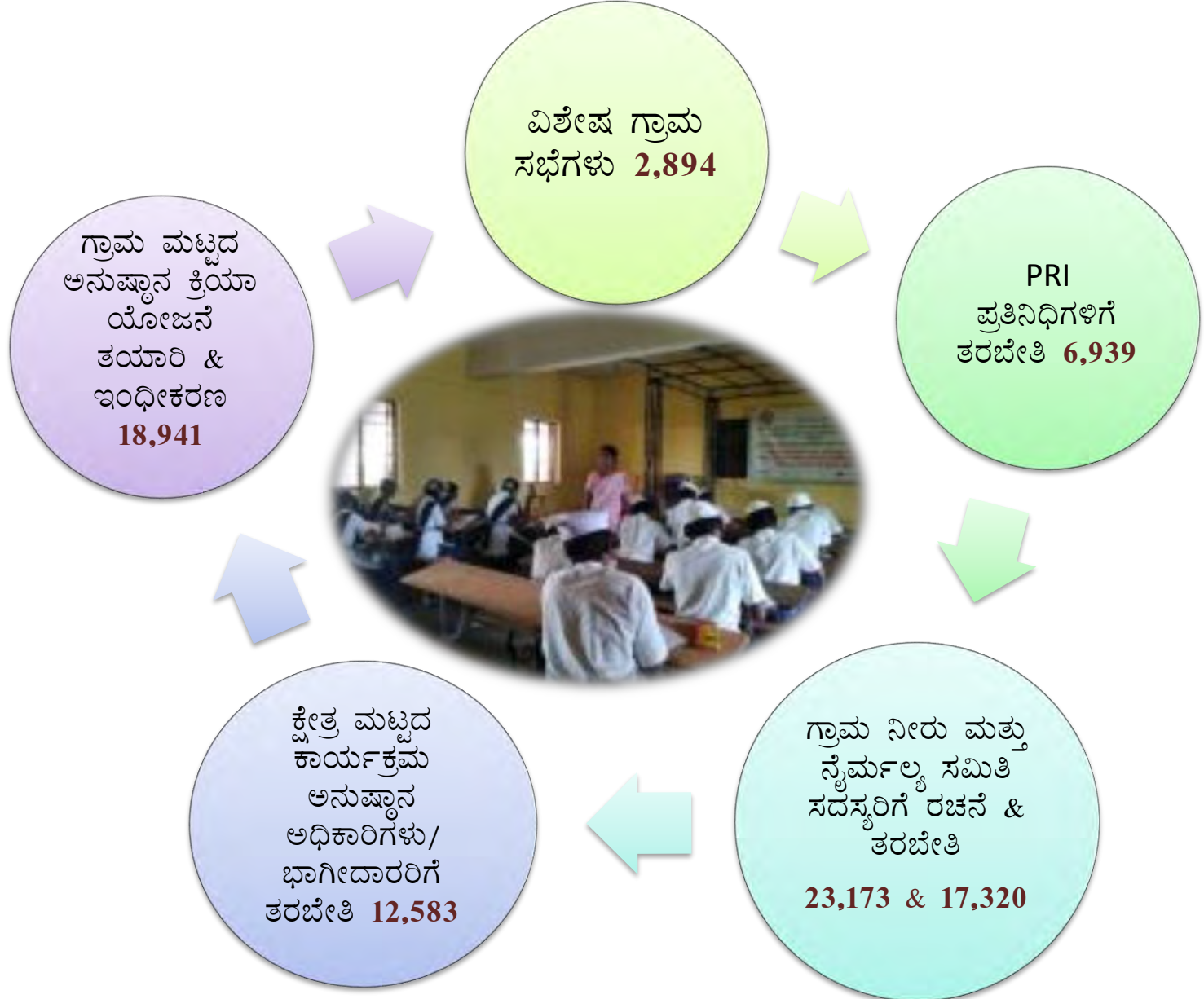
- ಜಾಗೃತಿ ಹಾಗೂ ಕಿರುಚಿತ್ರ ಪ್ರದರ್ಶನ ಕಾರ್ಯಕ್ರಮಗಳು



- ಅಂತರ್ಜಲ ಪುನಶ್ಚೇತನ ವಿಶೇಷ ಆಂದೋಲನ



JJM-ತರಬೇತಿ ಚಟುವಟಿಕೆಗಳು



ತರಬೇತಿಗಳು

✓ ಗ್ರಾಮ ಕ್ರಿಯಾ ಯೋಜನೆ



✓ ವಿಶೇಷ ಗ್ರಾಮ ಸಭೆಗಳು



- ಕ್ಷೇತ್ರ ಮಟ್ಟದ ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನ ಅಧಿಕಾರಿಗಳು/ಭಾಗೀದಾರರಿಗೆ ತರಬೇತಿ



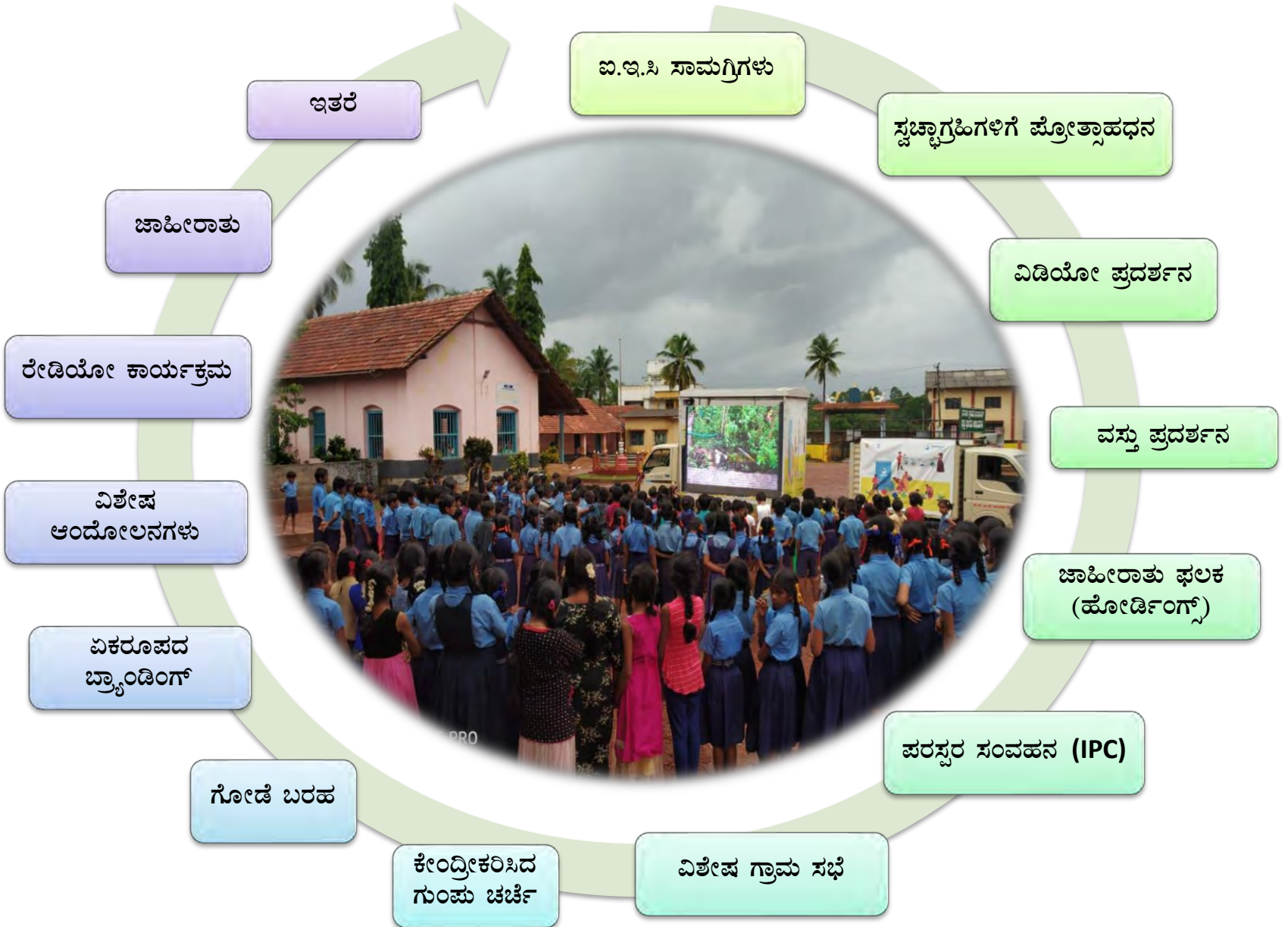
- VWSC ಸದಸ್ಯರಿಗೆ ತರಬೇತಿ



ಕಲ್ಯಾಣಿ ಪುನಶ್ಚೇತನ



SBMG-ಐ.ಇ.ಸಿ ಚಟುವಟಿಕೆಗಳು



2020-21 ನೇ ಸಾಲಿನ ಪ್ರಗತಿ ನೋಟ

➤ ಗೋಡೆ ಬರಹ 5,593

➤ ಬೀದಿ ನಾಟಕಗಳು 88

➤ ಮೇಳಗಳ ಆಯೋಜನೆ 06

➤ ಹೋರ್ದಿಂಗ್‌ಗಳು ಮತ್ತು ಬ್ಯಾನರ್‌ಗಳು

9,357

➤ ಗುಂಪು ಸಭೆಗಳು 5,185

➤ PRA 1,159

➤ ವಸ್ತು ಪ್ರದರ್ಶನ 28

➤ ಹಾಡು ಮತ್ತು ನಾಟಕ 86

➤ ರೇಡಿಯೋ ಸ್ಟಾಟ್ 08

➤ ಆಡಿಯೋ ದೃಶ್ಯ ಪ್ರಚಾರ 7,870

➤ ಜಾಗೃತಿ ಮತ್ತು ಉದ್ಘಾಟನಾ ಕಾರ್ಯಾಗಾರ

1,026

➤ IPC 1,26,872

➤ ಐ.ಇ.ಸಿ ವಸ್ತುಗಳ ವಿತರಣೆ 1,57,267

➤ ಸ್ವಚ್ಛತಾ ರಥ 74

ಐ.ಇ.ಸಿ/ತರಬೇತಿಗಳ ಅನುಷ್ಠಾನ ಪ್ರಮುಖ ಪಾಲುದಾರರು



ಬ್ರ್ಯಾಂಡಿಂಗ್

ತ್ಯಾಜ್ಯ ನಿರ್ವಹಣೆ



ಸ್ವಚ್ಛ ಸಂಕೀರ್ಣ

ನೀರು ಸರಬರಾಜು



ಜಲೋತ್ಸವ
ಮನೆ ಮನೆಗೆ ಗಂಗೆ ಸಿ



ಸ್ವಚ್ಛ ಸಂಕೀರ್ಣ



ಜಲೋತ್ಸವ ಬ್ಯಾಂಡಿಂಗ್



ಗೊಡೆ ಬರಹ



ಪುಸ್ತಕಗಳ ಮುದ್ರಣ/ಹಂಚಿಕೆ

- ನೈರ್ಮಲ್ಯ ನೀತಿ ಕಾರ್ಯತಂತ್ರ ಮತ್ತು ಉಪವಿಧಿ.
- JJM ಕಾರ್ಯಕಾರಿ ಮಾರ್ಗಸೂಚಿ
- JJM ಮಾರ್ಗದರ್ಶಿಕ
- ಸ್ವಚ್ಛ ಸಂಕೀರ್ಣ ಕಿರುಪುಸ್ತಕ
- ನೈರ್ಮಲ್ಯ ಕೈಪಿಡಿ



ಪರಿಹಾರ ಸ್ವಿಕ್ಚರ್

ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ



ನಿಮ್ಮ ಗ್ರಾಮದ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಕುರಿತ ಸಮಸ್ಯೆಗಳಿಗೆ ಪರಿಹಾರ ಸಹಾಯವಾಣಿಗೆ ಕರೆ ಮಾಡಿ

94809 85555

ನೀರು

- ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಘಟಕದ ಸಮಸ್ಯೆ
- ಅಶುದ್ಧ ನೀರಿನ ಸಮಸ್ಯೆ
- ನೀರು ಸರಬರಾಜು ವ್ಯವಸ್ಥೆ
- ಶಾಲೆ/ಅಂಗನವಾಡಿಗಳಲ್ಲಿ ನಳ ಸಂಪರ್ಕ

ಸ್ವಚ್ಛತೆ

- ಕೊಳಕು ನೀರು ನಿಂತಿರುವುದು/ಚರಂಡಿ ಸಮಸ್ಯೆ
- ಕಸ ನಿರ್ವಹಣೆ ಸಮಸ್ಯೆ
- ಸಾರ್ವಜನಿಕ/ಸಮುದಾಯ ಶೌಚಾಲಯದ ನಿರ್ಮಾಣ-ನಿರ್ವಹಣೆ
- ವೈಯಕ್ತಿಕ ಶೌಚಾಲಯದ ನಿರ್ಮಾಣ

ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
 ಸ್ವಚ್ಛೋತ್ಸವ-ಜಲೋತ್ಸವ

ಜನವರಿ January 2021

ಭಾನು Sun	31	3	10	17	24
ಸೋಮ Mon	4	11	18	25	26
ಮಂಗಳ Tue	5	12	19	26	27
ಬುಧ Wed	6	13	20	27	28
ಗುರು Thu	7	14	21	28	29
ಶುಕ್ರ Fri	1	8	15	22	29
ಶನಿ Sat	2	9	16	23	30

ಬೆಳೆ ಲಾಭದೊಂದಿಗೆ, ಉಳಿಕೆಯಿಂದಲೂ ಲಾಭ ಪಡೆಯೋಣ.

ಕೃಷಿ ತ್ಯಾಜ್ಯದಿಂದ ಬಯೋ ಗ್ಯಾಸ್ ಮತ್ತು ಕಾಂಪೋಸ್ಟ್ ತಯಾರಿಸಿ, ಪರಿಸರ ಸಂರಕ್ಷಿಸೋಣ.

ಕ್ಯಾಲೆಂಡರ್-2021

ಜನ ಜಾಗೃತಿಗೆ-ವಿಶೇಷ ಆಂದೋಲನಗಳು

- ✓ ಋತುಚಕ್ರ ನಿರ್ವಹಣೆ ಆಂದೋಲನ
- ✓ ಸ್ವಚ್ಛ ಗ್ರಾಮ ಸ್ವಚ್ಛ ಪರಿಸರ ಆಂದೋಲನ
- ✓ ಸಮುದಾಯ ಶೌಚಾಲಯ ಅಭಿಯಾನ
- ✓ ಸಾಮಾಜಿಕ ಮಾಧ್ಯಮ ವಿಶೇಷ ಆಂದೋಲನ
- ✓ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಆಂದೋಲನ
- ✓ ಗಂದಗಿ ಮುಕ್ತ ಭಾರತ್ ಆಂದೋಲನ
- ✓ ಸ್ವಚ್ಛೋತ್ಸವ- ನಿತ್ಯೋತ್ಸವ ಆಂದೋಲನ
- ✓ 100 ದಿನಗಳ ವಿಶೇಷ ಆಂದೋಲನ
- ✓ ನಮ್ಮ ನಡೆಗೆ ತ್ಯಾಜ್ಯ ಮುಕ್ತ ಕಡೆಗೆ
- ✓ ಸಮುದಾಯ ವಂತಿಕೆ ಸಂಗ್ರಹ ಆಂದೋಲನ



ಕೃಷಿಗಲು ಏತೋಲನಗಲು ಸ್ವಚ್ಛಗಲು ಉದ್ಯೋಗಗಲು ದಯೆಗಲು ಸಭೆ ಕಡೆಗೆ ENGLISH

ಗ್ರಾಮೀಣ ರೆಸಿಡೆನ್ಷಿಯಲ್ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಅಭಿಯಾನದಡಿ ಸಮಾಜೀಕರಣದಡಿ ನಡೆಸಿಬಿಡುಗಡೆ ಮಾಡಿ ರೆಸಿಡೆನ್ಷಿಯಲ್ ಒಳಗೆ ರೆಸಿಡೆನ್ಷಿಯಲ್ ಅಭಿವೃದ್ಧಿ ಮಾಡಿ.

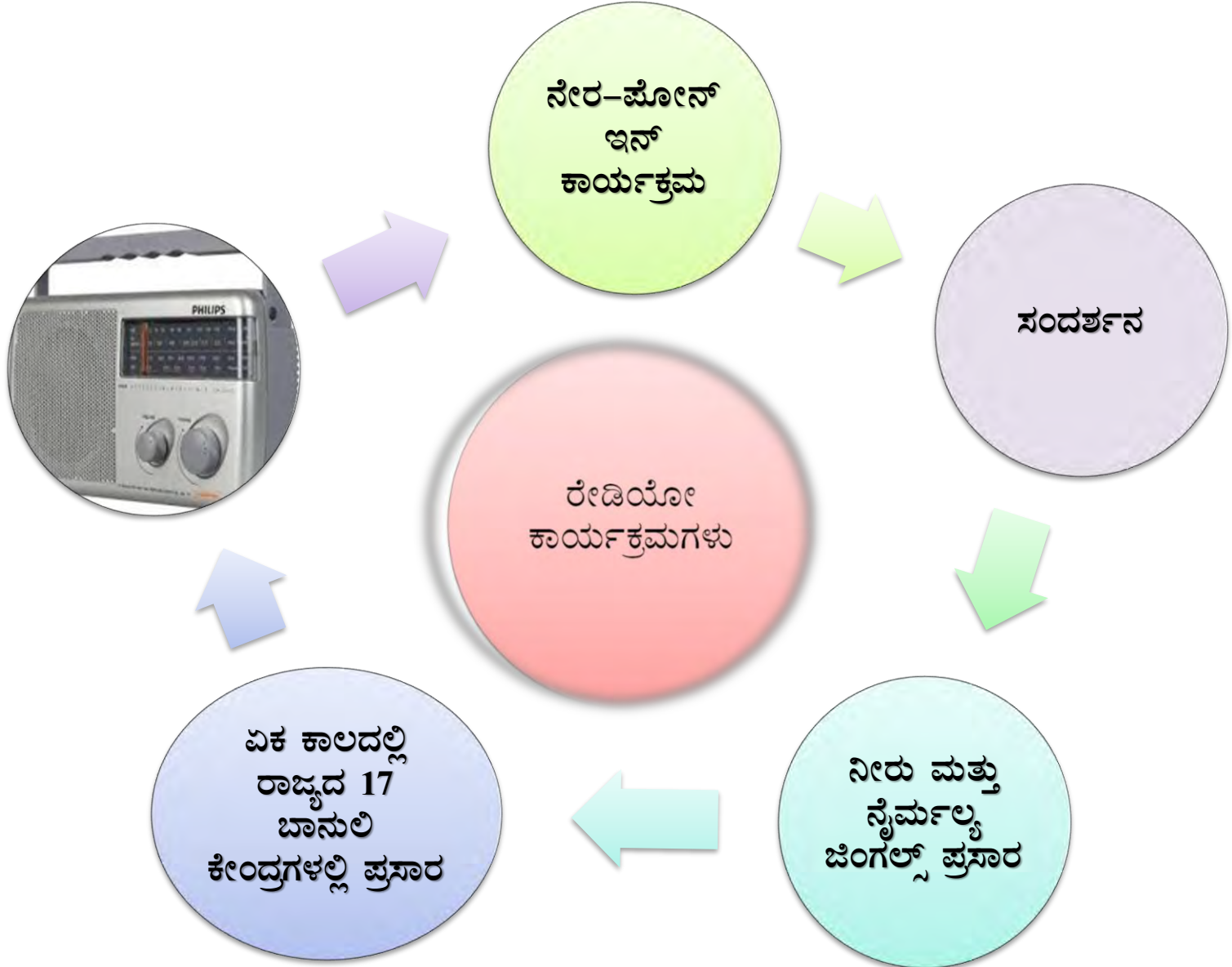
ವಿಶ್ವ ಪರಿಸರ ದಿನಾಚರಣೆಯ ಅಂಗವಾಗಿ
ಸ್ವಚ್ಛ ಗ್ರಾಮ ಸ್ವಚ್ಛ ಪರಿಸರ ಸ್ಪರ್ಧೆ

ಸಾಂಸ್ಕೃತಿಕ ಮತ್ತು ಗೃಹೋತ್ಪಾದಿತ ತ್ಯಾಜ್ಯ ನೀರಿನ ಸೂಕ್ತ ವಿಲೇವಾರಿ ಕುರಿತಂತೆ
ಕಿರುಚಿತ್ರ, ಯಶೋಗಾಥೆ, ಮಾದರಿ.

ಈ ಮೇಲಿನ ಯಾವುದಾದರೂ ಒಂದನ್ನು ಕಳುಹಿಸಿ, ಒಂದುವಾರ ಗೆಲ್ಲಿ.

ಪರಿಹಾರ

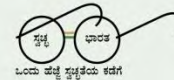
AIR ರೇಡಿಯೋ ಕಾರ್ಯಕ್ರಮಗಳು



ಸಮುದಾಯ ರೇಡಿಯೋ ಕಾರ್ಯಕ್ರಮಗಳು

The grid contains the following radio stations:

- Top Row (Left to Right):**
 - Nammur Banuti:** Logo of a microphone on a stand.
 - ANTARAVANI 90.8 FM:** Logo featuring a portrait of a deity and a microphone.
 - Janadhvani 90.8 Mhz:** Logo with a radio tower and antenna. Text: "Community Radio Station", "An initiative of Viveka School of Excellence (A Unit of Swami Vivekananda Youth Movement)".
 - Namma Dhvani:** Logo of headphones with a microphone inside.
- Bottom Row (Left to Right):**
 - Radio Manipal 90.4 MHz:** Logo of a hand holding a microphone.
 - Radio SARDAR 107.8 FM:** Logo with the name in large, stylized letters.
 - RADIO SIDDHARTHA 90.8FM COMMUNITY RADIO:** Logo featuring a person in a meditative pose.
 - Venudhwani 90.4FM ತೆವಣ್ಣ ಕವನು:** Logo of a tree with a microphone at its base.



Jun.05,2021

YouCam



2020.09.22 12:03



RADIO SARANG 107.8FM MANGALORE



ಯಶೋಗಾಥೆ
2.5 ಎಕರೆ ಖಾಸಗಿ
ಜಾರದಲ್ಲ ಕೆರೆ
ನಿರ್ಮಿಸಿ ಮಾದರಿಯಾದ
ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ
ಮಾಧವ ಭಟ್

ಜುಲೈ 29 ರುರುವಾರ,
ಬೆಳಿಗ್ಗೆ 10.30 ರಿಂದ
11 ಗಂಟೆಯವರೆಗೆ.

ಹಾರೂ ಮರುಪ್ರಸಾರದಲ್ಲಿ
ಸಂಜೆ 5.30 ರಿಂದ
6 ಗಂಟೆಯವರೆಗೆ

ಶುದ್ಧ ಜಲ ಸೃಷ್ಟಿ ನೆಲೆ
ಆರೋಗ್ಯವಾಗಿರಲಿ ಜೀವ ಸಂಕುಲ,
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು
ಹಾಗೂ ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಪ್ರಾಯೋಜಿತ
ಸರಣಿ ಕಾರ್ಯಕ್ರಮ



RADIO SARANG 107.8 FM MANGALORE



ಅಂತರ್ ಜಲ ಮರುಷೂರಣೆ
ಹಾರೂ ಖುರುರುಂಡಿರಳ ನಿರ್ವಹಣೆ



ಭಾಗವಹಿಸುವವರು
ನಾರಅಂಗಸ್ಥಾಪಿ ವಿಶ್ವಾಸ್ತುಣಿ

ಭೂ ವಿಜ್ಞಾನಿ,
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಹಾಗೂ
ನೈರ್ಮಲ್ಯ ವಿಭಾಗ, ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ

ಶುದ್ಧ ಜಲ ಸೃಷ್ಟಿ ನೆಲೆ ಆರೋಗ್ಯವಾಗಿರಲಿ ಜೀವ ಸಂಕುಲ,
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಪ್ರಾಯೋಜಿತ ಕಾರ್ಯಕ್ರಮ.

ಪ್ರಸಾರ

ಜುಲೈ 22 ಶುಕ್ರವಾರ,
ಬೆಳಿಗ್ಗೆ 10.30 ರಿಂದ
11 ಗಂಟೆಯವರೆಗೆ

ಮರುಪ್ರಸಾರ

ಸಂಜೆ 5.30 ರಿಂದ
6 ಗಂಟೆಯವರೆಗೆ

ರೇಡಿಯೋ ಸಾರಂಗ್ ಈಗ App ಸಲಹೆ ಲಭ್ಯ. ಕ್ಷೇ. ಸ್ಕ್ರೀನ್‌ನಿಂದ ಡೌನ್‌ಲೋಡ್ ಮಾಡಿಕೊಳ್ಳಿ.



ಡಿಡಿ ಚಂದನ ಕಾರ್ಯಕ್ರಮಗಳು



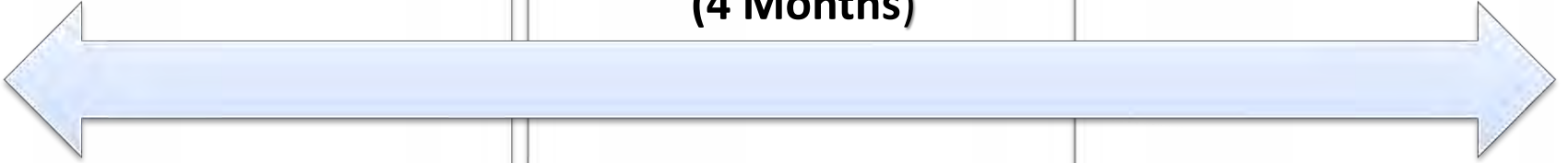
ನೇರ ಫೋನ್-ಇನ್
ಕಾರ್ಯಕ್ರಮ 4



Time Check
(Mute Caption)
(4 Months)



ಯಶೋಗಾಥೆಗಳ ಪ್ರಸಾರ



ಪ್ರತಿಕಾ ಜಾಹೀರಾತು



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ



ಶ್ರೀ ಜಿ. ಎಸ್. ಯತಿಯೊರಪ್ಪ
ಪದ್ಧತ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳು, ಕರ್ನಾಟಕ ಸರ್ಕಾರ



**ನನ್ನ ಗ್ರಾಮ
ನನ್ನ ಸ್ವಚ್ಛತೆ
ನನ್ನ ಪ್ರತಿಜ್ಞೆ**



ಗ್ರಾಮೀಣ ಕರ್ನಾಟಕದ ಜನರ ಸುಸ್ಥಿರ ನೈರ್ಮಲ್ಯ ಅಭ್ಯಾಸಗಳನ್ನು ಉತ್ತಮ ಪಡಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ, ದೇಶದಲ್ಲಿಯೇ ಮೊದಲ ಬಾರಿಗೆ "ಕರ್ನಾಟಕ ರಾಜ್ಯ ಗ್ರಾಮೀಣ ನೈರ್ಮಲ್ಯ ನೀತಿ, ಕಾರ್ಯತಂತ್ರ ಮತ್ತು ಮಾದರಿ ಉಪವಿಧಿಗಳು" ಜಾರಿಗೆ ತಂದು ಅನುಷ್ಠಾನಗೊಳಿಸಲಾಗುತ್ತಿದೆ.

"ಕರ್ನಾಟಕ ರಾಜ್ಯ ಗ್ರಾಮೀಣ ನೈರ್ಮಲ್ಯ ನೀತಿ, ಕಾರ್ಯತಂತ್ರ ಮತ್ತು ಮಾದರಿ ಉಪವಿಧಿಗಳು" ಫೋಟೋ ಡೌನ್ ಲೋಡ್ ಮಾಡಲು QR ಕೋಡ್ ಸ್ಕ್ಯಾನ್ ಮಾಡಿ ಅಥವಾ ಈ ಲಿಂಕ್‌ನಲ್ಲಿ ಕ್ಲಿಕ್ ಮಾಡಿ
www.english.swachhamevajayate.org/documents/

- 1883 ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಲ್ಲಿ ಘನ ತ್ಯಾಜ್ಯ ನಿರ್ವಹಣಾ ಘಟಕಗಳ ಕಾರ್ಯಾಚರಣೆ 2022 ರ ವೇಳೆಗೆ 6000 ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಿಗೆ ಘಟಕದ ಗುರಿ
- 4768 ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಲ್ಲಿ ದ್ರವ ತ್ಯಾಜ್ಯ ನಿರ್ವಹಣೆ ಮಾಡಲು ಅನುಮೋದನೆ
- 4 ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಮೆಟೀರಿಯಲ್ ರಿಕ್‌ವರಿ ಫೆಸಿಲಿಟಿ ಕಾಮಗಾರಿ ಅನುಷ್ಠಾನಕ್ಕೆ ಬಾಲನೆ
- 60 ಗೋಬರ್ದನ್ ಘಟಕಗಳ ಸ್ಥಾಪನೆಗೆ ಕ್ರಮ
- 17 ಮಲ ತ್ಯಾಜ್ಯ ನಿರ್ವಹಣಾ ಘಟಕಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಬಾಲನೆ 100 ಘಟಕಗಳ ನಿರ್ಮಾಣದ ಗುರಿ

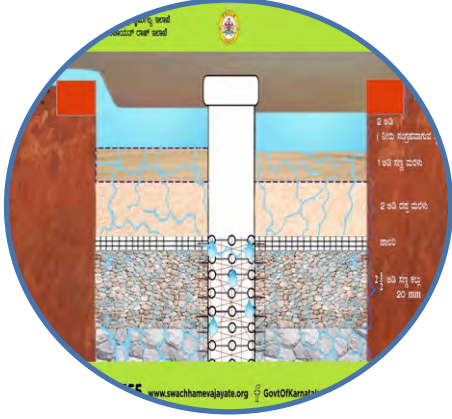


ಮಾನ್ಯ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆಯ ಕಾರ್ಯದರ್ಶಿ ಶ್ರೀ ಡಿ. ಎಸ್. ಅಶ್ವತ್ಥನಾಥ್, ಶ್ರೀ ವಾಹಗೌರಿ ಜಾವಳಿ ಸಹಾಯಕರು

ಪರಿಹಾರ
parihara
9480985555
GovtOfKarnatakaRdpr @GokRDPR



ಕಿರುಚಿತ್ರ ನಿರ್ಮಾಣ-ಎಂಪ್ಲಾಯ್ ಸಂಸ್ಥೆಗಳು



ಮೆ|| ನೈರುತ್ಯ ಆರ್ಟ್ ಮೀಡಿಯಾ

- 10 ಕಿರುಚಿತ್ರಗಳ ನಿರ್ಮಾಣ



ಮೆ|| ಸುಧೀ ನೆಟ್‌ವರ್ಕ್ ಪ್ರೈ. ಲಿಮಿಟೆಡ್

- 9 ಕಿರುಚಿತ್ರಗಳ ನಿರ್ಮಾಣ



ಮೆ|| ಸ್ಟೆಡ್ ಡಿಸೈನ್ ಪ್ರೈ.ಲಿ

- 8 ಕಿರುಚಿತ್ರಗಳ ನಿರ್ಮಾಣ



ಸ್ವತಂತ್ರ ಕಿರುಚಿತ್ರ ತಯಾರಕರು.



ಶ್ರೀ ವೀರಪ್ಪ ಮರಳವಾಡಿ

1 ಕಿರುಚಿತ್ರ ನಿರ್ಮಾಣ



ಶ್ರೀ ಕೆ.ಸಿ. ರವಿಕುಮಾರ್

1 ಕಿರುಚಿತ್ರ ನಿರ್ಮಾಣ



ಶ್ರೀ ಅಭಯ ಸಿಂಹ

1 ಕಿರುಚಿತ್ರ ನಿರ್ಮಾಣ



ಇತರೆ ಐ.ಇ.ಸಿ,

✓ 1500 ಬಸ್
ಬ್ರ್ಯಾಂಡಿಂಗ್

✓ 154 ಬಸ್ ನಿಲ್ದಾಣಗಳಲ್ಲಿ
ಶ್ರವ್ಯ ಜಿಂಗಲ್ಸ್‌ಗಳ ಪ್ರಚಾರ

✓ ಆಟೋ ಮೂಲಕ
ಪ್ರಚಾರ



ಇತರೆ ಐ.ಇ.ಸಿ.

➤ ಗ್ರಾಮಗಳಲ್ಲಿ ಸ್ವಚ್ಛತೆ
ಕಾಪಾಡುವ ನಿಟ್ಟಿನಲ್ಲಿ
ಸ್ವಚ್ಛ ಶುಕ್ರವಾರ-ಸ್ವಚ್ಛ
ಶನಿವಾರ ದಿನ ಆಚರಣೆ

➤ ಈ ದಿನಗಳಂದು ಕಸ
ಸಂಗ್ರಹಣೆ, ಗ್ರಾಮದ
ಸ್ವಚ್ಛತೆ, ಶ್ರಮದಾನ, ಸಸಿ
ನೆಡುವ ಕಾರ್ಯಕ್ರಮ
ಆಯೋಜನೆ.



ಗ್ರಾಮಗಳಲ್ಲಿ ಸಾಂಕ್ರಾಮಿಕ ರೋಗ ತಡೆಗೆ ಕ್ರಮ

- ಕೋವಿಡ್-19 ಸಾಂಕ್ರಾಮಿಕ ರೋಗ ತಡೆಯಲು ಗ್ರಾಮ ಪಂಚಾಯಿತಿಗಳಲ್ಲಿ ಟಾಸ್ಕ್ ಫೋರ್ಸ್ ರಚಿಸಿ ಜಾಗೃತಿ ಮೂಡಿಸಲು ಕ್ರಮ.
- ಮಾಸ್ಕ್, ಸ್ಯಾನಿಟೈಸರ್ ಬಳಕೆ ಮಾಡುವುದು, ಸಾಮಾಜಿಕ ಅಂತರ ಕಾಯ್ದುಕೊಳ್ಳಲು ಅರಿವು
- ಆಶಾ ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರು, ಆರೋಗ್ಯ ಸಹಾಯಕರ ಮೂಲಕ ಜಾಗೃತಿ
- ಗೋಡೆ ಬರಹಗಳ ಮೂಲಕ ಜಾಗೃತಿ
- ಸಾಮಾಜಿಕ ಮಾಧ್ಯಮಗಳ ಮೂಲಕ ಅರಿವು



FHTCs



ವಿಶೇಷ ಗ್ರಾಮ ಸಭೆಗಳ ಆಯೋಜನೆ





LED Mobile Van

ಮಾನವ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಚಟುವಟಿಕೆಗಳು

District consultant recruitment under SBM-G & JJM

SBM-G

SI No	Designation	No of Post	Working at Present	Balance to be filled
1	HRD	31	31	0
2	IEC	31	31	0
3	SH	31	28	3
4	SLWM	31	28	3
5	MIS/M&E	31	30	1
Total		155	148	07

JJM

SI No	Designation	No of Post	Working at Present	Balance to be filled
1	DPM	31	29	02
2	MIS	32	30	02
Total		63	59	04

Training / Workshops

Sl	Training / Workshop	Participants	Online / Classroom	Date
1	Development of technical manual on retrofitting			
2	3-day workshop on development of SBCC/IEC tools and methods for sustaining ODF status including retrofitting and pit conversion	District Consultants	Classroom	Feb-2020
3	2 nd Batch Training of Trainers (ToT) on “ Sujal and Swachha Gaon ” for Field Trainers (Master Trainers)	District Consultants	Classroom	Feb-2020
4	Capacity Building Programme on ODF S & Plus activities for newly recruited consultants	District Consultants	Classroom	June-2020
5	Training programme on ODF-S, ODF Plus & SLWM	District Consultants	Classroom	July-2020

Training / Workshops

Sl	Training / Workshop	Participants	Online / Classroom	Date
6	Capacity Building Programme on JJM activities for newly recruited DPMs MIS and ISA team leaders and	DPM, MIS & ISA Team Leaders	Classroom	Dec-2020 & Jan-2021
7	Orientation programme on LWM for State SLWM Consultants	State SLWM Consultants	Classroom	Dec-2020
8	Orientation programme on JJM & SBM G for CEOs/Nodal Officers & EEs	for CEOs/Nodal Officers & EEs	Classroom	Jan-2021
9	Orientation programme on JJM & SBM G for EOs	205 EOs	Classroom	Feb-2021 3 batches
10	Orientation programme on SLWM for State SLWM Consultants	District SLWM Consultants	Classroom	March-2021

Training / Workshops

Sl	Training / Workshop	Participants	Online / Classroom	Date
11	Capacity Building Programme on JJM MIS for newly recruited MIS consultants	District Consultants	Classroom	Jan-2021
12	Capacity Building Programme of implementation of JJM for newly recruited ISA team members	30 Districts ISA Team Members	Classroom	Mar-2021
13	TOT for LWM at State level	66 State and District Level SLWM Consultants	Classroom	July-2021



Social Media Activities



Modus Operandi

What We Do?

- Educate rural audience
- Promote department's work and its schemes.

How We Do?

- Monthly 80+ posts on Social Media Channels
- Facebook, YouTube, Twitter, Instagram, SlideShare, Whatsapp, Telegram, Website
- Creation of video, image, newsletter, blog
- Content based on monthly theme.

Followers



▪ **86,000+** Page Likes



▪ **9,000+** Followers



▪ **3600+** Followers



▪ **13,400+** Subscribers

FACEBOOK

YOUTUBE



gokrdrpr Message

1,822 posts 3,616 followers 21 following

RDPR Dept, Govt of Karnataka
 Rural Development & Panchayat Raj Dept, Government of Karnataka #GoK #Rural #Karnataka #India #MyCleanIndia #JIM #SBMG #SwachhBharat #ODFIndia #RDWSD swachhamevajayate.org

Followed by pk22295



POSTS IGTV TAGGED



TWITTER

INSTAGRAM

Rural Development and Panchayat Raj-Karnata
 3,166 Tweets

Walk on the path of cleanliness by transforming:
 Wet Waste into Bio-fuel
 Dry Waste into Recycled products
 Challenges into Solutions...

Following

Rural Development and Panchayat Raj-Karnataka
 @gokRDPR

Official RDPR Dept Account
 #GoK #Rural #Karnataka #India #MyCleanIndia #JIM #SBMG #SwachhBharat #Water #MenstrualHygiene #Sanitation #ODFIndia #MGNREGA #RDWSD

Karnataka, India swachhamevajayate.org Joined July 2018

802 Following 9,006 Followers

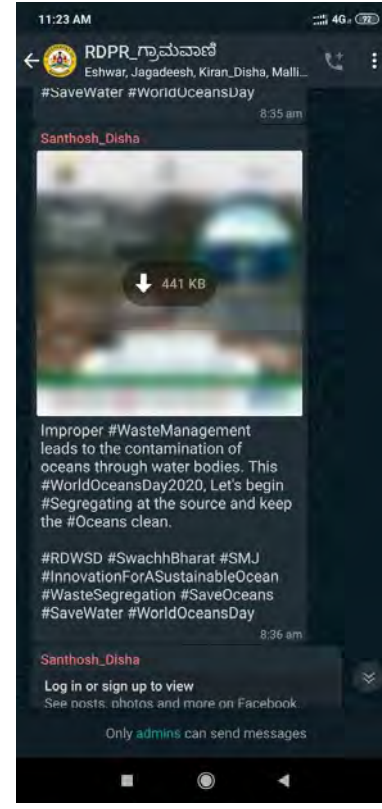
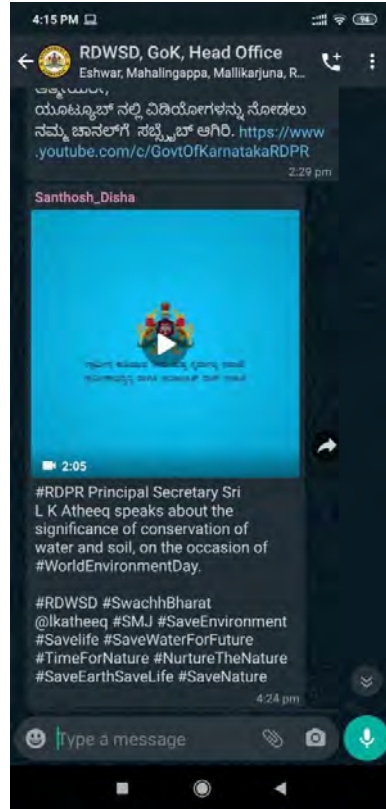
Followed by BengaluruCityPolice and Ravi Kumar

Tweets Tweets & replies Media Likes

Pinned Tweet

Rural Development and Panchayat Raj-Karnataka @gokR... · Aug 2

WhatsApp & Telegram Groups



- 31 Broadcast lists and various Whatsapp/Telegram groups have been created
- It comprising of all CEOs, EOs, Nodal Officers, PDOs, State Office Staff, Consultants & WSSO empanelled partners - NGOs, Audio-Visual, CRS.

Website of RDWSD

(www.swachhmevajayate.org)

ಶ್ರೀ ಬಸವರಾಜ ಬೊಮ್ಮಾಯಿ

ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳು | ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ಸ್ವಚ್ಛತೆ ಇಲಾಖೆ

ಶ್ರೀ ಕೆ. ಎಸ್. ಈಶ್ವರಪ್ಪ

ಮಾನ್ಯ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪುನರಾವೇಶನ ಸಚಿವರು | ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಕೇಂದ್ರಗಳು

ಐ.ಎಸ್.ಎ

ವಿಡಿಯೋಗಳು

ಸಂಪನ್ಮೂಲಗಳು

ENGLISH



ಗ್ರಾ.ಕು.ನೀ.ನೈ ಇಲಾಖೆಯಲ್ಲಿ ಸಮಾಲೋಚಕರನ್ನು ನೇಮಿಸಿಕೊಳ್ಳಲು ಅರ್ಜಿ ಕರೆಯಲಾಗಿದೆ. ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಾಗಿ ಇಲ್ಲಿ ಕ್ಲಿಕ್ ಮಾಡಿ.



ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ

ಬಿಜ್ಜೆ ಸಾಮಾಜಿಕ ನ್ಯಾಯ ದಿನ

20 ಫೆಬ್ರವರಿ 2021

ನೀರು - ಪ್ರತಿಯೊಬ್ಬರ ಹಕ್ಕು **ಸ್ವಚ್ಛತೆ - ಪ್ರತಿಯೊಬ್ಬರ ಕರ್ತವ್ಯ**

ಸರ್ಕಾರಿಗೂ ಶುದ್ಧ ಕುಡಿಯುವ ನೀರು ಒದಗಿಸುವ ಜವಾಬ್ದಾರಿ ನಮ್ಮದು
 ದಿಢಕೆ ಸ್ವಚ್ಛತೆಗೆ ಅದ್ವೈತ ನೀಡುವ ಕರ್ತವ್ಯ ನಮ್ಮದು
 ಮೇಲು-ಕೀಳು ದಿಢಕೆ ಸಮಾನತೆ ಸಾಧಿಸೋಣ
 ಸ್ವಚ್ಛ ಸಮಾಜ ನಿರ್ಮಾಣಕ್ಕೆ ಮುಂದಾಗೋಣ.

ಜಲೋತ್ಸವ ಹೀರೋ ಇಟಿ ಸ್ವಚ್ಛತೆ ಪರಿಹಾರ ಪರಿಹಾರ

ನಮ್ಮನ್ನು ಓಂದಾಲಿಸಿ : [f](#) [i](#) [t](#) [y](#) [g](#) [swachhamevajayate.org](#) [rdpr.karnataka.gov.in](#)

ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ

ರಾಷ್ಟ್ರೀಯ ಲಸಿಕೆ ದಿನ

16 ಮಾರ್ಚ್ 2021

ಮರೆಯಬೇಡಿ!
 ಇಂದೇ ಕೋವಿಡ್ ಲಸಿಕೆ ಪಡೆಯಿರಿ.
 ಆರೋಗ್ಯ ಸುರಕ್ಷತೆಗಾಗಿ ತಪ್ಪಿರಿ

ಮಾಸ್ಕ್ ಧರಿಸಿ ಕೈಗಳ ಸ್ವಚ್ಛತೆ ಸಾಮಾಜಿಕ ಅಂತರ
 ಕಾಪಾಡಿ ಕಾಪಾಡಿ ಕಾಪಾಡಿ

ಜಲೋತ್ಸವ ಹೀರೋ ಇಟಿ ಸ್ವಚ್ಛತೆ ಪರಿಹಾರ ಪರಿಹಾರ

ನಮ್ಮನ್ನು ಓಂದಾಲಿಸಿ : [f](#) [i](#) [t](#) [y](#) [g](#) [swachhamevajayate.org](#) [rdpr.karnataka.gov.in](#)

Posts

ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ

ಮಹಿಳೆಯರ ಮಹಿಳಾ ದಿನ

8 ಮಾರ್ಚ್ 2021

ಮಹಿಳೆಯರ ಹಕ್ಕು, ಸುರಕ್ಷತೆ, ಸ್ವಾಭಿಮಾನ ಮತ್ತು ಆರೋಗ್ಯ ನಮ್ಮ ಧ್ಯೇಯ

ಶೌಚಾಲಯ ಇನ್ಫ್ರಾಸ್ಟ್ರಕ್ಚರ್ ಮಾಹಿತಿ, ಶಿಕ್ಷಣ, ಸಂವಹನ

ಜಲೋತ್ಸವ ಹೀರೋ ಇಟಿ ಸ್ವಚ್ಛತೆ ಪರಿಹಾರ ಪರಿಹಾರ

ನಮ್ಮನ್ನು ಓಂದಾಲಿಸಿ : [f](#) [i](#) [t](#) [y](#) [g](#) [swachhamevajayate.org](#) [rdpr.karnataka.gov.in](#)

ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ

ಜಾಗತಿಕ ಮರುಬಳಕೆ ದಿನ

18 ಮಾರ್ಚ್ 2021

ವ್ಯಾಜ್ಯ ದಿವ್ಯವ ಮುನ್ನ ಒಮ್ಮೆ ಯೋಚಿಸಿ! ಸಾಧ್ಯವಾದಷ್ಟು ಮರುಬಳಕೆ ಪರನ ಸರಕು

ಪಳಿತೆ ಸಾಲಿನಿಂದ ಕರಕುಶಲ ವಸ್ತುಗಳು ಪಳಿತೆ ಸ್ವಲ್ಪ ವಸ್ತುಗಳಿಂದ ಪಾತ್ರೆ ಪಳಿತೆ ಪಟ್ಟಿಯಿಂದ ಬ್ಯಾಗ್, ಸೀಲ ಯಾನು ಪಳಿತೆ ಪೂರ್ವಗಳಿಂದ ಕಾಗದದ್ದು

ಜಲೋತ್ಸವ ಹೀರೋ ಇಟಿ ಸ್ವಚ್ಛತೆ ಪರಿಹಾರ ಪರಿಹಾರ

ನಮ್ಮನ್ನು ಓಂದಾಲಿಸಿ : [f](#) [i](#) [t](#) [y](#) [g](#) [swachhamevajayate.org](#) [rdpr.karnataka.gov.in](#)

ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಆರೋಗ್ಯದ ದೃಷ್ಟಿಯಿಂದ

ಬಿಜ್ಜೆ

ತೆಂಬಾಕು ರಹಿತ ದಿನ 31 ಮೇ 2021


ತೆಂಬಾಕು ಅಕ್ಷಯಗಳ ಬಿಜ್ಜೆ ಕೃಷಿ ಅಕ್ಷಯ ಆರೋಗ್ಯ ಪಡೆಯಲು ಪಲನರ ಮಾನ್ಯವನ್ನು ತರೋಣ

ಜಲೋತ್ಸವ ಹೀರೋ ಇಟಿ ಸ್ವಚ್ಛತೆ ಪರಿಹಾರ ಪರಿಹಾರ

ನಮ್ಮನ್ನು ಓಂದಾಲಿಸಿ : [f](#) [i](#) [t](#) [y](#) [g](#) [swachhamevajayate.org](#) [rdpr.karnataka.gov.in](#)


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@Mgnregsk Follow
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Official Twitter of Mysuru City Corporation


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 **SADASHIVANAGAR TRAFFIC PS**
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 **24x7 Karmika Sahayavani, Govt of Karnataka**
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 **Cluster Facilitation Project Karnataka**
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 **K'taka Health Dept** ✓
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
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Official Account of the Ministry of Women and Child Development, Government of Karnataka.

 **Dept. of Fisheries, Karnataka**
@dof_kar Follows you Follow
ಮೀನುಗಾರಿಕೆ ಇಲಾಖೆ, ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಅಧಿಕೃತ ಖಾತೆ. Official Twitter account of the Department of Fisheries, Government of Karnataka, India

 **Commissioner Panchayat Raj**
@CommrPR Follow
Working with the three tiers of the rural local self government

 **24 hrs Cremation/Burial helpline (Covid) BBMP**
@BLRjastrites Follows you Follow
The official 24x7 helpline (8495998495) of the BBMP for all help regarding the final rites for the deceased due to Covid-19. Operated by the Task Force.

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FollowingOfficial account of Swachh Bharat Mission (SBM) Gramin #MyCleanIndia #ODFPiplus Subscribe to our YouTube channel: tinyurl.com/sbmgramin**Ministry of Panchayati Raj, Government of India**

@mopr_goi

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Official Twitter handle of Lohiya Swachh Bihar Abhiyan, Rural Development Department, Govt. of Bihar | #SwachhBharatMission(G)Bihar | #SBMGBihar | #SwachhBihar |

**Department of Water Supply & Sanitation**

@DWSSPunjabIND

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**Ministry of SJ&E**

@MSJEGO1

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TNRTP enhances rural economy by creating sustainable income through rural enterprise promotion, access to finance and creation of employment opportunities

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Follow

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K S Eshwarappa

@ikseshwarappa

Follow

Minister for Rural Development and Panchayat Raj in Government of Karnataka & MLA of Shivamogga assembly constituency from @BJP4Karnataka



Kourava B.C.Patil

@bcpatilkourava

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ಕೃಷಿ ಸಚಿವರು | Minister for Agriculture, Govt of Karnataka | Ex-Cop(25years) | Actor | Producer | Member of Legislative Assembly, Hirekerur | ಕಾಯಕವೇ ಕೈಲಾಸ



S T Somashekar Gowda

@STSomashekarMLA

Follow

ಸಹಕಾರ ಸಚಿವರು || Minister of Co-Operation, Govt of Karnataka || Mysore District Minister in-charge || Member of Legislative Assembly, Yeshwanthpur (Bangalore)



M P Renukacharya

@MPRBJP

Follow

ಮಾಜಿ ಮುಖ್ಯಮಂತ್ರಿಗಳ ರಾಜಕೀಯ ಕಾರ್ಯದರ್ಶಿ, ಶಾಸಕರು - ಹೊನ್ನಾವಳಿ ವಿಧಾನಸಭಾ ಕ್ಷೇತ್ರ Former Political Secretary to CM, MLA - Honnali Constituency | Office: @MPROffice



Sowmya | ಸೌಮ್ಯ

@Sowmyareddy

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ಕನ್ನಡತಿ | MLA - Jayanagara |Congress| GS- AIMC | will block trolls | Dont tag civic issues here,send DM or Call-080-26542424/92416 69999 or Meet MLA|RT not endo



ಎಲ್ ಕೆ ಅತೀಕ್ L K Atheeq

@lkatheeq

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Principal Secretary Rural Development & Panchayat Raj | Formerly Prl. Secy to CM Karnataka | Sr Adviser, World Bank | Joint Secretary PMO. Tweets Personal.



Major Manivannan

@Captain_Mani72

Follow

Servant | Soldier | ಕನ್ನಡಿಗ



Jagadish Shettar

@JagadishShettar

Former Chief minister of Karnataka



B.N. Bache Gowda

@BNBachegowda_MP

Follow

Member of Parliament representing BJP from Chikballapur Lok Sabha Constituency, Karnataka | 5-Term MLA of Hoskote Assembly Constituency.



Byrathi Basavaraja

@BABasavaraja

MLA K R Pura Assembly Constituency.



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@sbgteam

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@hrskarnataka

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@tcfindia

Follow

Non-Profit Organization ~ Health and Education Interventions for underserved populations in India : ...initycarefoundationindia.blogspot.com #CSR



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SELCO Foundation
@SELCOFoundation

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#EndEnergyPoverty



Climate Resource Centre - Bidar
@crc_bidar

Follow

Infrastructure for collaborative climate action research



India Water Portal
@indiawater

Follow

National knowledge platform for #water & related issues, and repository of news & resources. Share your stories with us. Visit: linktr.ee/indiawater



DIPR Karnataka

@KarnatakaVarthe

Official Account of Department of Information and Public Relations,
Government of Karnataka

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@AsianetNewsSN

ಕನ್ನಡದ ಜನಪ್ರಿಯ ಚಾನೆಲ್- ಕರ್ನಾಟಕ, ದೇಶ, ವಿದೇಶದ ಲೇಟೆಸ್ಟ್ ಸುದ್ದಿಗಳಿಗೆ
ಏಕೈಕ ತಾಣ. ಭಾರತದ ನಂ.1 ಪ್ರಾದೇಶಿಕ ಸುದ್ದಿ ಜಾಲ, ಐಷ್ಯಾನೇಟ್ ನ್ಯೂಸ್‌ನ
ಅಂಗ.

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ಅಧಿಕ ಓದುಗರನ್ನು ತಲುಪುವಲ್ಲಿ ಯಶಸ್ವಿಯಾಗಿದೆ.

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t.me/VIJAYAVANI Official Account of No.1 Kannada Daily VIJAYAVANI,
Published by VRL Media Ltd.

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ಜನಸ್ನೇಹಿ-ಕರ್ನಾಟಕ/ Janasnehi-Karnataka

@Karnataka_DIPR

For contacting the State Government on any issue 24x7, please tag
[@Karnataka_DIPR](https://t.me/Karnataka_DIPR) E-mail ID : janasnehikarnataka@gmail.com WhatsApp:
+91 9980299802

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PARIHARA

Public Access to Responsive & Innovative Handling (Of Complaints) & Resolution Application



ಪರಿಹಾರ
parihara

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9480985555

ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ

ಕುರಿತಾದ ಸಮಸ್ಯೆಗಳ

ತ್ವರಿತಗತಿಯಲ್ಲಿ

ಇತ್ಯಾರ್ಥಪಡಿಸಲು

“ಪರಿಹಾರ” ಸಹಾಯವಾಣಿ

ಸ್ಥಾಪನೆ

Calls Received & Complaints Received from March 2020- July 2021

Offered Calls	Complaints	Queries
44432	12929	31605

Complaints Received	Resolved	Pending
12929	12357	565

Escalation Chart for the Resolution for the Resolution of the Complaints

Register Complaint
User

	Responsible Officer	Cummulative tme to Resolve	For Information
Initial Complaint	PDO	2 days	AE/JE

	Responsible Officer	Cummulative time to Resolve	For Information
Initial Complaint	AE/JE and O&M Contractor	2 days	PDO

Sanitation and Other Water Supply schemes

Water Purification Plant (WPP)

Pending Complaint List
Panchayat Development Officer **PDO**

Pending Complaint List
RDW & SD **AE / JE**

Forward Complaint to other
Department Head

Escalation

Resolve and Close Complaint
Department Head

Sanitation and Other water supply schemes
Escalation Matrix

WPP
Escalation Matrix

#	Escalation Level	Responsible Officer	Cummulative time to Resolve	For Information
2	1st	EO	2-7 days	AEE & AE / JE
3	2nd	CEO - ZP	7-10 days	SE, AEE & AE / JE
4	3rd	Commissioner	Reminder every 7 days	CE, SE, AEE & AE / JE

#	Escalation Level	Responsible Officer	Cummulative time to Resolve	For Information
2	1st	AEE	2-4 days	EO & PDO CEO, EO & PDO
3	2nd	EE	4-7 days	
4	3rd	Circle SE	7-10 days	
5	4th	CE	10-15 days	
6	5th	Commissioner	Reminder every 7 days	

ASSUMPTION: 1. Complaint can be resolved at any level

2. Escalated Complaints can be closed or re-assigned to their immediate previous level

ದಾಖಲೀಕರಣ

- ಮಾಹಿತಿ, ಶಿಕ್ಷಣ ಮತ್ತು ಸಂವಹನ ಹಾಗೂ ಮಾನವ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಚಟುವಟಿಕೆಗಳನ್ನು
- ಈ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳ ವಿವರವನ್ನು ಕ್ರೋಢೀಕರಿಸಿ ಛಾಯಾಚಿತ್ರ ಸಹಿತ ವರದಿ ತಯಾರಿಸುವುದು ಮುಖ್ಯವಾಗಿದೆ.
- ಮಾರ್ಗಸೂಚಿಯಲ್ಲಿರುವ ಐ.ಇ.ಸಿ ಹಾಗೂ ಹೆಚ್.ಆರ್.ಡಿ ಚಟುವಟಿಕೆಗಳನ್ನು ಪ್ರತಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ಹಮ್ಮಿಕೊಂಡ ಮಾಹಿತಿಯನ್ನು ಕ್ರೋಢೀಕರಿಸಿ ವರದಿ ತಯಾರಿಸಿ ದಾಖಲಿಸಬೇಕು.



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ

ಜಲ ಜೀವನ್ ಮಿಷನ್ (ಜೆಜಿಎಂ)

ಯೋಜನೆಯಡಿಯಲ್ಲಿ

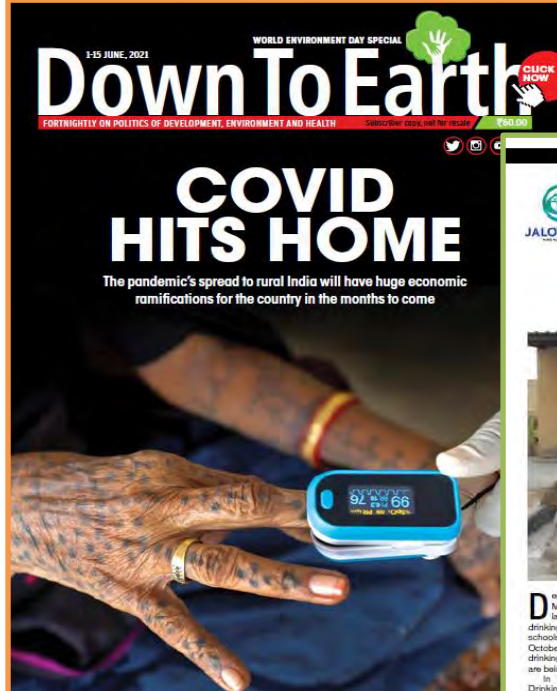
ಮಾರ್ಚ್ 2021 ರ
ಐ.ಇ.ಸಿ ಮತ್ತು ಹೆಚ್‌ಆರ್‌ಡಿ ಕಾರ್ಯಕ್ರಮಗಳ ವರದಿ

ಅಯ್ಯತ್ತರ ಕಛೇರಿ, 2ನೇ ಮಹಡಿ, "ಎ" ಬ್ಲಾಕ್, ಕರ್ನಾಟಕ ಗೃಹ ಮಂಡಳಿ ಕಟ್ಟಡ, ಕಾವೇರಿ ಭವನ, 6ನೇ ರಸ್ತೆ
ಬೆಂಗಳೂರು-560009 ದೂ.ಸಂ:080-22240508 ಫ್ಯಾಕ್ಸ್: 22240509,
ಇ-ಮೇಲ್: krwssd@gmail.com, wssr.kar14@gmail.com

ಇಲಾಖಾಪರಿಚಯ ಪುಸ್ತಕ

ಪ್ರಕಟಣೆಗಳು

DownTo Earth ಮ್ಯಾಗಜೀನ್‌ಗೆ 15 ದಿನಗಳಿಗೊಮ್ಮೆ ತಿಂಗಳಿಗೆ ಇಲಾಖೆಯ ಚಟುವಟಿಕೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಆಂಗ್ಲ ಭಾಷೆಯಲ್ಲಿ 2 ಲೇಖನವನ್ನು ಪ್ರಕಟಿಸಲಾಗಿದೆ.



COVID HITS HOME

The pandemic's spread to rural India will have huge economic ramifications for the country in the months to come

ಕರ್ನಾಟಕ ವಿಕಾಸ

Karnataka Vikas



ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್‌ರಾಜ್ ವಿಭಾಗದ ಅಧ್ಯಕ್ಷರುಗಳಿಂದ ಪ್ರಥಮ ಭೇಟಿಯಾಗುವ



ಕವಿತೆ ಕೆ
ಪಾಂಚಾಯತ್‌ರಾಜ್ ಮತ್ತು ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ವಿಭಾಗದ ಸಹಾಯಕ ನಿರ್ದೇಶಕಿ

ಸಮುದಾಯ ಶೌಚಾಲಯ ಸ್ವಂತ ಶೌಚಾಲಯ

22 ಕ್ಷೇತ್ರಗಳಿಂದ ಪ್ರತಿ, ಅಧ್ಯಯನ ಕಾರ್ಯದ ಅಧ್ಯಕ್ಷನಿಗ್ರಹ ಪಂಚಾಯತ್ ಪ್ರಾಥಮಿಕ ಹೆಚ್ಚುವರಿಯಲ್ಲಿ 104 ಮನೆಗಳನ್ನು, 514 ಬಸಂಪತ್ತಿಯನ್ನು ಹೊಂದಿದೆ. ಪ್ರತಿಯೊಂದು ಮನೆಯಲ್ಲೂ ಶೌಚಾಲಯ ಒಳಗೊಳ್ಳುತ್ತದೆ. ಈ ಉದ್ದೇಶದ ಪ್ರಗತಿಯನ್ನು ಈ ವಾರದಿಂದ ಪ್ರಾರಂಭಿಸಲಾಗಿದೆ. ಈ ಉದ್ದೇಶದ ಅಡಿಯಲ್ಲಿ ಮನೆಯ ಮಧ್ಯಮಾಂಶ, ಪಾತ್ರೆ, ಪರಿಶೀಲನೆ, ಗ್ರಾಮೀಣ ಸಭೆಗಳು, ಸ್ವ ಸಹಾಯ ಸಂಘಗಳ ಸಭೆ, ಸ್ವೀಕೃತ ಸಂಘಗಳ ಸಭೆ ಮುಂತಾದ ಕಾರ್ಯಕ್ರಮಗಳು ನಡೆಯುತ್ತವೆ. ಬಸಂಪತ್ತಿ ಸೇರಿದ ಈ ಜಾಗದಲ್ಲಿ ಪಾತ್ರೆ, ಪಟ್ಟಿ ಅಥವಾ ಯಾವುದೇ ಕಾರ್ಯಕ್ರಮಗಳಲ್ಲಿ ಬೇರೆ ಉದ್ದೇಶದ ಅನುಷ್ಠಾನ ಬಂದ ಮೇಲೆ ಮುಖಾಂತರ ಬಸಂಪತ್ತಿ ಬಯಲಿನಲ್ಲಿ ಹೊಸಗುತ್ತವೆ, ಮುಖಾಂತರ ನಿರಂತರ ಸ್ವಂತ ಬಯಲಿನ ಶೌಚಾಲಯ ತೋರಿಸುವಂತಹ ಪ್ರಗತಿ ಹಾಗೂ ಮುಖಾಂತರ ಮತ್ತು ಪರಿಶೀಲನೆ ಹೆಚ್ಚು ಮಕ್ಕಳು ಬಯಲಿಗೆ ಹೋಗಲು ಕೈ ಹಾಕುತ್ತಿದ್ದಾರೆ.

ಬಯಲಿನಲ್ಲಿ ಮುಖಾಂತರ ಬಸಂಪತ್ತಿ ಮಾಡುತ್ತಿದ್ದರೆ ದೇವಸ್ಥಾನದ ಪರಿಶೀಲನೆ ಪರಿಗಣಿಸಿ, ಇದನ್ನು ಗುರುತಿಸಿ ಆ ಉದ್ದೇಶದ ಗ್ರಾಮೀಣ ಮತ್ತು ದೇವಸ್ಥಾನದ ಸಮಿತಿ ಸಭೆಯ ಉದ್ದೇಶ ಸ್ಪಷ್ಟಪಡಿಸಿ, ಹಾಗೂ ಅಧಿಕಾರಿಗಳ ಸಹಾಯದ ಅಡಿಯಲ್ಲಿ ಸಮುದಾಯ ಶೌಚಾಲಯದ ಅಭಿವೃದ್ಧಿಯನ್ನು ಒಂದು ಗ್ರಾಮೀಣ ಸಭೆಗೆ ಮುಖಾಂತರ ಬಸಂಪತ್ತಿ ಅಧಿಕಾರಿಗಳಿಂದ ರೇಖಾಚಿತ್ರವನ್ನು ಬಹುಮಾನದ ಬಗ್ಗೆ ಸೂಚಿಸಿ, 2019ರಲ್ಲಿ ಗ್ರಾಮೀಣ ಶೌಚಾಲಯ ನಿರಂತರ ಮತ್ತು ಸ್ವೀಕೃತ ಅಧಿಕಾರಿಯಿಂದ ಸ್ವಂತ ಧಾರಾ ಮಹಾ(ಗ್ರ) ಯೋಜನೆಗೆ ಈ ವಿಷಯವನ್ನು ಸೂಚಿಸಿ, ಸ್ವಂತ ಧಾರಾ ಮಹಾ(ಗ್ರ) ಅಧಿಕಾರಿ ಸಮುದಾಯ ಶೌಚಾಲಯಕ್ಕೆ ಹಾಗೂ ಮುಖಾಂತರ ದಾಖಲಿಸುವಂತೆ ಹಾಗೂ ಸಮುದಾಯ ಶೌಚಾಲಯದ ಉದ್ದೇಶಗಳನ್ನು ದೇವಸ್ಥಾನದಿಂದ 2.00 ಅಕ್ಷರಗಳನ್ನು ನಿರಂತರವಾಗಿ ಒಂದು ಅಧಿಕಾರಿಗಳಿಂದ ಮುಖಾಂತರ ಅಧಿಕಾರಿಗಳಿಂದ.

ಈಗ ಆ ಶೌಚಾಲಯ ಪ್ರಾಥಮಿಕವಾಗಿದ್ದರೆ, ಅದರ ನಿರ್ವಹಣೆಯ ಜವಾಬ್ದಾರಿಯನ್ನು ಆ ದೇವಸ್ಥಾನದ ಸಮಿತಿ ಸದಸ್ಯರದ್ದು ಮಾಡಲಾಗಿದೆ. ಅದನ್ನು ಸೇರಿಸಿ ತಮ್ಮ ಮನೆಯಿಂದ ಸ್ವಲ್ಪಮಾತ್ರವೇ ನಿರ್ಧರಿಸಿ ಬಸಂಪತ್ತಿಗೆ ಸೇರಿಸುವಲ್ಲಿ ನಿರ್ಮಾಣದ ಸಮುದಾಯ ಶೌಚಾಲಯವನ್ನು ಬಂದ ಫಲಿತಾಂಶಗಳು ಹಾಗೂ ಅದರ ಬಸಂಪತ್ತಿ ಮುಖಾಂತರ ಬಸಂಪತ್ತಿಗೆ ಉದ್ದೇಶಗಳನ್ನು ಹಾಗೂ ಪರಿಶೀಲನೆಗೆ ಉಚಿತವಾಗಿ ಸೇವೆ ನೀಡುತ್ತಿರುವುದು ಆ ಉದ್ದೇಶದ ಉದ್ದೇಶವು.

ಶೌಚಾಲಯದಿಂದ ಉದ್ದೇಶ ಮತ್ತು ಬಸಂಪತ್ತಿ ನಿರಂತರವಾಗಿ ಮುಖಾಂತರ ಮುಖಾಂತರ ಉದ್ದೇಶಗಳನ್ನು ಸೂಚಿಸುವಂತೆ ಮಾಡಲಾಗಿದೆ ಮತ್ತು 15ರ ಹಾಗೂ ಅಧಿಕಾರಿಯಿಂದ ಇಂಥ (Soak pit) ನಿರಂತರವಾಗಿ ಸ್ವಂತವನ್ನು ಮಾಡಲಾಗಿದೆ. ಈಗ ಸಮುದಾಯ ಶೌಚಾಲಯವನ್ನು ಸ್ವಂತ ಶೌಚಾಲಯ ಒಂದು ಧಾರಾ ಇದನ್ನು ಆ ಉದ್ದೇಶದ ಗ್ರಾಮೀಣ ಪರಿಶೀಲನೆ ಸ್ವಂತ ಹಾಗೂ ಅಧಿಕಾರಿಗಳಿಂದ ಮೇಲಿನ ಕಾರ್ಯವಿಧಾನದಿಂದ ಇದು ಮುಖಾಂತರ ಗ್ರಾಮೀಣವಾಗಿದೆ.



"WATER IN SCHOOL TAPS - SMILES ON CHILDREN'S FACE"

100 Days Campaign Jal Jeevan Mission - A case study of Karnataka

HOW DID WE ACHIEVE IT?
Karnataka has 53,560 schools and 54,795 anganwadis. Many schools did not have drinkable water connections. JEWSD has gathered the information of schools and anganwadis which were lacking water connections through Gram Panchayats, the departments, P.A.R.H.USA, Call Center, Social Media channels etc. Subsequently, detailed estimates were prepared and work was initiated. Each school was provided with Rs. 20,000 and each Anganwadi was provided with Rs. 15,000 for water supply. Water storage facilities were also provided. Any additional funding required was devaluated under convergence.

What Has Changed?
Head master of Government Higher Primary School in the Heguru Gram Panchayat of Brahmarosa Taluk in Udupi District says "Our school has 60 students and four teachers. Previously, parents were admitting the children to our School, but nowadays, the children are getting enrolled in private schools. The reason is our school has a toilet but no water. Parents were reluctant to send their children to school where there is a lack of water and sanitation facilities. But this "100 days campaign" is providing water to our school. We are expecting more children enrollment in our school in the coming days".

In Anganwadi of Gowdige, Thanda, Guramthali Taluk in Yagodi district, there are 73 children. Only 31 children were coming to Anganwadi. Remaining children were staying at home owing to lack of water. Now, Anganwadi Teacher shares that "Anganwadi helper used to take off for 30 minutes to fetch the water for preparation of food. Now under 100 days campaign, Anganwadi was provided with water tap connection. Clean water is available for drinking and preparation of meals, now we are expecting all children to attend Anganwadi".

There are 143 children and 6 teachers in the Govt. Higher Primary School of Kempana Phala, Kalgabala Taluk, Channarayana District. After this campaign, a teacher opined that earlier the children were not using toilets for urinate as there was no water facility in the school's toilet. Now they are accessing toilets without any hesitation and the school's attendance has also increased. This also helped increased attendance of girls especially during menstruation, even though the school is opened recently after COVID-19 lockdown.

This campaign is bringing 'Smile on every Child' when they return to the School/ Anganwad Centre after reopening.

To know more stories from Karnataka, please follow us on
<https://twitter.com/anganwadis> | <https://www.facebook.com/Goa/1000000000000000/> | <https://www.youtube.com/channel/UC0UJLFTDNR81B0aJL1U/feature>

ಕರ್ನಾಟಕ ವಿಕಾಸ ಮ್ಯಾಗಜೀನ್ ನಲ್ಲಿ ಇಲಾಖೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಚಟುವಟಿಕೆಗಳನ್ನು ಪ್ರಕಟಿಸಲು ನೀಡಲಾಗುತ್ತಿದೆ.

ಜಲ ಜೀವನ್ ಸಂವಾದ್‌ಗೆ ಪ್ರಕರಣ ಅಧ್ಯಯನ ಮತ್ತು ಯಶೋಗಾಥೆಗಳನ್ನು ನೀಡಿ ಪ್ರಕಟಿಸಲಾಗುತ್ತಿದೆ.

Activities in States/ UTs

Karnataka: Panchayats promote grey water management

Karnataka Rural Drinking Water & Sanitation Department (RDW&SD) has released Rs 205 Crore to 4,464 Gram Panchayats for grey water management. Greywater management is an integral component of Jal Jeevan Mission.

Under Har Ghar Jal programme, Jal Jeevan Mission provides 55 lpcd water to every rural household. About 70% of this water is discharged as greywater. Its management therefore is important to maintain hygienic conditions in villages.

Earlier, the department had launched the 'Swacha Grama, Swachha Parivara' campaign under which a number of IEC and capacity building activities were undertaken. It sensitised the community about judicious use of water and minimal wastage, and measures to check leakages. The campaign propagated the use of greywater in kitchen gardens and agriculture fields and thereby reduce the fresh water demand.

RDW&SD is encouraging nature-based and cost-effective technologies. Earlier, it had built a waste stabilization pond (WSP), wetland and sedimentation tanks to reduce the pollution load of River Tungabhadra in Haveri district.

Kodiya village in Haveri district is on the banks of river Tungabhadra. It has a population of 8,500 people. Wastewater from their households drained into the river and polluted it. The Zilla Panchayat started a campaign called 'Nirmala Haveri', which was joined by the elected representatives of the Panchayats and local community, and they ensured wastewater was treated before it was released in the river.

A two-stage sedimentation pond followed by a wetland as inline treatment was constructed in the village. Based on the quantum of greywater generated, a system was designed to bypass the drain and address the problem of wet-weather flow.

Haveri Zilla Parishad's measure addressed the river pollution in the district. This initiative is exemplary in water source strengthening. Community involvement is the key here because when people take ownership of the water supply infrastructure created for them, they are mindful of their actions and take remedial measures to maintain it.



Creation of passage to utilize greywater

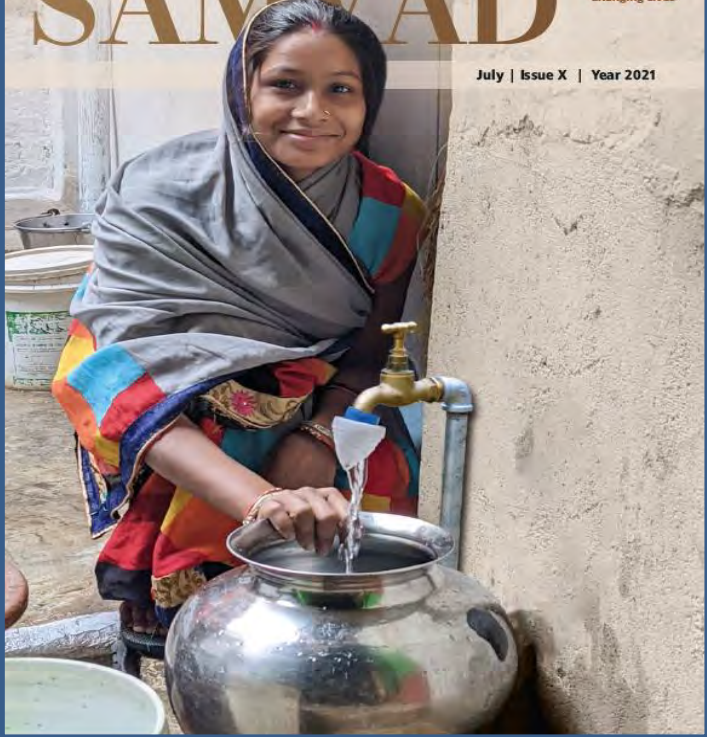
Jal Jeevan Samvad

Issue X | July 2021 17

JAL JEEVAN
SAMYAD

Har Ghar Jal
Jal Jeevan Mission
Building Partnership
Changing Lives

July | Issue X | Year 2021



✓ ಯೋಜನಾ ವಿಶೇಷ ಸಂಚಿಕೆಯಲ್ಲಿ ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಪೂರೈಕೆಯ ಬಗ್ಗೆ ಲೇಖನ ಪ್ರಕಟಿಸಲಾಗಿದೆ.



ಜಿ.ಜಿ.ಎಂ ಹಾಗೂ ಎಸ್.ಬಿ.ಎಂ (ಜಿ) ಯೋಜನೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳ ಅಧ್ಯಯನ ಹಾಗೂ ಯಶೋಗಾಢೆಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ ವರದಿ ದಾಖಲೀಕರಣ

ಸ್ವಚ್ಛ ಭಾರತ ಮಿಷನ್ (ಗ್ರಾ) ಯೋಜನೆಗೆ
ಸಂಬಂಧಿಸಿದ ಪ್ರಕರಣ ಅಧ್ಯಯನ ಮತ್ತು

ಯಶೋಗಾಢೆಗಳನ್ನು WordPress.com ನಲ್ಲಿ ಪ್ರಕಟ



ಸ್ವಚ್ಛ ಭಾರತ ಮಿಷನ್ (ಗ್ರಾ) ಯೋಜನೆಗಳಿಗೆ
ಸಂಬಂಧಿಸಿದಂತೆ ನಡೆಯುವ ತರಬೇತಿಗಳ
ವರದಿ ತಯಾರಿಸಿ ದಾಖಲಿಸಲಾಗುತ್ತದೆ.

Swachh Bharat (Grameen)

Towards a Swachh and Swasth Bharat by 2025

Search Results for: karnataka

Community sanitation through GWM in Karnataka's Haveri District
Liquid waste when managed efficiently, prevents the spread of disease while contributing to a cleaner environment. To ensure this, elected - [More](#)

Incinerators in 32 locations of rural Karnataka
To ensure better hygiene and sanitation in rural areas, incinerators that can effectively dispose menstrual waste have been installed as - [More](#)

Educating Rural Karnataka through Social Media
Effective use of social media can bring about behavioural and lifestyle changes, particularly with regard to hygiene and sanitation. However, - [More](#)



Dated - 02/08/2021

1. Registration Number	L-105961/2021
2. Name, address and nationality of the applicant	DR. VISHAL R COMMISSIONER, RURAL DRINKING WATER & SANITATION DEPARTMENT GOVERNMENT OF KARNATAKA 2ND FLOOR, E BLOCK, KHB COMPLEX, CAUVERY BHAVAN, KG ROAD, BANGALORE-560009 INDIAN
3. Nature of the applicant's interest in the copyright of the work	AUTHOR
4. Class and description of the work	LITERARY/ DRAMATIC WORK
5. Title of the work	KARNATAKA STATE POLICY, STRATEGY ON SANITATION AND WASTE MANAGEMENT AND BYE-LAWS ON SOLID AND LIQUID WASTE MANAGEMENT
6. Language of the work	KANNADA
7. Name, address and nationality of the author and if the author is deceased, date of his decease	DR. VISHAL R COMMISSIONER, RURAL DRINKING WATER & SANITATION DEPARTMENT GOVERNMENT OF KARNATAKA 2ND FLOOR, E BLOCK, KHB COMPLEX, CAUVERY BHAVAN, KG ROAD, BANGALORE-560009 INDIAN
8. Whether the work is published or unpublished	PUBLISHED
9. Year and country of first publication and name, address and nationality of the publisher	2020 INDIA DR. VISHAL R COMMISSIONER, RURAL DRINKING WATER & SANITATION DEPARTMENT GOVERNMENT OF KARNATAKA 2ND FLOOR, E BLOCK, KHB COMP-560009 INDIAN
10. Years and countries of subsequent publications, if any, and names, addresses and nationalities of the publishers	N.A.
11. Names, addresses and nationalities of the owners of various rights comprising the copyright in the work and the extent of rights held by each, together with particulars of assignments and licences, if any	RURAL DRINKING WATER & SANITATION DEPARTMENT GOVERNMENT OF KARNATAKA - 2ND FLOOR, E BLOCK, KHB COMPLEX, CAUVERY BHAVAN, KG ROAD, BANGALORE-560009 INDIAN
12. Names, addresses and nationalities of other persons, if any, authorized to assign or licence of rights comprising the copyright	N.A.
13. If the work is an 'Artistic work' the location of the original work, including name, address and nationality of the person in possession of the work. (In the case of an architectural work, the year of completion of the work should also be shown).	N.A.
14. If the work is an 'Artistic work' which is used or capable of being used in relation to any goods or services, the application should include a certification from the Registrar of Trade Marks in terms of the provision to Sub-Section (1) of Section 45 of the Copyright Act, 1957.	N.A.
15. If the work is an 'Artistic work' whether it is registered under the Designs Act 2000 if yes give details.	N.A.
16. If the work is an 'Artistic work' capable of being registered as a design under the Designs Act 2000 whether it has been applied to an article or to an industrial process and, if yes, the number of times it has been so applied.	N.A.
17.	

6665/2021-COL



ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ
ಕರ್ನಾಟಕ ರಾಜ್ಯ ಗ್ರಾಮೀಣ ನೈರ್ಮಲ್ಯ ನೀತಿ,
ಕಾರ್ಯತಂತ್ರ ಮತ್ತು ಮಾದರಿ ಉಪವಿಧಿಗಳು



ಕಾಪಿರೈಟ್ ನೋಂದಣಿ

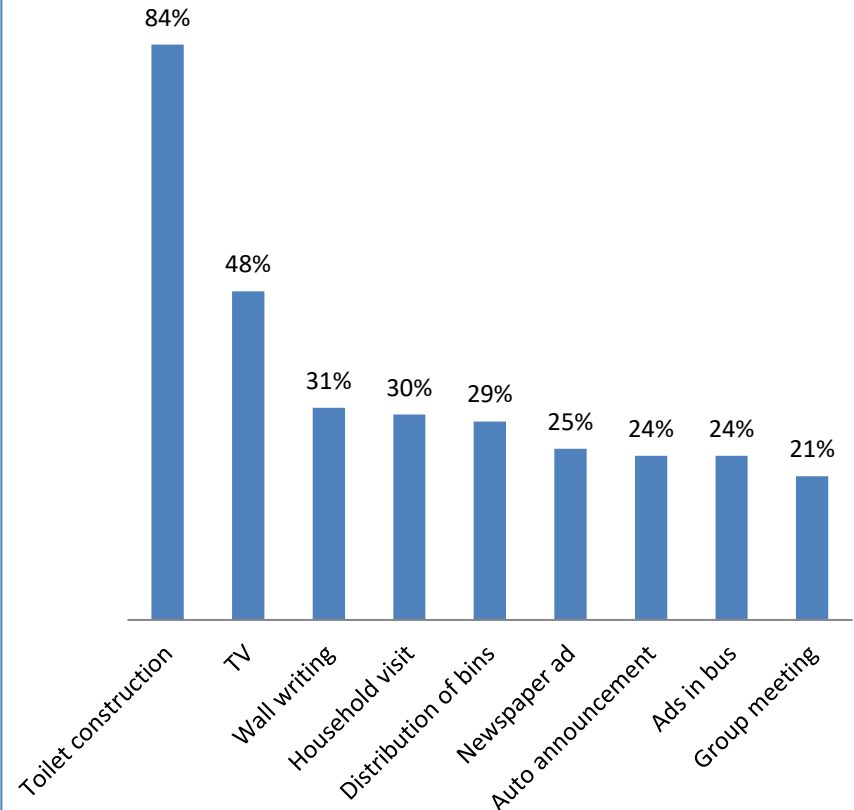
Third Party Evaluation

IEC Impact Assessment

- 10 districts
- 20 talukas
- 40 GPs
- 80 villages
- 2000 Households

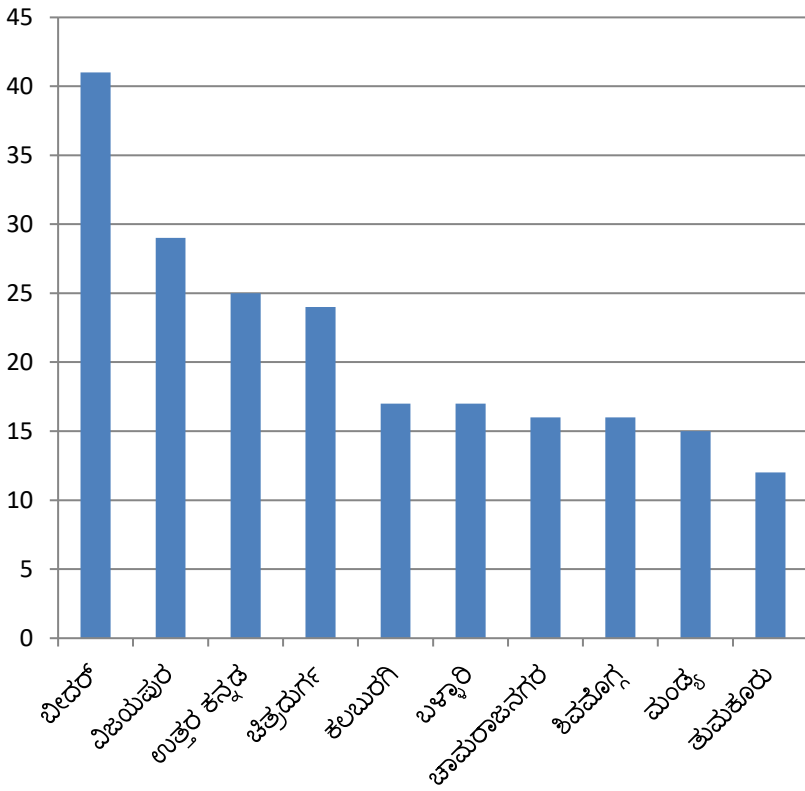
Key findings

Recollection of IEC tools/materials

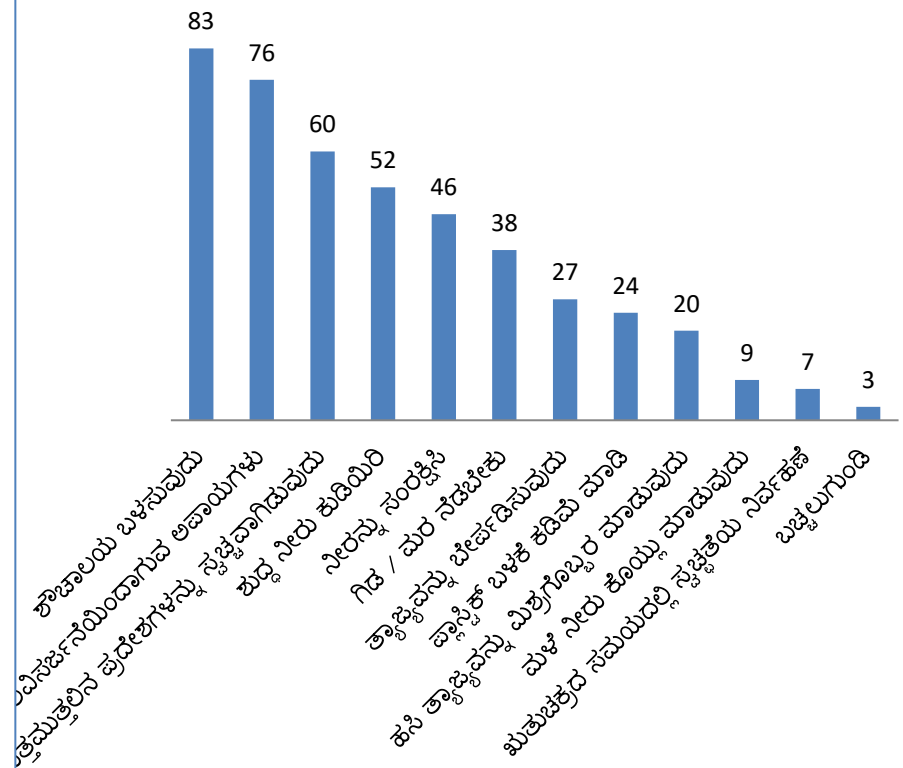


Third Party Evaluation

Districts with Low Recollection of any IEC materials



Type of message recollection in Wall Writing



Thank You



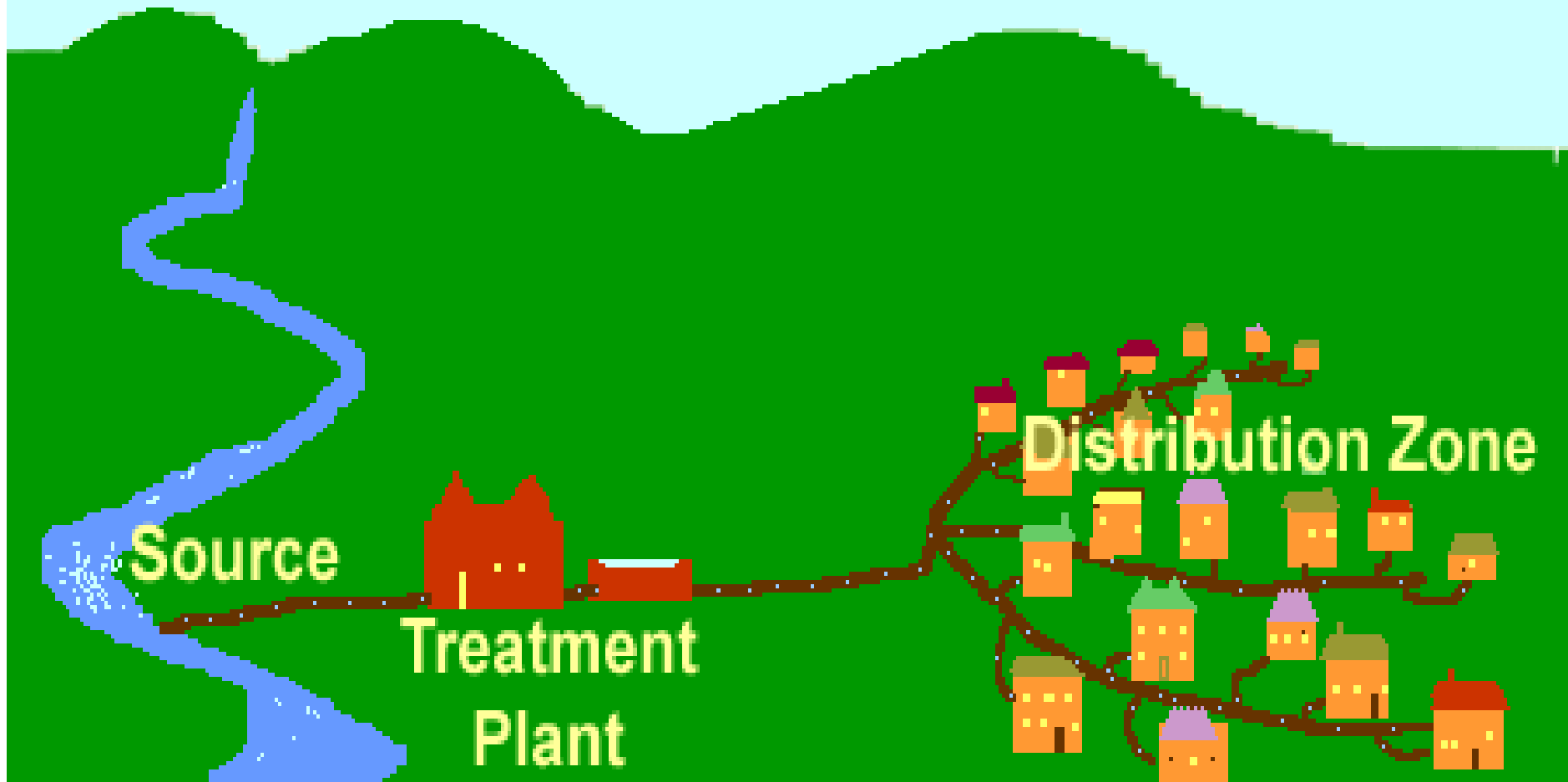


MULTI VILLAGE SCHEME

Mahananda Kalgi
Assistant Executive Engineer
Rural Drinking Water and Sanitation Central Office
Bangalore

Overview

A simple supply structure



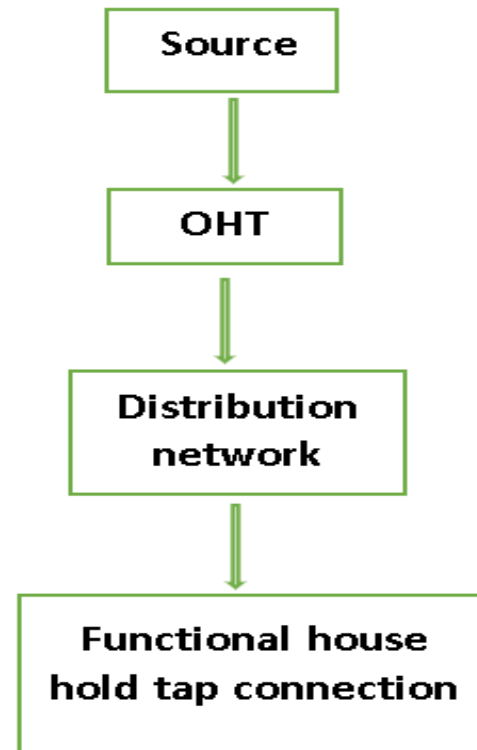
Introduction

Karnataka Rural Drinking Water and Sanitation Department is providing **Potable Water** Supply mainly to the Rural areas by

- Single Village Scheme
- Multi Village Schemes and
- Water Purification Plant.

Single village Scheme

- As the Name itself suggests in these Schemes **Potable water** will be supplied for a **single Village** or group of habitations.
- These Schemes uses **Sustainable Source** like Bore wells, Open wells and surface sources with a minimum operation and maintenance cost .

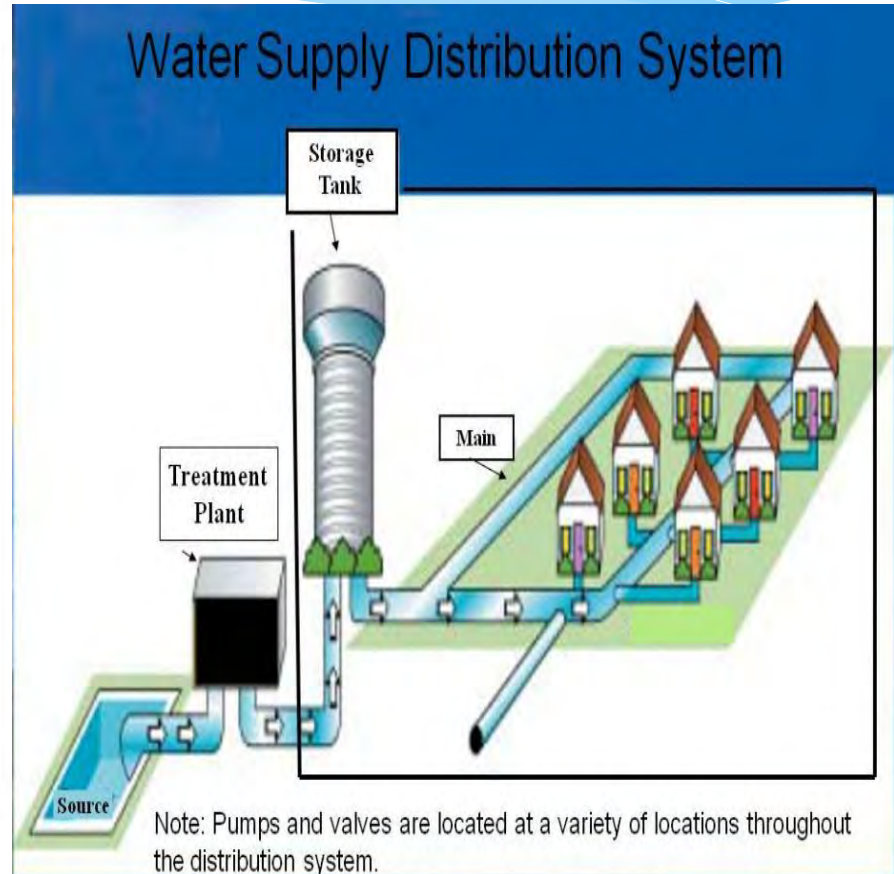
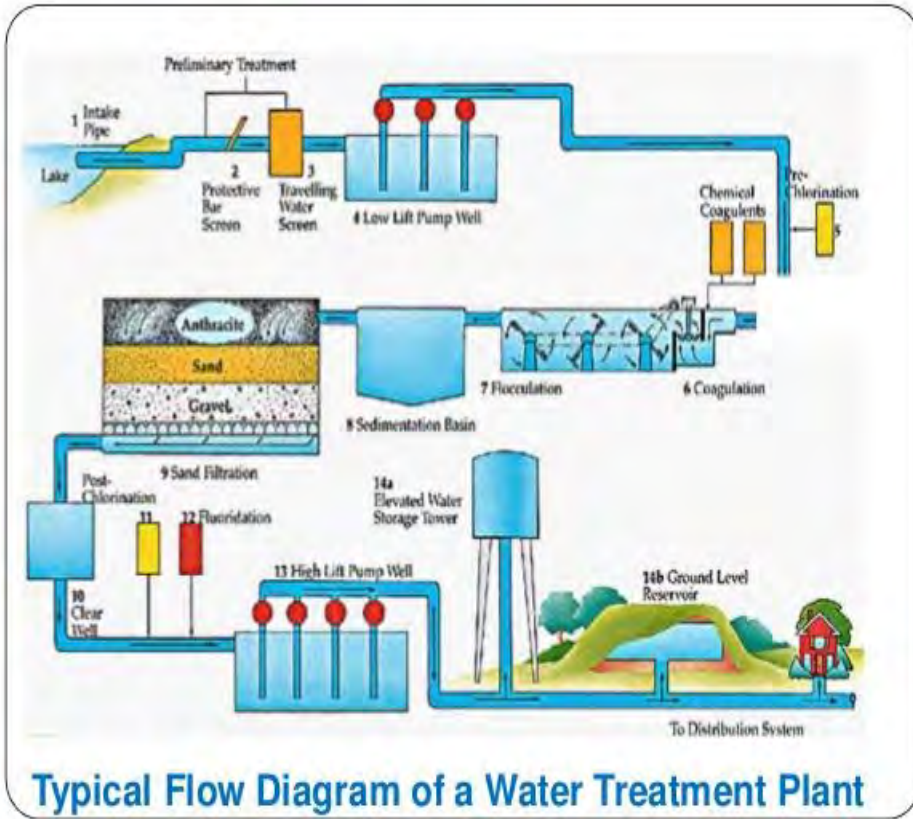


Water Purification Plant

WPP's installed in Karnataka are Reverse Osmosis (RO) based water purification system with capacities ranging from 250 Litre per Hour (LPH) to 1000 LPH drawing "Raw Water" from exclusive bore well or from any existing water supply systems with typically 2000 Litre of Treated Water Tank and dispensed through Coin and/or Card vending machines dispensing 20 Litre at Rs.2-5



Multi Village Scheme



Over view

These Schemes uses Sustainable Water Source and Treated into the designated Water Treatment Plant and then supplies purified Drinking Water to the Villages/Habitations covered under the project.

Since the water is transferred from long distance at a **very high cost**, it is essential to have **least loss of water during transmission**. For this purpose it is necessary to have District Metering Area (DMA) with SCADA systems. Bulk water transfer/multiple village schemes have higher per capita & maintenance costs, and require skilled human resources. Hence, the Districts have to **judiciously plan these works, preferably as a last option, keeping in view the availability of resources and future O&M expenditure.**

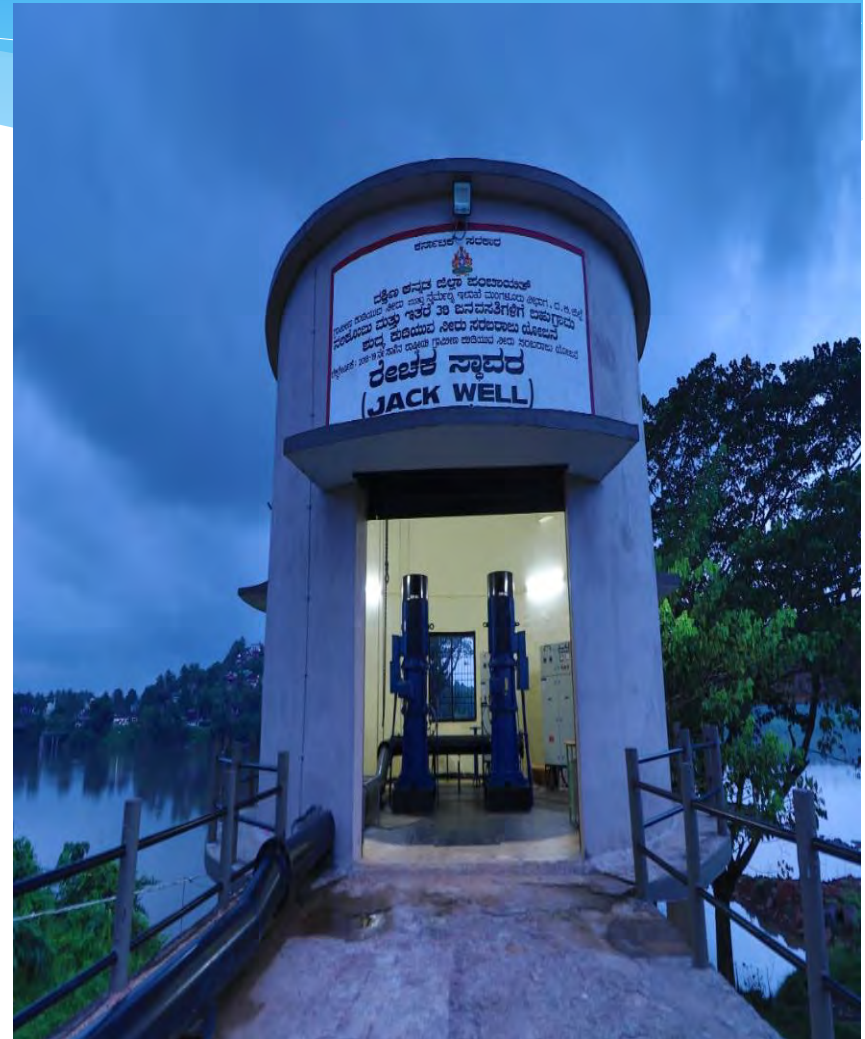
Intake Structure

- * Intake well is used to collect water from the source such as River, Lake & Reservoirs and conveying it further to the Water Treatment Plant through jackwell.



Jackwell

- * The structure where the drawn water from intake is delivered and the pumping operation starts
- * Main objectives are to prevent vortex formation
- * To obtain uniform distribution inflow to all operating pumps
- * To maintain sufficient depth of water to avoid air entry during pumping



Raw Water Rising Main

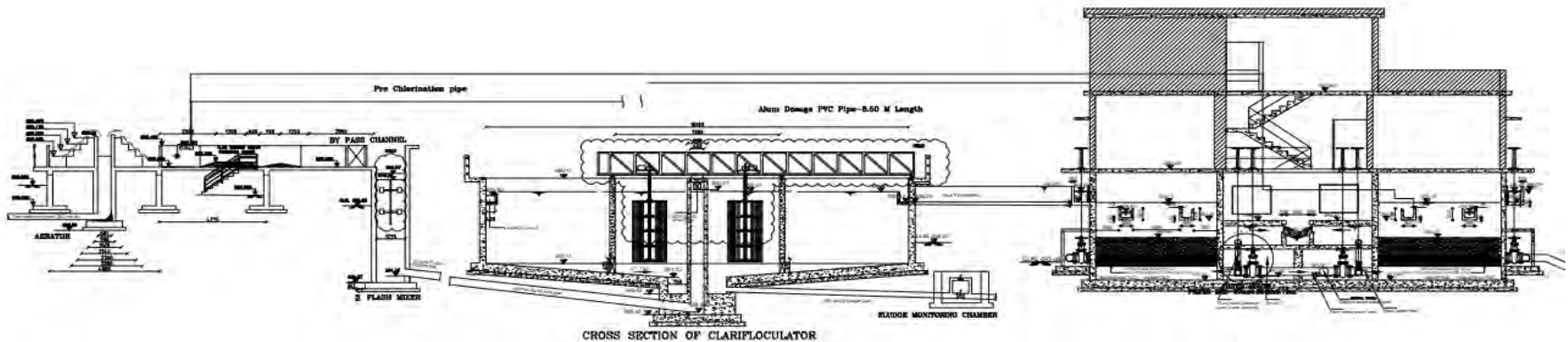
Raw water Rising Main or pumping main is used to convey the Water from source to Water Treatment Plant

It may be through Gravity or Pumping, depending on the geographical conditions of the site.



Water Treatment Plant

Water treatment is the process that improves the quality of water to make it appropriate for a specific end-use.





Components of WTP

- **Aerator** : Process in order to remove dissolved gases
- **Flash Mixer** : A flash mixer is a chamber that contains mechanical stirrers, which is designed to assure fast, thorough, mixing of lime and alum for the purpose of creating floc.
- **Clariflocculator** : Clariflocculator is a combination of flocculation and clarification in a single tank.
- **Filtration** : Filtration is a process that removes particles from suspension in water by slow sand filter or rapid sand filter
- **Disinfection** : Water disinfection means the removal, deactivation or killing of pathogenic microorganisms. Microorganisms are destroyed or deactivated, resulting in termination of growth and reproduction.

MVS Progress details

SL NO	Name of the Divison	Project Commissioned Prior to Mar 2018-19	Completed Projects in 2019-20	No of works Physically completed 2020-21	No of works under progress 2020-21	DPR/PSR/ADM Approval/Tender Stages	Proposed in 2021-22	Grand Total
1	Bagalkot	32	2	1	0	1	5	41
2	Bengaluru (U)	0	0	0	0	1	1	2
3	Belagavi	68	2	0	0	1	3	84
4	Chikkodi			0	2	0	8	
5	Bellary	67	0	0	4	3	4	83
6	Harappanahalli			0	3	0	2	
7	Bidar	3	0	0	0	3	1	7
8	Chamrajnagar	5	0	0	2	1	1	9
9	Chikkaballapur	2	0	1	0	4	0	7
10	Chikkamangalur	2	1	2	1	0	15	21
11	Chitradurga	2	0	0	4	1	5	12
12	Dakshin Kannada	4	1	2	0	0	7	14
13	Davangere	23	3	2	3	1	5	37
14	Dharwad	14	0	0	0	1	0	15
15	Gadag	20	0	0	0	0	0	20
16	Kalaburgi	25	0	0	0	0	6	31
17	Hassan	8	1	2	5	0	7	23
18	Haveri	18	0	0	0	0	4	22
19	Kodagu	1	0	0	0	0	0	1
20	Kolar	1	0	0	0	0	0	1
21	Koppal	12	0	0	4	5	0	21
22	Mandya	12	0	1	7	1	6	27
23	Mysore	25	4	2	2	0	13	46
24	Raichur	24	3	1	4	1	0	33
25	Ramanagar	3	0	0	2	0	3	8
26	Shivamogga	5	3	0	3	0	16	27
27	Tumkur	27	2	1	2	0	0	32
28	Udupi	1	2	0	2	1	27	33
29	Uttarkannada	6	1	0	2	0	4	13
30	Vijaypur	30	2	2	3	1	0	38
31	Yadgir	6	1	1	1	0	1	10
	Total	446	28	18	56	26	144	718

Operation and Maintenance of MVS

Why O&M?

- The large investments made to construct utilities intended to provide facilities for water supply are generally becoming **unproductive**, mainly on account of poor Maintenance.
- If this **situation continues** even after few years, these schemes become **defunct**, and a **large amount of money is required to replace and rebuild** the system components apart from interruptions in service occur owing to the breakdown of equipment.
- **The water supply boards /departments are not able to ensure that the maintenance staff follows** valid practices of O&M.
- Generally the management of Water supply systems in the water authorities is receiving relatively **lower priority**.

Criteria to be considered for the proper Operation and Maintenance of MVS

- **Establishment Charges:** Key Personals (Pump operators, Valve man, Electrician, Watchman) according to labour dept rates
- **Electricity Charges:** Pumping machineries (Head work, Treatment plant and others)
- **Maintenance of Civil work:** 0.25% as per CPHEEO Manual
- **Maintenance of Electro Mechanical components:** 2.5% as per CPHEEO Manual
- **Consumables:** Chlorination (Bleaching powder), Alum, transformer oil, etc..
- **Transportation, Communication and Accommodation Charges**
- Water quality test, report generation and other Stationery etc


Aerial view of MVS Scheme Video



WhatsApp Video 2021-08-05 at 10:44:29 AM (2).mp4

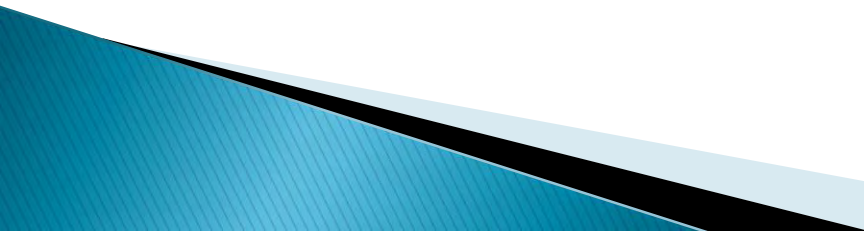
A diamond-shaped wooden sign with a dark brown border and two yellow circular fasteners at the top and bottom. The sign is set against a white background with a blue header and footer. The text "ANY QUESTIONS?" is written in bold, dark red, sans-serif capital letters in the center of the sign. The background features a repeating watermark of a camera icon and the text "123RF".

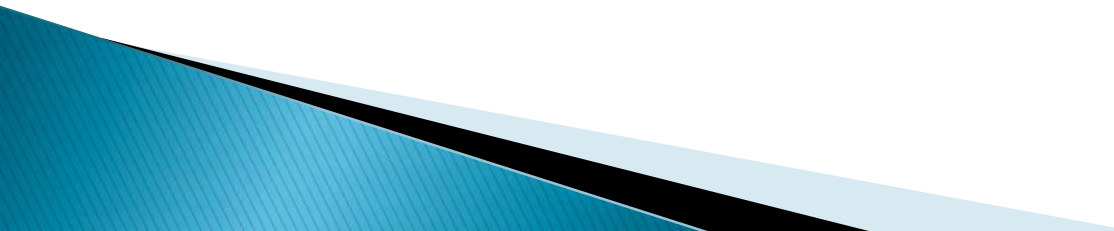
**ANY
QUESTIONS?**



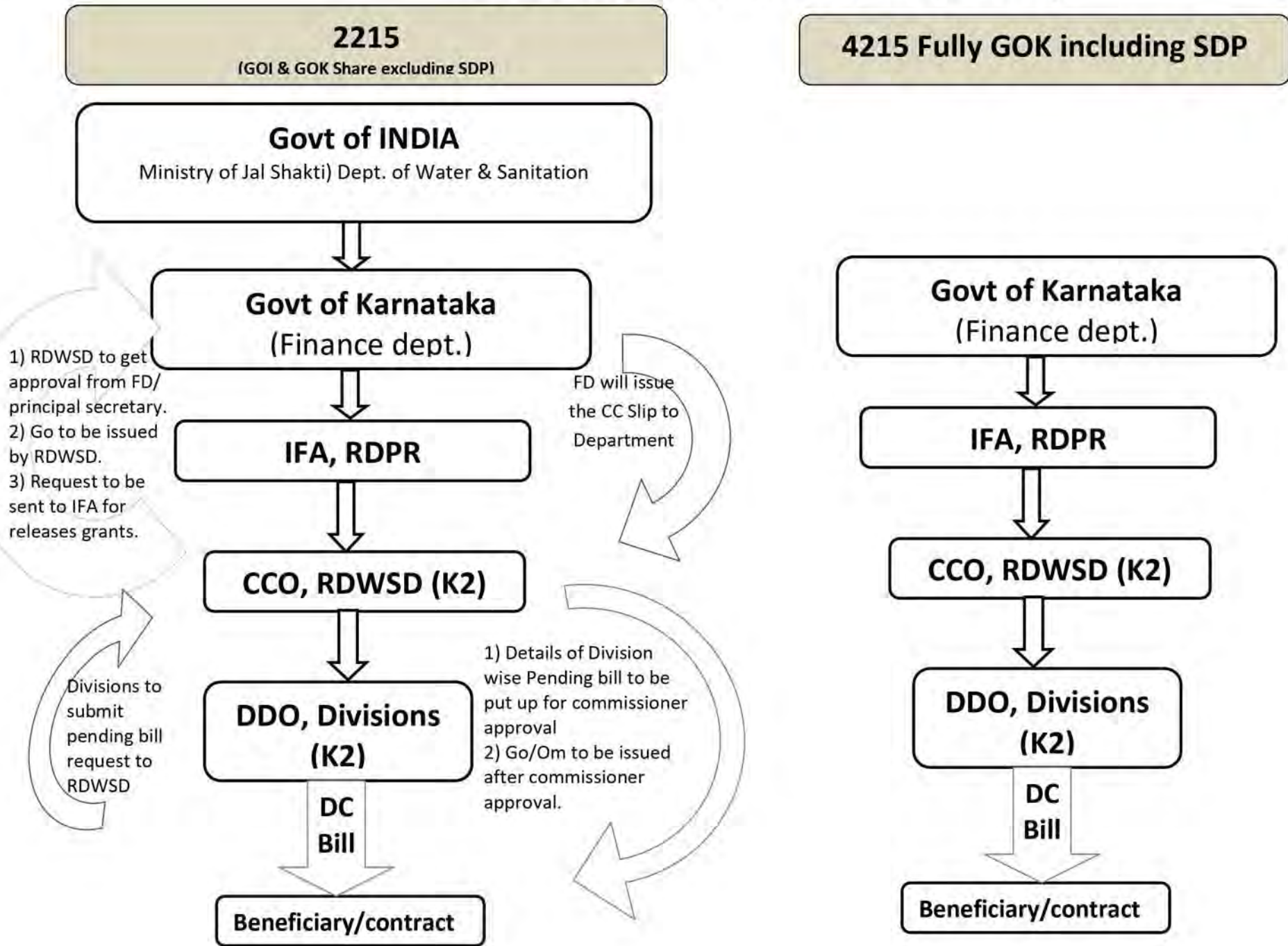
Thank you

Roles and Responsibility of CAO

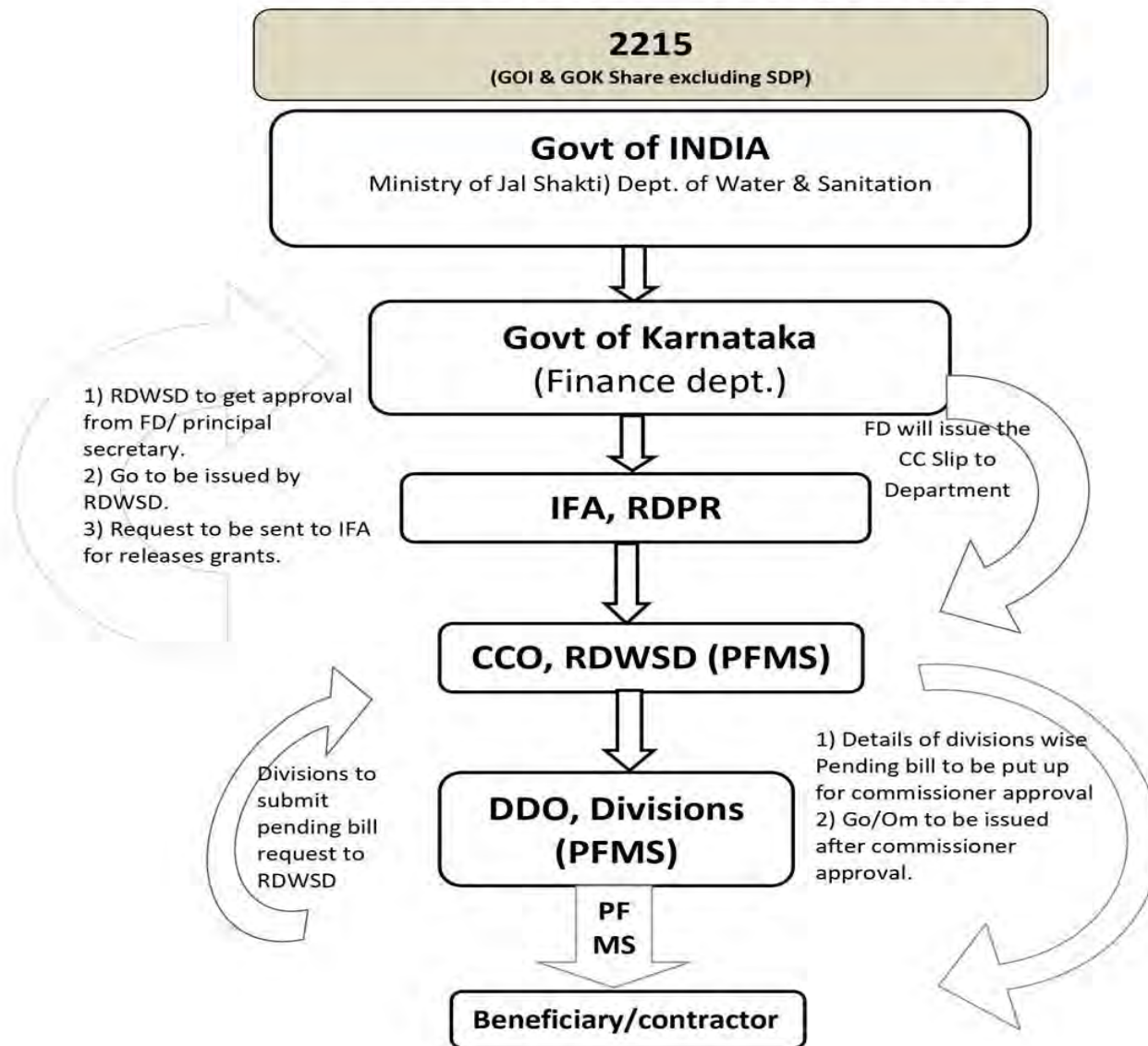
- ▶ Act as DDO, Internal Auditor and Fund Manager
 - ▶ To monitor component wise release and expenditure of 2215 and 4215 grants
 - ▶ Ensuring the opening and proper maintenance of Bank Accounts of RDW&SD
 - ▶ Ensuring the maintenance of monthly expenditure and summaries of transaction
 - ▶ Coordination with ZP's, EE's, Bank, FD for timely channelization of fund-flow
 - ▶ Monitoring expenditure on various schemes of Water and Sanitation against their planned budget
 - ▶ Preparation of bills to draw funds from treasury and to deposit in main bank account
 - ▶ To draw the salaries of RDW&SD Staff and Officers through HRMS and performing as nodal officer for HRMS
 - ▶ Collection and compilation of utilization certificate and submission of UC's to GoI
- 

- ▶ Preparation and maintenance of all required document for submitting to C&AG
 - ▶ Maintain Budgetary Control Register, Cash Book
 - ▶ Reconcile Receipts and Expenditure with Bank Accounts opened under both the schemes
 - ▶ The State has effectively implemented PFMS from the month of February 2020 and monitoring of release and expenditure of CSS funds under single nodal account
 - ▶ Monitoring of release and expenditure of state funds through K-2
 - ▶ Timely payment of statutory deductions and filing returns
 - ▶ Issuing of form-16 and form-16A
 - ▶ Any other work entrusted by Commissioner
- 

JJM Fund flow chart (Khajane-2)



JJM Fund flow chart (PFMS)



Role of in Accounts in SBM-G scheme

- Swachh Bharat Mission (Gramin) is a Centrally Sponsored scheme and grants released as per 60 :40 ratio.
- Based on the demand, the amount is released to the 30 **Districts** through **e-FMS Bank Account** to facilitate payment of incentive amount directly to the bank account of **IHHL** beneficiaries. (DBT mode in Panchantatra software)
- Based on the demand and with the administrative approval of the Commissioner, the component-wise grants (Centre and State Share) are released to 30 District through Scheme **offline Bank Account** towards the following: -
 - For construction of Community Sanitary Complexes.
 - For establishment of SWM & LWM units at GPs.
 - For IEC/HRD activities.
 - Gobardhan, FSM & PWM
 - MRF (Material Recovery Facility Centre)
 - For Construction of School & Anganwadi Toilets

Role of Accounts in SBM-G scheme

- Maintenance of 4 bank A/c's at the State Level (SBM-G Main, EBR & PBI and UNICEF)
- Maintenance of month-wise cash book (including Flexi Account) and reconciliation in Tally software at State Level
- As per GoI guidelines district audit report and Utilization certificate will be collected and consolidated along with State office audited reports with the approval of the Principal Secretary, RD&PR and the same is submitted to GoI (SBM-G Main, EBR & PBI Grants)
- IEC & HRD payments are made with admin sanction order and component-wise expenditure statement is maintained at State level and same is being updated in IMIS
- Monitoring monthly professional tax and GST payment and returns
- Quarterly filing of TDS
- Quarterly submission of FACE & SOE form to UNICEF, Hyderabad for reimbursement
- Submission of Provisional UC as requested by the GoI from time to time
- Withdrawal and re-allocation of grants as per direction & approval of the commissioner
- Principal Auditor General of Accounts (AG Audit) scheme audit compliance is being submitted to audit paras

Role of in Accounts in SBM-G scheme

- Public Finance Management System (PFMS) has to be implemented as per new Government of India **Single Nodal Account user manual**
- Dedicated PFMS Technical Team has been setup for implementation of PFMS under **SBM-G** (State Office, 31 Districts, 6002 GPs, & 176 TPs) and **JJM** (State Office & 32 Divisions)
- PFMS circular has been issued to all districts for implementation of PFMS, to exhaust the available unspent grants at ZP/TP/GPs & other implementing agencies and submit the UCs accordingly.

PFMS FLOW CHART

Rural Drinking Water and Sanitation Department

Public Finance Management System

State Level Agency Registered in PFMS – Rural Drinking Water and Sanitation Department

Totally 3 Bank Accounts Linked under PFMS

SBM-G Scheme Main Bank A/c

EBR Bank A/c

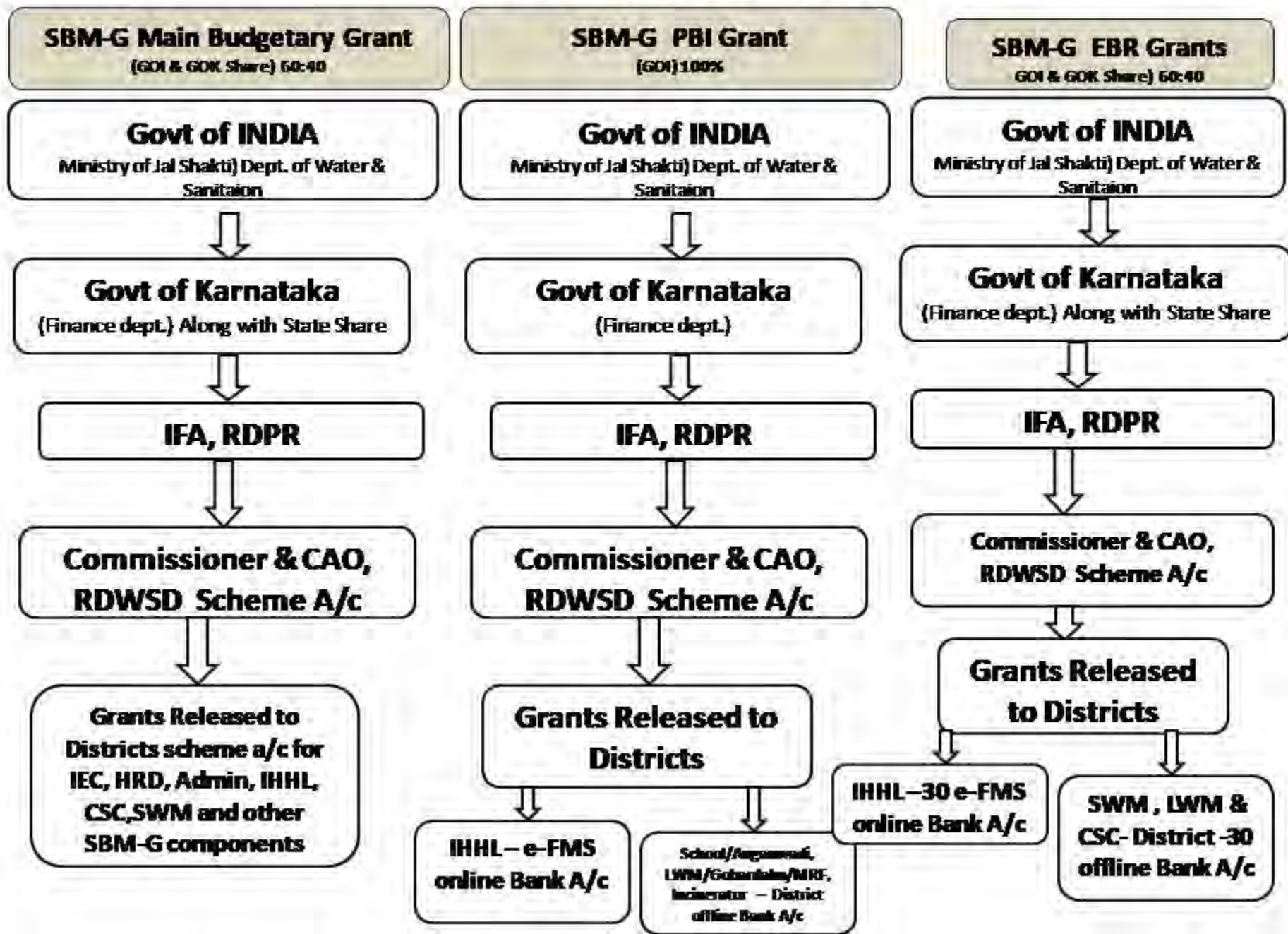
Performance Based incentive Grant Bank A/c

State Level Scheme Manager created under PFMS

State Scheme Code– SBM-G KA-97 mapped with State level agency

30 Districts are registered and Mapped to 3 state Nodal Bank Accounts & 6002 GPs *3 Bank Accounts = 18006, out of these, 17100 GPs (Child Level agency) mapped to SNA Bank Accounts and balance of 902 GPs mapping is under process

SBM-G Fund Flow Chart



DELEGATION OF FINANCIAL POWER

ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎಫ್‌ಡಿ 03 ಟಿ.ಎಫ್.ಪಿ. 2018 ದಿನಾಂಕ:14.05.2018 ರ ಆದೇಶದ
ಅನುಬಂಧದಲ್ಲಿನ ಕ್ರಮ ಸಂಖ್ಯೆ:2 ರಲ್ಲಿ ಸರ್ಕಾರದ ಕಾರ್ಯಕ್ರಮ/ ಯೋಜನೆಗಳ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ಸೇವೆಗಳ
ಸಂಗ್ರಹಣೆಗಾಗಿ ಪ್ರಸ್ತುತ ಇರುವ ಅಧಿಕಾರವನ್ನು ಈ ಕೆಳಕಂಡಂತೆ ಪರಿಷ್ಕರಿಸಲಾಗಿದೆ.

ಕ್ರ. ಸಂ.	ಇಲಾಖಾಧಿಕಾರಿಗಳು	ಪ್ರಸ್ತುತ ಇರುವ ಅಧಿಕಾರ	ಪರಿಷ್ಕೃತ ಅಧಿಕಾರ
1.	ಇಲಾಖಾ ಮುಖ್ಯಸ್ಥರು	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.5.00 ಲಕ್ಷಗಳು	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.100.00 ಲಕ್ಷಗಳು
2.	ವಿಭಾಗೀಯ ಮಟ್ಟದ ಅಧಿಕಾರಿ	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.2.00 ಲಕ್ಷಗಳು	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.50.00 ಲಕ್ಷಗಳು
3.	ಜಿಲ್ಲಾಮಟ್ಟದ ಅಧಿಕಾರಿ	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.1.00 ಲಕ್ಷಗಳು	ಆಯವ್ಯದ ಅನುದಾನದ ಲಭ್ಯತೆಗೊಳಪಟ್ಟು ಒಂದು ಬಾರಿಗೆ ರೂ.10.00 ಲಕ್ಷಗಳು

New TDS Rates & Procedure With Effect From 1st July , 2021

- Income tax department has introduced new provisions with reference to Tax deduction at source
 - Sec 206 AB - Applicable to Tax Deduction at Source
 - Sec 206 CCA - Applicable to Tax Collection at Source
 - These provisions will come into effect with effect from 1st July 2021

- Declaration and Confirmation of filing of Income Tax Returns for FY 2018-19 and 2019-20 as per section 206AB(3) in a prescribed format.
- IT Acknowledgement or screenshot from Tax portal for having filed the tax return. These provisions will come into effect with effect from 1st July 2021.
- In case the deductee has not filed the tax returns and covered under section 206AB, then, twice the rate specified in the relevant Section, at the rate of 5% which ever is higher has to be paid.
- Format Circulated.

Date :

To,

Dear Sir / Madam,

Ref: Declaration and Confirmation of filing of Income Tax Returns for FY 2018-19 and FY 2019-20 as per section 206AB (3)

I, Mr / Mrs. (Name and Designation of the declarant), -----, do hereby state, submit and confirm as follows:

Sl No	Particulars	Description
01	Name of our organization	
02	IT PAN	
03	Email id for communication	
04	Contact No for communication	
05	Our Income tax Jurisdiction is	

6. We have filed the Return of Income for FY 2018-19 and FY 2019-20 as per the details mentioned below:

Particulars	Financial Year	Financial year 2018-19	Financial Year 2019-20
Date of Filing the Tax Return			
Due date of filing the Tax return			
Acknowledgement Number			
TDS / TCS			

7. I/ We further agree to indemnify, defend and hold good your organization from any liability (including towards tax, interest, and penalty) that may arise, or may be asserted against your organization, on account of the Section 206AB of the Income Tax Act, 1961 due to any misrepresentation made by us through this declaration.

Enclosures :

- PAN card copy
- IT Acknowledgement or Screenshot from Tax portal for having filed the tax return

Yours sincerely,

For

Name:
Designation:

2014 ರಿಂದ 2018, ಹಾಗೂ 2018-19, 2019-20ನೇ ಸಾಲಿನ ಮಹಾಲೇಖಪಾಲರ ಲೆಕ್ಕಪರಿಶೋಧನೆಯಲ್ಲಿ ಇಲ್ಲಿಯವರೆಗೂ ಶಾಖಾವಾರು ಅನುಪಾಲನಾವರದಿಯನ್ನು ಸಲ್ಲಿಸದಿರುವ ವಿವರ.

ಶಾಖೆ	ಅವಧಿ	ಕಂಡಿಕೆಗಳು	ಷರಾ
ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ಶಾಖೆ	2014-18 2018-19, 2019-20	part IIA I, II, III part IIB, XIV, XVII (5 Paras) Part IA, I, II, part IIB, I (3 Paras)	ಭಾಗಶಃ ಉತ್ತರಗಳನ್ನು ನೀಡಿದ್ದು, ಈ ಕುರಿತು ದಿನಾಂಕ 28-7-2021ರಂದು ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ಇವರೊಂದಿಗೆ ನಡೆಸಿದ ಚರ್ಚೆಯಲ್ಲಿ ಸೂಕ್ತ ಉತ್ತರವನ್ನು ಕೊಡಲಾಗುವುದೆಂದು ತಿಳಿಸಿದ್ದಾರೆ.
ನಿರ್ದೇಶಕರು (ISA)	2018-19, 2019-20	part IIB, IXC (1 Para)	ಯಾವುದೇ ವಿವರ ಒದಗಿಸಿಲ್ಲ.
ರಾಜ್ಯ ತಾಂತ್ರಿಕ ಸಂಯೋಜಕರು (WQMSP)	2014-18	part IIA, VII, IX a,b,d (2 Paras)	ಜಿಲ್ಲೆಗಳಿಂದ ಮಾಹಿತಿ ಪಡೆಯುತ್ತಿರುವುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ

THANK YOU



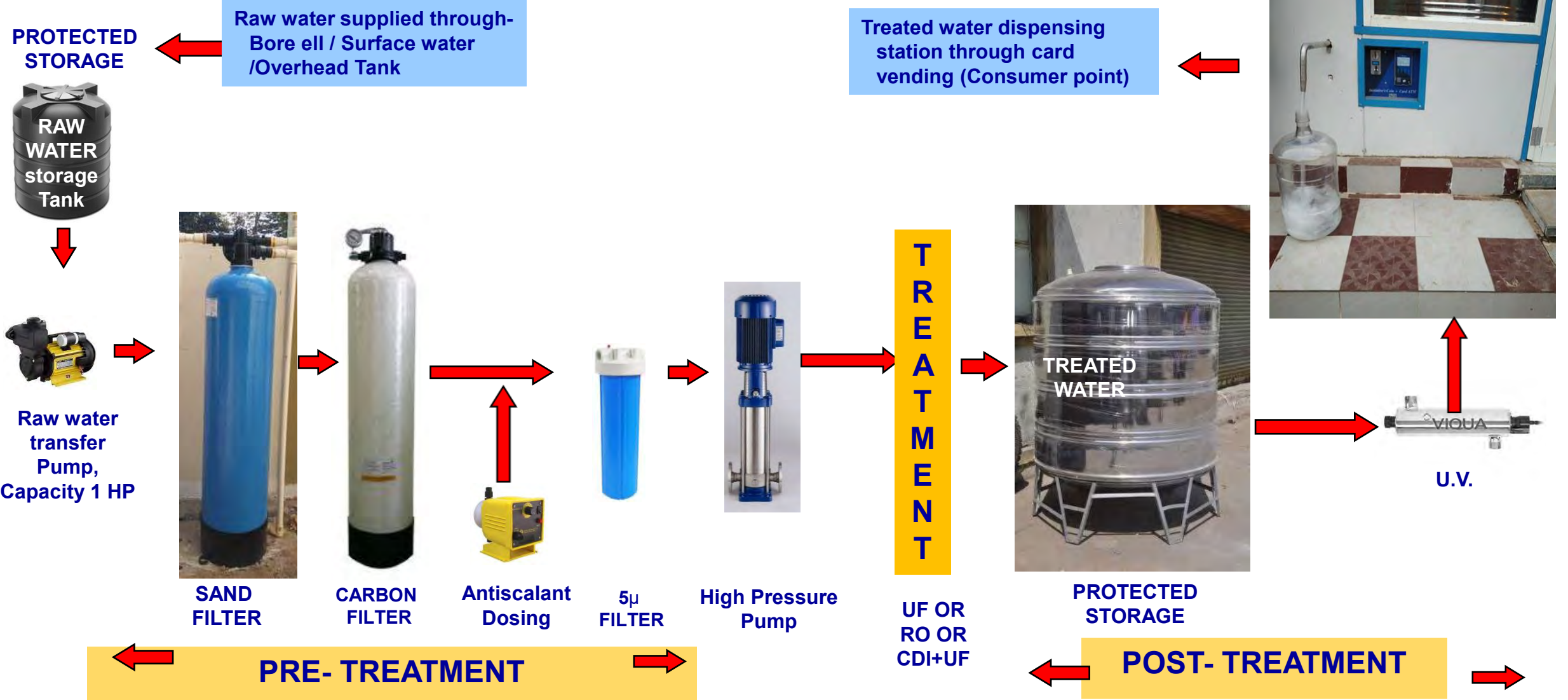


AGENDA

1. ALTERNATE TECHNOLOGIES
2. TECHNOLOGY SELECTION TOOL
3. WPP ASSESSMENT
4. WPP MONITORING AND EVALUATION
5. REMOTE MONITORING SYSTEM



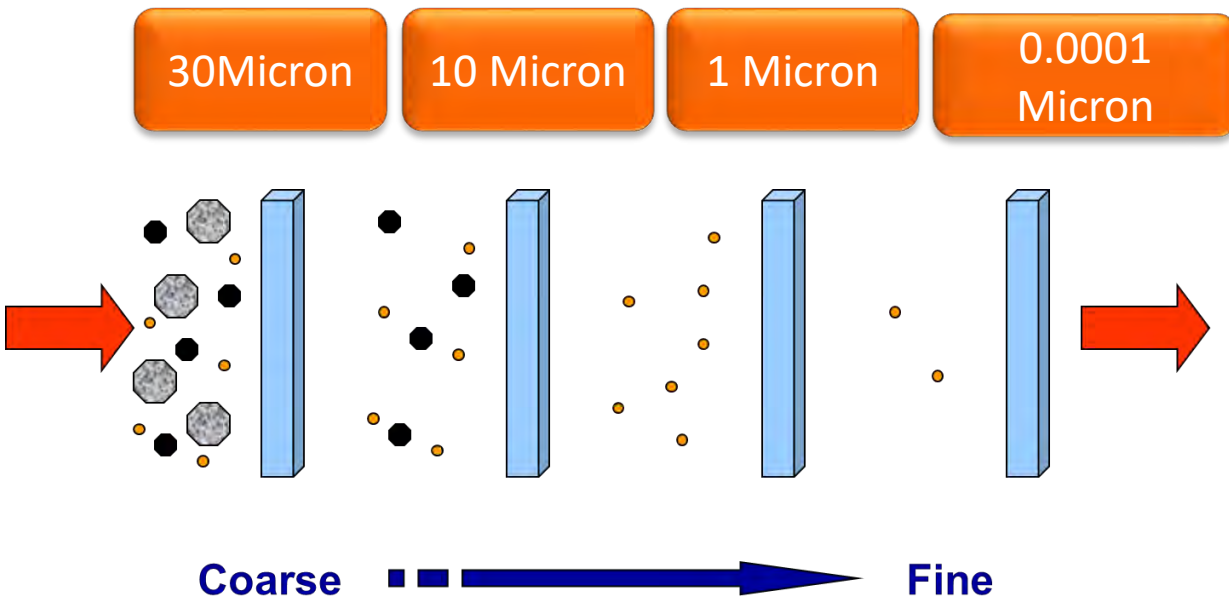
STANDARD WPP PROCESS





PRE-TREATMENT

A “stepped” filtration approach is usually the most efficient and effective



BENEFITS

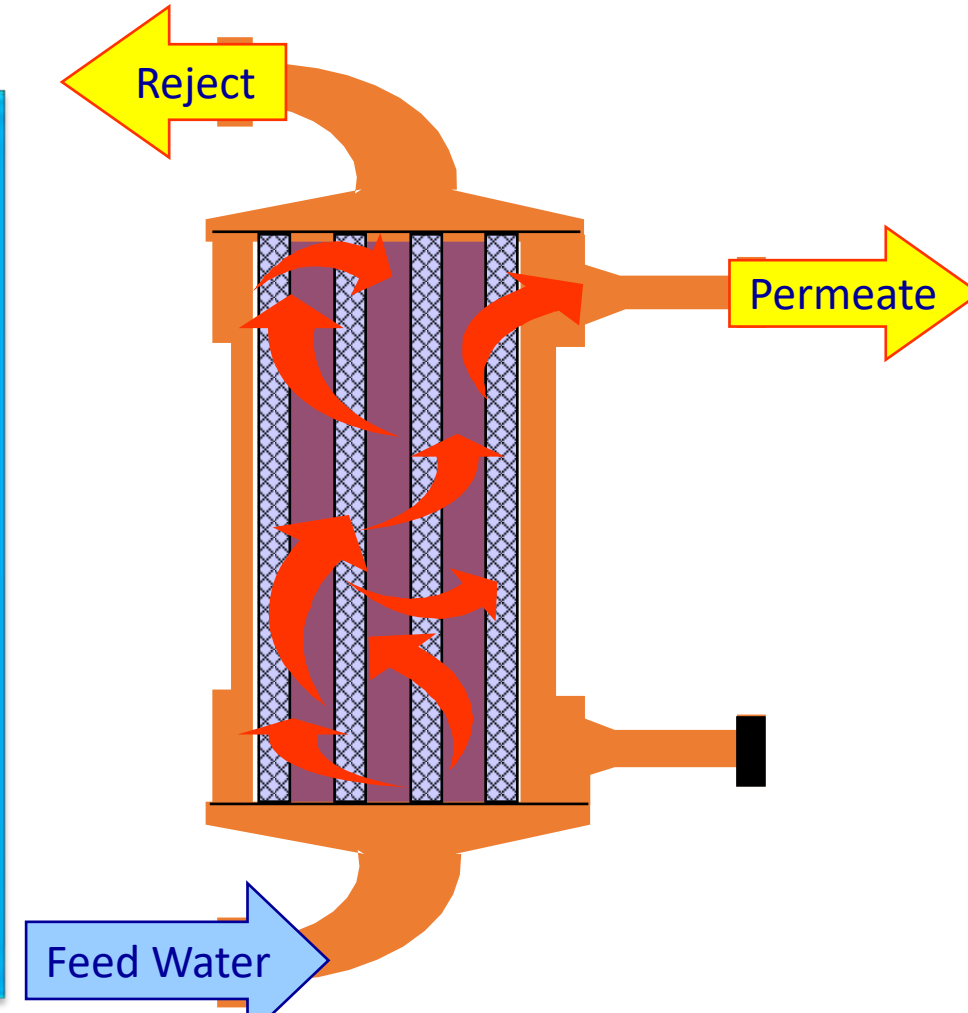
- Sequential removal of impurities that will help improve RO performance.
- If the impurities are not removed then fouling by suspended particles & Scaling by inorganic salts will exceeded saturation and leads to
 - Reduction of water flow.
 - Increase in pressure drop.
- Monitoring as per SOP will maximize the life of RO & minimize downtime.
- Proper maintenance required to ensure
 - Quality of water supplied to RO
 - Off odor removal
 - Biological fouling



ULTRAFILTRATION

OVERVIEW

- Separation mechanism Primarily “sieving”
- Removal of physical contaminants - Color, Turbidity, Colloid components and particulate matter
- Removal of microbiological contaminants – Bacteria, Protozoa



DISADVANTAGE

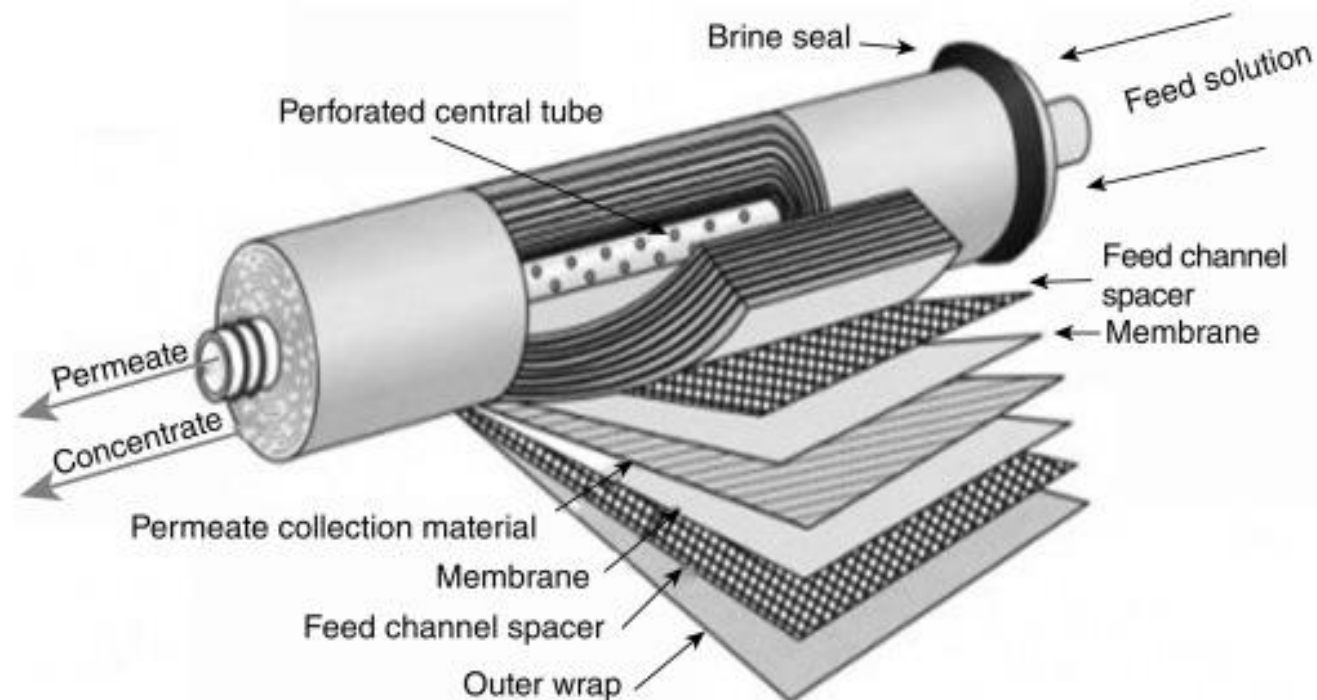
- Does not remove dissolved salts so it will not reduce parameters such as TDS, alkalinity etc



REVERSE OSMOSIS

CHALLENGES

- Membrane Fouling
 - Caused by particulate, colloidal & biologic material that binds to the membrane surface and causes blockage.
- Membrane Scaling
 - Caused by the increase in concentration of salts beyond their saturation level - this factor directly affects recovery levels.
- Membrane Degradation
 - Caused by hydrolysis, microbial attack, or chemical solubilization of the membrane material



DISADVANTAGE

- Approx 40% - 50% of the feed water goes to drain.
- Requires high pressure pump - approx 10 bar



CAPACITIVE DE-IONIZATION

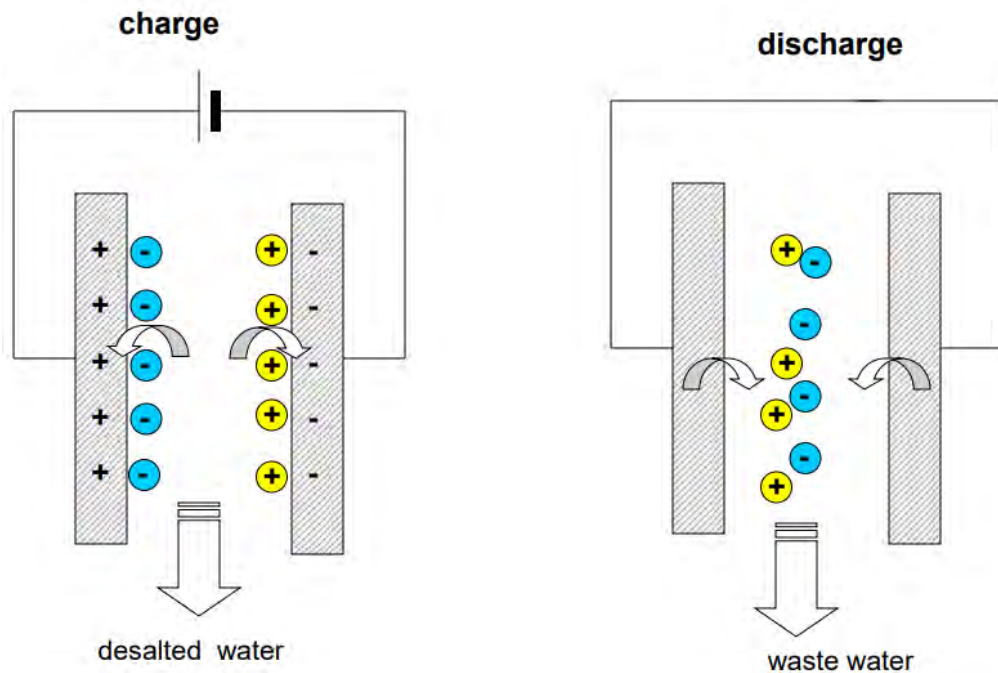
ADVANTAGES

- Out put TDS can be controlled.
- Can be operated with solar power.
- The system is completely automatic.

DISADVANTAGES

- The technology is new and there are very few players hence it is vendor dependent .
- The waste water generated will have higher TDS value due to the concentration of dissolved salts and cleaning chemicals.

Salty water flows through a pair of electrodes.



Once the ion exchange coating gets saturated with ions, by reversing the polarity of the electrodes the electrodes are regenerated and the water is drained.

The ions gets attracted towards the electrode of opposite polarity and get trapped in the double layer region and water flows through the cell.



DESIGN BASIS – FOR TOOL

- 13 Raw water quality parameters were used (Physiochemical 11 and Microbiological 2)
- The 3 technologies identified were shortlisted based on ease of operation and cost
- Input of the 13 parameters will provide an output of the appropriate technology. Selection is based on the highest score.

Physiochemical Parameters (11)

pH

Turbidity

Total Dissolved Solids

Total Hardness

Total Alkalinity

Nitrate

Iron

Sulphate

Chloride

Fluoride

Arsenic

Microbiological Parameters (2)

Total Coliform

E-Coli



ASSIGNED WEIGHTAGES

Typical Wastage During Treatment	Ultra Filtration	Coagualtion	Ozonation	Reverse Osmosis	Ion Exchange	Nano Filtration	Electro dialysis
	10%	5%	5%	50%	10%	30%	15%
Score	4	5	5	2	4	3	4

Higher score indicates low wastage

Evaluation Parameters	Weightage	Ultra Filtration	Coagualtion	Ozonation	Reverse Osmosis	Ion Exchange	Nano Filtration	Electro dialysis
Water Wastage	30%	4	5	5	2	4	3	4
Operational Cost (Opex)	15%	5	4	4	2	2	3	2
Serviceability & Availability of Spares	15%	5	5	4	4	3	3	2
Capital Cost (Capex)	10%	5	4	4	3	3	2	1
Ease of Adoption	10%	4	2	5	5	3	4	2
Consumables - Ease of Availability	10%	5	5	3	5	4	5	3
Reliability - Consistency of Quality	10%	5	4	3	5	2	5	3
Total Score	100%	4.60	4.35	4.20	3.30	3.15	3.40	2.70

Higher score indicates favourable



TECHNOLOGY SELECTION TOOL

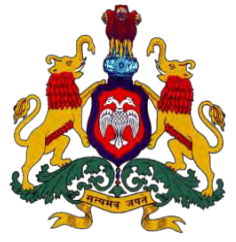
S.No.	Key Water Quality Parameters	Unit	Permissible Limits (BIS 10500:2012)	Enter Feed Water Quality	Feed Water > Limit
A					Off Limit
Physical / Organoleptic Parameters					
1	pH Value - All technologies will perform Between 6.5 to 8.5. Additional dosing system has to be provided if out of limit		6.5 - 8.5	7.5	0
2	Turbidity	NTU	1	2	0
3	Total Dissolved Solids	mg/L	500	400	0
Microbiological					
4	E. Coli	per 100 ml	0	0	0
5	Total Coliforms	per 100 ml	0	0	0
General Parameters					
6	Chloride	mg/L	250	25	0
7	Fluoride	mg/L	1	0.5	0
8	Iron	mg/L	0.3	0.3	0
9	Nitrate	mg/L	45	2	0
10	Sulphate	mg/L	200	22	0
11	Total Alkalinity to Methyl Orange	mg/L	200	75	0
12	Total Hardness	mg/L	200	90	0
Toxic Substances					
13	Total Arsenic (as As)	mg/L	0.01	0	0
			13	13	0

WEIGHTED AVERAGE SCORE (MAX - 5)	
Recommended Technology (Ranked in order of preference)	Total Score
Ultra Filtration	4.6
Reverse Osmosis	3.3
CDI with Ultra Filtration	3.3

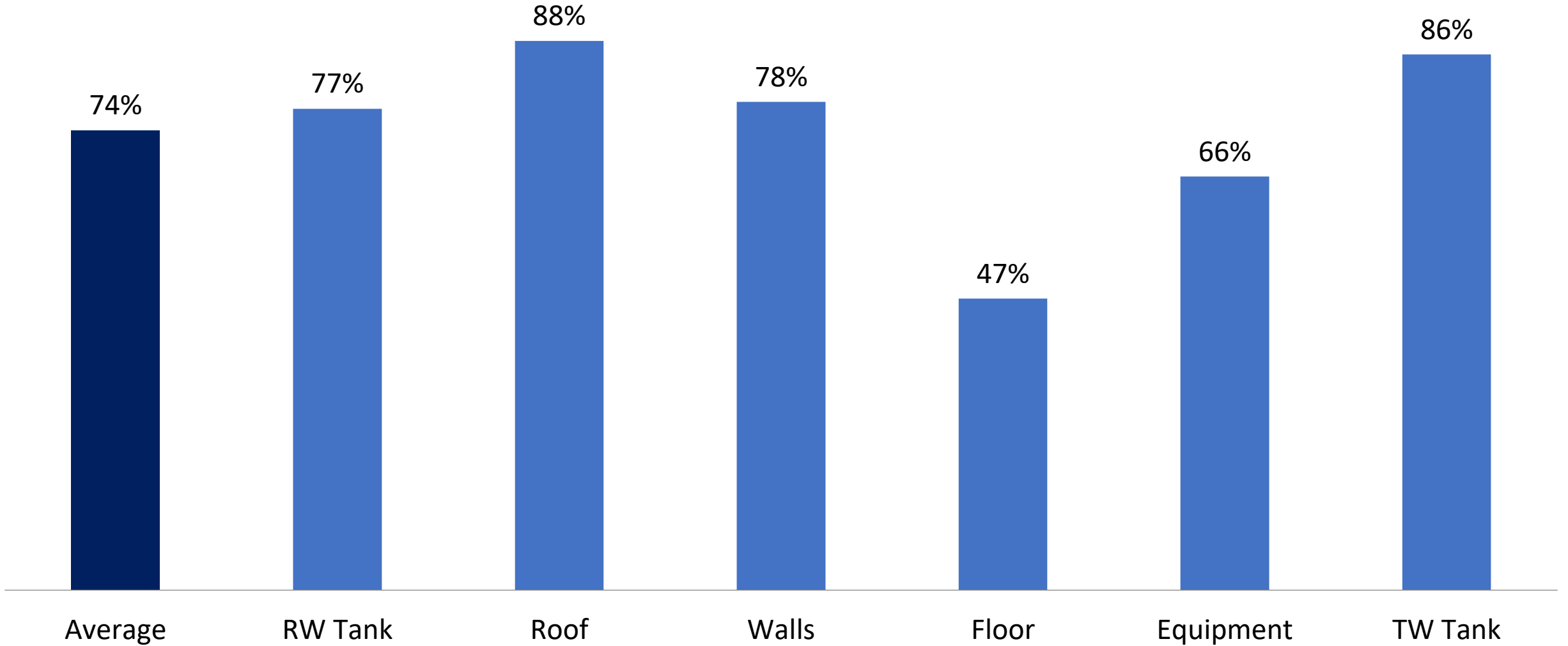


WPP ASSESSMENT

1. **Hygiene and cleanliness** - Floor, Wall ,Roof , Equipment's ,Raw water and Treated water storage tank .
2. **Quality** – Raw and Treated water testing as per frequency.
3. **Operation** – Monitoring of operational parameters, Working status of Antiscalent dosing pump and UV.
4. **Preventive Maintenance** – check motor current value, cartridge replacement.
5. **Breakdown maintenance** – Replacement of pumps or change of membrane.
6. **Sales data** – Daily sales of treated water.
7. **Documentation** – Document of Operational parameters, Quality, Sales volume, Preventive and breakdown maintenance and hygienic status.

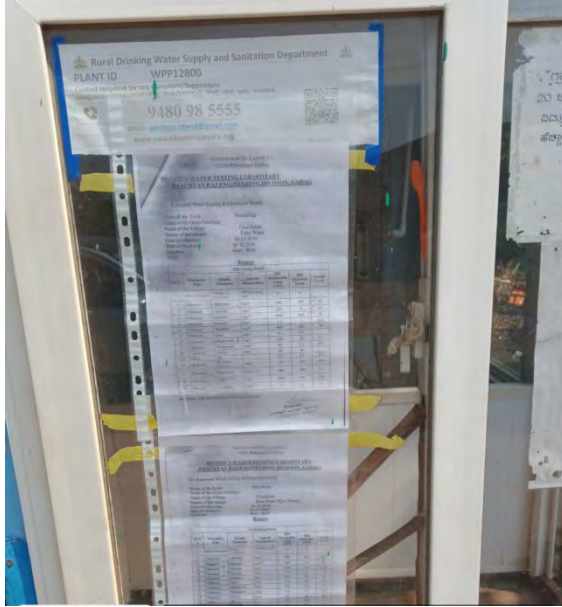


INTERNAL HYGIENE





DOCUMENTATION



AquaSafi Purification Systems Pvt Ltd.,
Daily Plant Operation Data
Automatic Plant (Automatic Start/Stop)

Date	Product TDS (PPM)	Product Flow (LPH)	Reject Flow (LPH)	Pressure (PSI)	Report Reason if the plant not working (No power, water, Operator absent, ...)
01/9/2020	31	600	1800	100	
02/9/2020	30	600	1400	100	
3/9/2020	30	600	1400	100	
4/9/2020	30	600	1400	100	
5/9/2020	31	500	1800	100	
6/9/2020	30	500	1600	100	
7/9/2020	29	500	1400	100	
8/9/2020	29	550	1400	100	
9/9/2020	28	550	1400	100	
10/9/2020	30	550	1500	100	
11/9/2020	30	600	1500	100	
12/9/2020	30	600	1400	100	
13/9/2020	28	600	1800	100	
14/9/2020	29	600	1400	100	

Aquashine
CUSTOMER SERVICE / COMMISSIONING REPORT

DATE: 02/09/2020

CUSTOMER DETAILS: A ಕೂಳಿನಕಲ್ಲು ಕುಂಚಿನಕಲ್ಲು ಸ್ವಲ್ಪ ದೀವಿಲ್ಲ ಇತನೇಯದೇವಿ ಆ!!

COMPLAINT DETAILS AND LOGGED BY: 9535254619. water Man. ಕೆಶ್ವಪ್ಪ ಕಾರ್.

500 PH RO+UF PLANT CHECK LIST
Hygenic = Inside / Outside

SL NO	PARAMETER	STATUS / CONDITION / UNIT	REMARK
1	RAW WATER SOURCE	Borewell Pipeline	250 PPM TDS
2	INPUT VOLTAGE / ELECTRICITY	240 Voltage/Good	Electricity
3	RAW WATER TANK	2000 Ltr HDPE	Tank
4	RAW WATER PUMP	0.5 HP. LEO Make	2.7 Amps
5	PRESSURE SAND FILTER	Dual Media Filter	4:30 pm 5:30 pm
6	ACTIVATED CARBON FILTER		
7	MICRON FILTERS	20" Slim Jumbo	Filters
8	HIGH PRESSURE PUMP	CRT 2/11 1.2kw	1.0 HP
9	RO / UF MEMBRANE & HOUSINGS	4040 200 No	No Leakages
10	ROTO METERS		Good Condition
11	PRESSURE GAUGES		Good Condition
12	PANEL BOARD	Single Phase	Provisative
13	DOSING PUMP, CHEMICAL		working condition
14	LPS / HPS		work / work
15	S S TANK		1000 Ltr Stainless Steel
16	FLOATY		Working
17	DISPENSING PUMP	0.5 Hp pump	LEO
18	SV / FLOW SENSOR		working Condition
19	COIN / CARD SYSTEM		Both Condition
20	CIP SYSTEM		
21	OTHERS / LEAKAGES IF ANY		

DIAGNOSIS / CORRECTIVE ACTION: Rotive visit. Inside se outside cleaning process

Aquashine Technologies
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Sahakara Nagar, Bangalore - 560 092 Toll Free Number : 8880055888 Web : www.aquashineindia.com



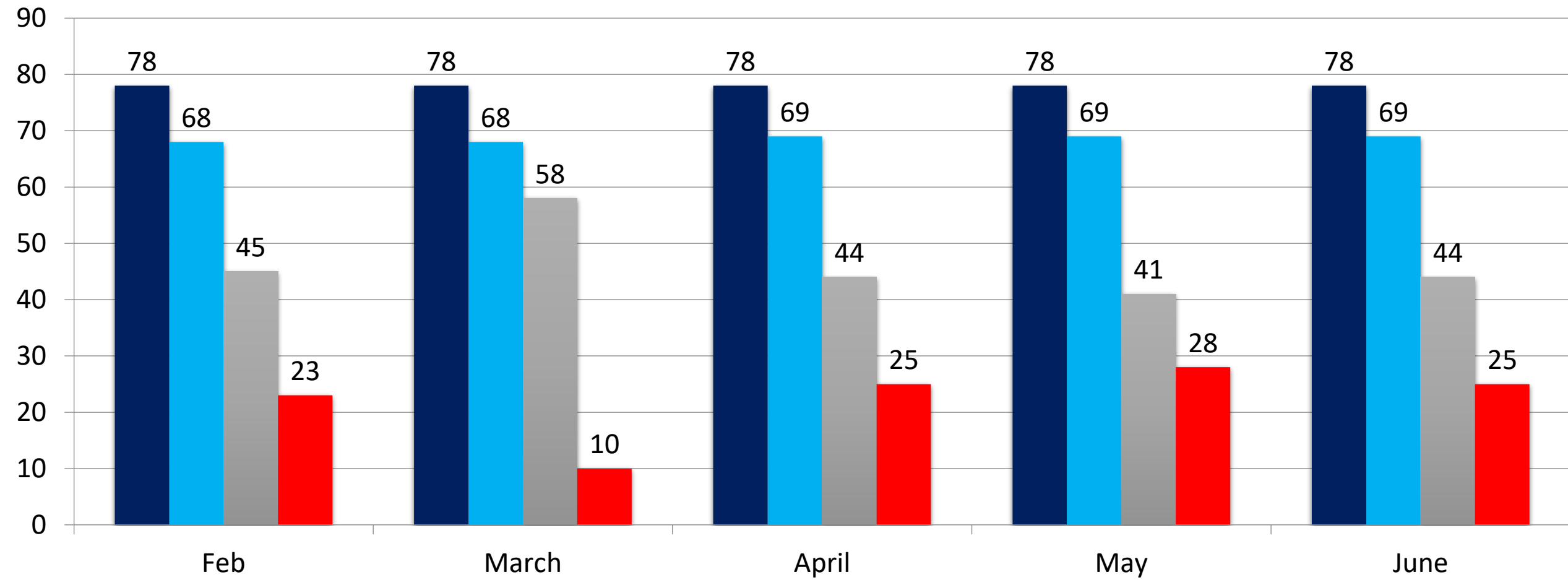
Report 1
DAILY PRODUCTIONS & SALES REPORT (DUAL)

Sl	Plant location (Plant ID)	Tank	District	Plant start time	Treated Water production (liters)	Treated Water TDS (mg/L)	Dispensing Meter reading (liters)	Dispensing Meter reading (liters)	Energy Meter Reading (kWh)	Energy Meter Reading (kWh)	Report Reason (No Power, No Water, Operator absent, ...)
1	Kannur	Good	Good	7:30 AM	150	150	061539	061542			
2	"	"	"	7:30 AM	150	150	061543	061546			
3	"	"	"	7:30 AM	150	150	061547	061550			
4	"	"	"	7:30 AM	150	150	061551	061554			
5	"	"	"	7:30 AM	150	150	061555	061558			
6	"	"	"	7:30 AM	150	150	061561	061564			
7	"	"	"	7:30 AM	150	150	061567	061570			



WPP OPERATIONAL STATUS

■ Total No of Plants ■ Operational plants ■ Data Received Plants ■ No Data Received Plants





SCHEDULED COMPLIANCE

Visits Score March					
No of Villages	No of Visits	Performance Score	Remarks		
18	1 Time	31%	Unacceptable	59%	Improvement Required
16	2 Time	28%	Needs Improvement		
16	3 Time	28%	Below target	41%	Good work
7	4 Time	12%	Target		
1	> 4 Visits	2%	Above target		

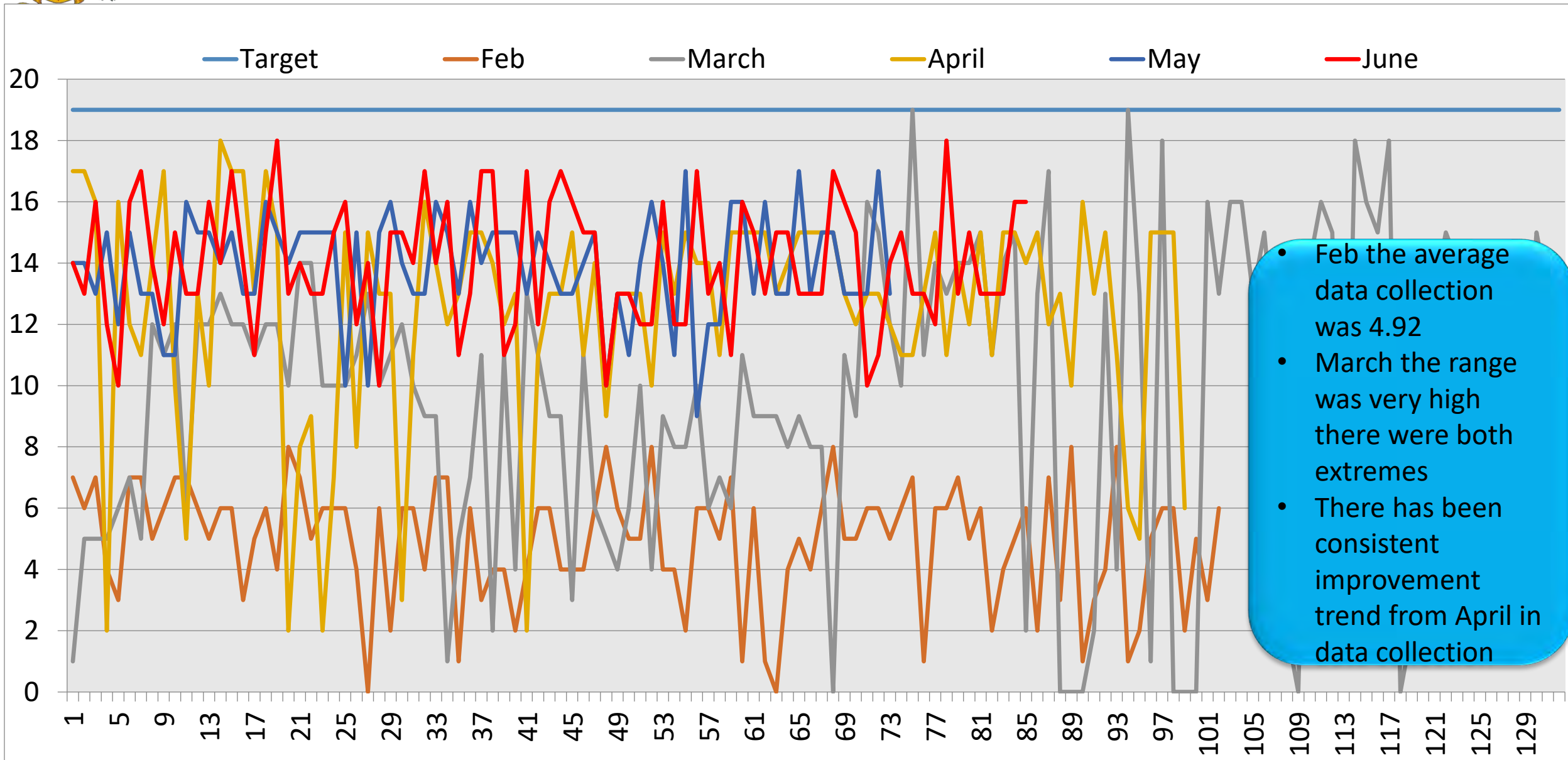
Visits Score April					
No of Villages	No of Visits	Performance Score	Remarks		
18	1 Visit	41%	Unacceptable	57%	Improvement Required
7	2 Visits	16%	Needs Improvement		
12	3 Visits	27%	Below target	43%	Good work
4	4 Visits	9%	Target		
3	> 4 Visits	7%	Above target		

Visits Score May					
No of Villages	No of Visits	Performance Score	Remarks		
17	1 Visit	41%	Unacceptable	80%	Improvement Required
16	2 Visits	39%	Needs Improvement		
8	3 Visits	20%	Below target	20%	Good work
0	4 Visits	0%	Target		
0	>4 Visits	0%	Above target		

Visits Score June					
No of Villages	No of Visits	Performance Score	Remarks		
18	1 Visit	41%	Unacceptable	82%	Improvement Required
18	2 Visits	41%	Needs Improvement		
4	3 Visits	9%	Below target	18%	Good work
2	4 Visits	5%	Target		
2	> 4 Visits	5%	Above target		



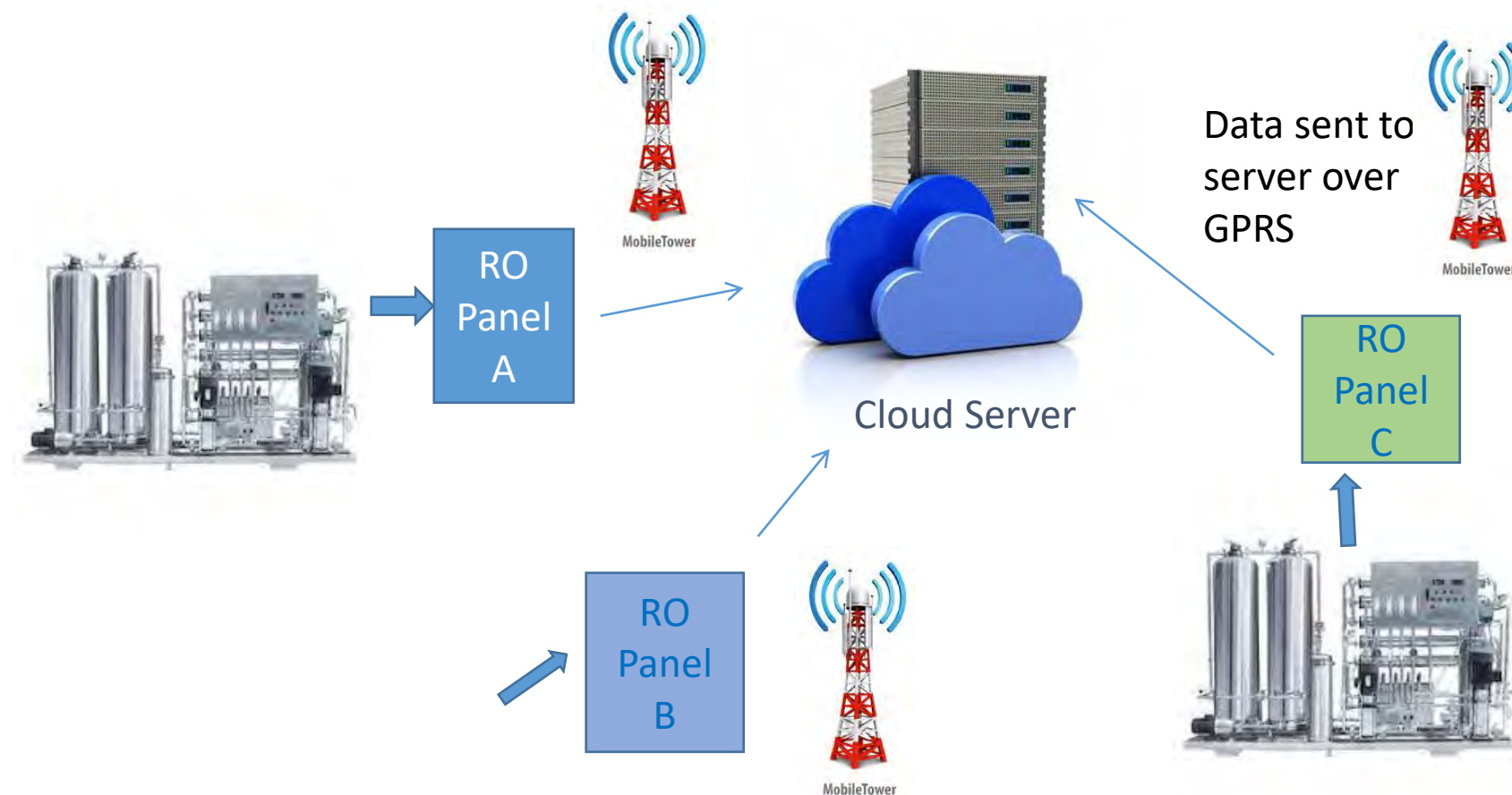
DOCUMENTATION BY WPPS





Remote Monitoring System

Operation Schematic **GPRS**

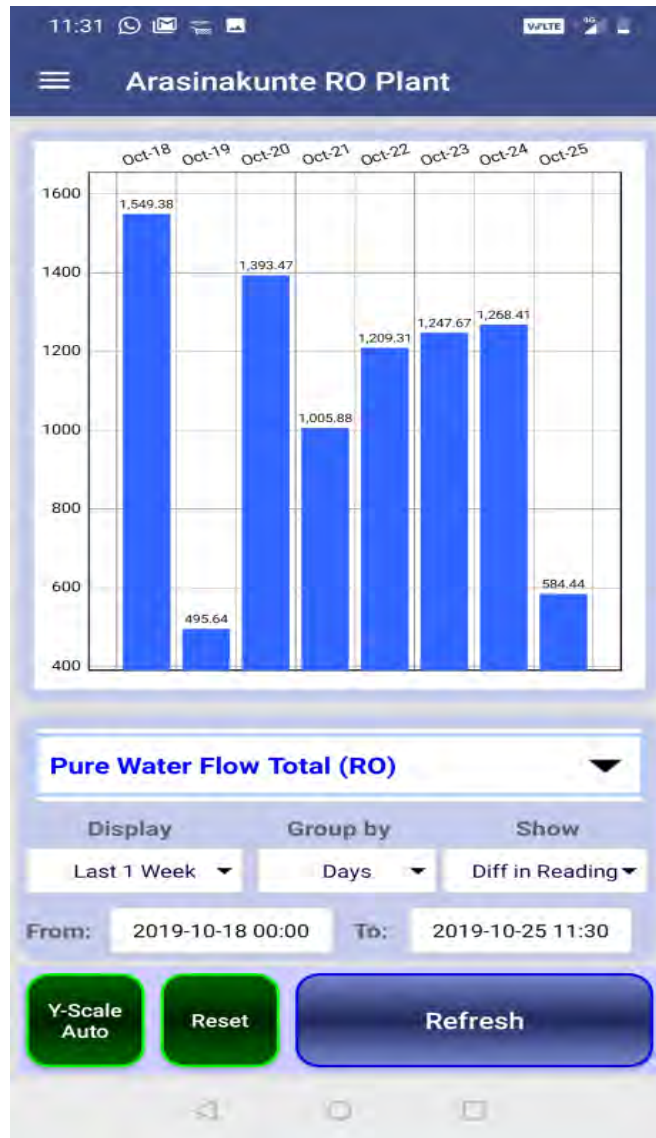
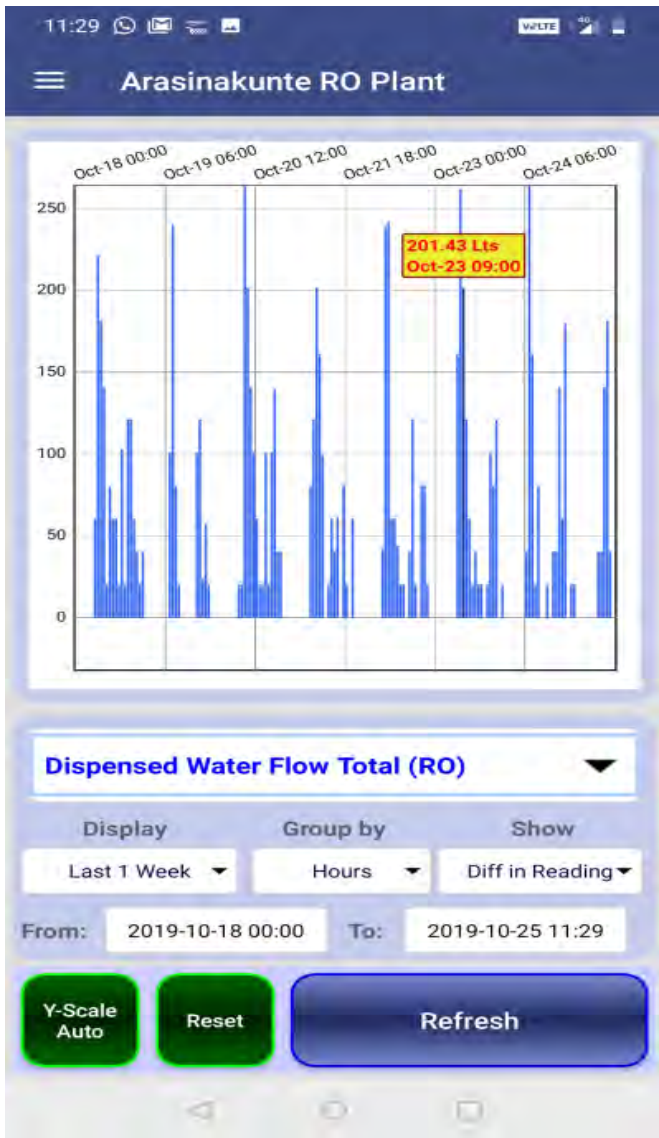


Water Production/ dispensing Report

- Liters Dispensed per hour / day
- Plant running status
- TDS of the Water dispensed



RMS - DASHBOARD



Arasinakunte RO Plant
Nelamangala, Bangalore
22-Oct-2019 10:21:41

Dashboard | Live Graphs | Reports | Rolling Graph

View Type (New) | Node: - All - RO Plant | Meter/Equipment: - All - Flow RO | Units: - All - A Hz | Status: - All - Any Error - Normal - High

25 Show entries | Search:

Sl. No.	Sensor	Last Reading Time	Relative	Last Reading Value	Unit	Status	In Status Since	Trend Graph
1	Raw Water Flow Total	Oct-22 10:20:08	25 secs ago	38788.16	Lts			
2	Pure Water Flow Total	Oct-22 10:20:08	25 secs ago	8041.51	Lts			
3	Dispensed Water Flow Total	Oct-22 10:20:08	25 secs ago	7310.76	Lts			
4	pH Value	Oct-22 10:02:07	18 mins ago	6.6	-			
5	TDS Value	Oct-22 10:20:10	23 secs ago	13	ppm			
6	HPP Current	Oct-22 10:20:10	23 secs ago	6.3	A			
7	RWP Current	Oct-22 10:20:10	23 secs ago	3.74	A			
8	Raw Water Tank Level	Oct-22 10:20:14	19 secs ago	1	-	High	1 day	
9	Pure Water Tank Level	Oct-22 10:20:14	19 secs ago	1	-	High	5 days	
10	HPP Energy	Oct-22 10:20:10	23 secs ago	26.97	kWh			
11	HPP Voltage	Oct-22 10:20:10	23 secs ago	241.6	V			
12	HPP Power	Oct-22 10:20:10	23 secs ago	1.07	kW			
13	HPP Frequency	Oct-22 10:20:10	23 secs ago	50	Hz			
14	HPP Power Factor	Oct-22 10:20:10	23 secs ago	0.7	PF			
15	RWP Voltage	Oct-22 10:20:10	23 secs ago	241.6	V			
16	RWP Power	Oct-22 10:20:10	23 secs ago	0.75	kW			
17	RWP Energy	Oct-22 10:20:10	23 secs ago	19.73	kWh			
18	RWP Power Factor	Oct-22 10:20:10	23 secs ago	0.7	PF			
19	RWT High	Oct-22 10:20:14	19 secs ago	0	-			
20	PWT High	Oct-22 10:20:14	19 secs ago	1	-	High	54 mins	

Showing 1 to 20 of 20 entries | Previous 1 Next



Thank You